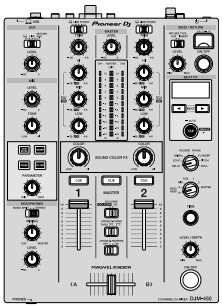
Pioneer DJ

Service Manual



DJM-450

ORDER NO.
QRT1003

DJ MIXER

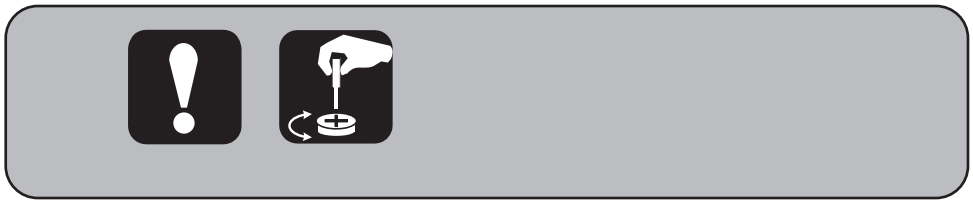
DJM-450

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

Model	Type	Power Requirement	Remarks
DJM-450	SYXJ	AC 100 V to 240 V	
DJM-450	UXJCB	AC 100 V to 240 V	
DJM-450	FWLPWXJ	AC 100 V to 240 V	
DJM-450	XJCN	AC 100 V to 240 V	

THIS SERVICE MANUAL SHOULD BE USED TOGETHER WITH THE FOLLOWING MANUAL(S).

Model	Order No.	Remarks
DJM-450	QRT1004	SCHEMATIC DIAGRAM, PCB CONNECTION DIAGRAM, PCB PARTS LIST



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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

CONTENTS

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

1.2 NOTES ON REPLACING

The part listed below is difficult to replace as a discrete component part.
It the failure of suspected that are listed in the table, replace whole ASSY.

ASSY Name	Parts that is Difficult to Replace			
	Ref. No	Parts No.	Function	Remarks
MAIN ASSY	IC501	D810K013DZKB400	DSP	BGA
	IC2003	BD9328EFJ	12V =>1.25V DC/DC Converter	IC with heat-pad
	IC2004	MM3543BH	12V => 5V DC/DC Converter	IC with heat-pad
	IC2005	TPS2557DRB	Current Limit IC	IC with heat-pad
	IC2007	NJM78M05DL1A	12V => 5V Regulator	IC with heat-pad
	IC2011	NJM78M15DL1A	18V => 15V Regulator	IC with heat-pad
	IC2012	NJM79M15DL1A	-18V => -15V Regulator	IC with heat-pad
	Q3309	2SD1760F5(R)	Transistor	Transistor with heat-pad
	Q3310	2SB1184F5(R)	Transistor	Transistor with heat-pad
	Q3311	2SD1760F5(R)	Transistor	Transistor with heat-pad
	Q3312	2SB1184F5(R)	Transistor	Transistor with heat-pad

1.3 SERVICE NOTICE

About voltage monitoring

This product is continuously monitoring abnormal voltages.
If abnormality is detected, power supply is immediately turned OFF.
Power supply abnormality is indicated by blinking the WAKE UP LED [cycle : 250 ms (lighting 125 ms/ light-off 125 ms)].
WAKE UP LED display other than the LED is lighting-off all, it will all be SW and VR free reaction.
Repair according to the diagnosis method of “5.3 POWER SUPPLY DIAGNOSIS INFORMATION.”

Checking user setting contents

This product includes user setting items. Check the settings before repairing.
Use the check sheet prepared in item 8.5 to transcribe the settings.
Setting contents are stored in the Flash ROM (IC1002) in the MAIN ASSY.
For confirming or changing setting contents, refer to “Changing the settings” of the Operationg Instructions.

About the replacing CROSS FADER ASSY

The contactless fader is mounted in the cross fader part of this product.
This has several times of durability comparing with conventional types.
As assembly of the fader part is required high precision, service parts are provided only as an assembly
(Part name is CROSS FADER ASSY (DXA2257)).
After replacing the part, make sure to conduct CROSS FADER CALIBRATION (CFDR SET) in the test mode.
If this calibration is not conducted, normal start is not possible.
If MAIN ASSY is replaced, make sure to conduct CROSS FADER CALIBRATION (CFDR SET) after the replacement.

About the replacing OLED ASSY

Display part of this product employs OLED. Exchange at the time of OLED failure, replace using OLED ASSY (DEA1065).
Matrix OEL is stick to Holder using double side tape. If trying to peel in the case of failing to paste,
fault will be caused due to the stress.
Service part supplies as ASSY who stuck Matrix OEL and Holder.

2. SPECIFICATIONS

2.1 ACCESORIES

- AC adapter (SYXJ, UXJCB : DRW1567) (FWLPWXJ, XJCN : DWR1551)
- Power cord (SYXJ, FWLPWXJ : ADG1154) (UXJCB : XDG3052) (XJCN : ADG7079)
- USB cable (DDE1128)
- Operating instructions (Quick start guide) (SYXJ : DRH1393, DRH1394) (UXJCB : DRH1395) (FWLPWXJ : DRH1396) (XJCN : DRH1397)
- License key card (rekordbox dj, recordbox dvs)
- Leaflet
- Warranty card*

* The corresponding information is provided on the last page.

Note

Please keep the license key because it cannot be provided again.

2.2 SPECIFICATIONS

AC adapter

Power ..... AC 100 V to 240 V, 50 Hz/60 Hz
Rated current ..... 0.6 A
Rated output ..... DC 12 V, 2 A
Power consumption (standby) ..... 0.5 W

General - Main Unit

Power consumption ..... DC 12 V, 1700 mA
Main unit weight ..... 3.2 kg (7.1 lb)
Max. dimensions
..... 230 mm (width) x 107.9 mm (height) x 319.5 mm (depth)
(9.1 in. (W) × 4.2 in. (H) × 12.6 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 ..... 48 kHz
MASTER D/A converter ..... 24 bits
Other A/D and D/A converters ..... 24 bits
Frequency characteristic
LINE ..... 20 Hz to 20 kHz
S/N ratio (rated output)
PHONO ..... 80 dB
LINE ..... 94 dB
MIC ..... 77 dB
AUX ..... 96 dB
Total harmonic distortion (**LINE**— **MASTER1**) ..... 0.005 %
Standard input level / Input impedance
PHONO ..... –52 dBu/47 kΩ
LINE ..... –12 dBu/47 kΩ
MIC ..... –52 dBu/8.5 kΩ
AUX ..... –12 dBu/47 kΩ
Standard output level / Load impedance / Output impedance
MASTER1 ..... +6 dBu/10 kΩ/150 Ω or lower
MASTER2 ..... +2 dBu/10 kΩ/220 Ω or lower
PHONES ..... +8.0 dBu/32 Ω/1 Ω or lower
Rated output level / Load impedance
MASTER1 ..... +25 dBu/10 kΩ
MASTER2 ..... +21 dBu/10 kΩ
Crosstalk (**LINE**) ..... 90 dB
Channel equalizer characteristic
HI ..... –26 dB to +6 dB (20 kHz)
MID ..... –26 dB to +6 dB (1 kHz)
LOW ..... –26 dB to +6 dB (20 Hz)
Microphone equalizer characteristic
LOW ..... 0 dB to –12 dB (10 kHz)
HI ..... 0 dB to –12 dB (100 Hz)

Input / Output terminals

PHONO input terminal
RCA pin jack ..... 2 sets
LINE input terminal
RCA pin jack ..... 2 sets
MIC input terminal
1/4" TRS jack ..... 1 set
AUX input terminal
RCA pin jack ..... 1 set
MASTER output terminal
XLR connector ..... 1 set
RCA pin jack ..... 1 set
PHONES output terminal
1/4" stereo phone jack ..... 1 set
3.5 mm stereo mini jack ..... 1 set
USB terminal
Type A ..... 1 set
Power supply...5 V/1 A or less
B type ..... 1 set

- The specifications and design of this product are subject to change without notice.
-

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

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

No.	Procedure	Check points
1	Check the firmware version in Test mode.	The version of the firmware must be latest. Update firmware to the latest one, if it is not the latest.
2	Confirm whether the customer complain has been solved. If the problem pointed out by the customer occurs with a specific source or operation, input that specific source then perform that specific operation for checking.	The customer complain must not be reappeared. Audio and operations must be normal.
3	Check the analog audio input (each channel, MIC, AUX). (CDJ player, analog player and MIC to analog connection)	Audio and operations must be normal.
4	Check the analog audio output (MASTER 1/2). (CDJ player to analog connection)	Audio and operations must be normal.
5	Check the headphone output (1/4" jack, mini jack).	Noise and audio must be normal.
6	Check the each operation (KEY, SW, VR, fader, PAD, etc.) and indicator.	That it works properly in Test mode check.
7	Check the connection of each interface USB A terminal USB B terminal	It is properly recognized in PC by inserting a USB memory.
8	Check the DVS.	PC application is operating normally, audio and operations must be normal of each channel.
9	Check the user settings.	It is in the contents before repairs.
10	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.

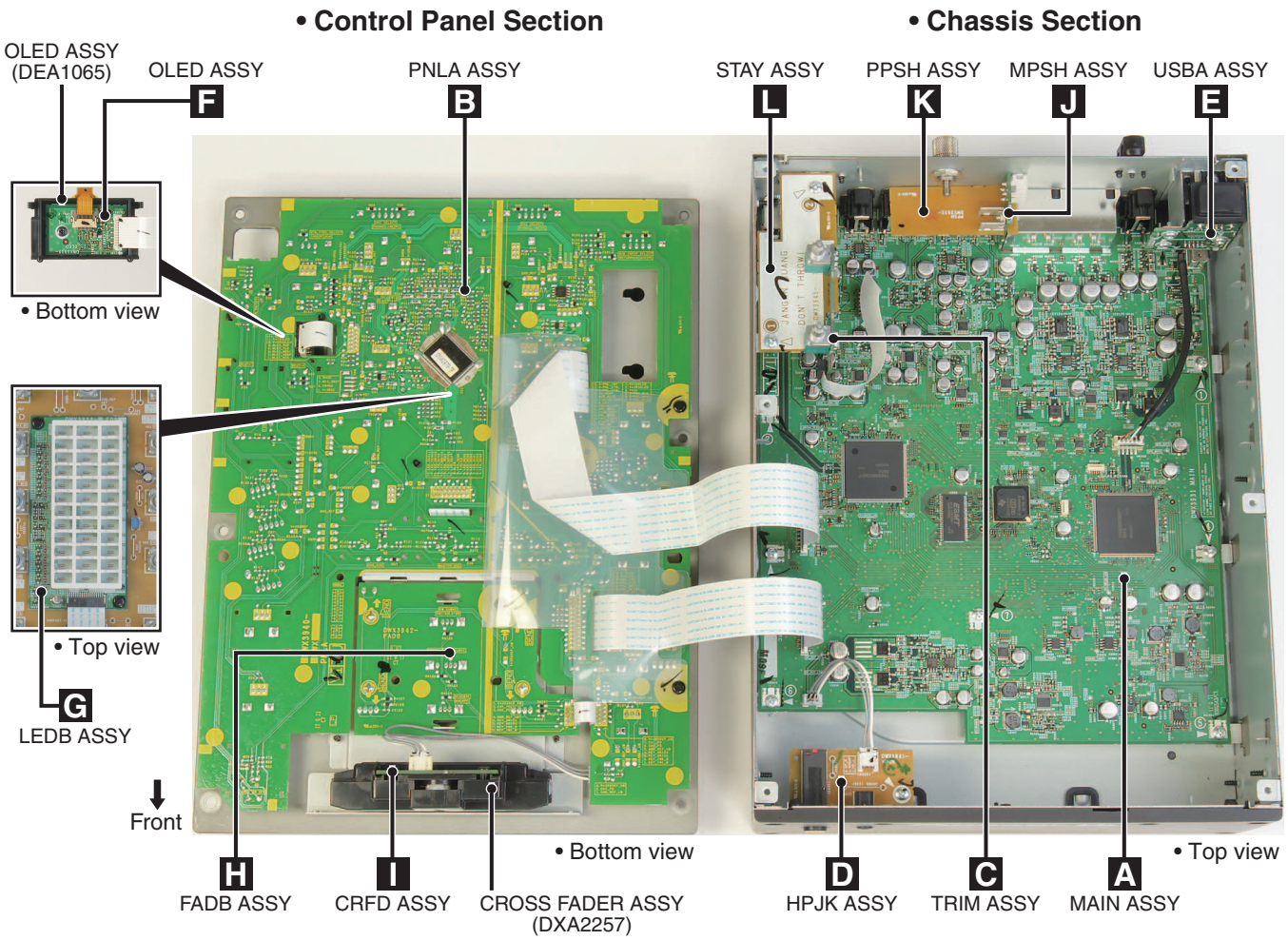
Item to be checked regarding audio	
Distortion	Volume too high
Noise	Volume fluctuating
Volume too low	Sound interrupted

3.2 JIGS LIST

Jigs List

Jig Name	Part No.	Purpose of use / Remarks
USB cable	GGP1193	For PC connection, Accessories
Serial number writing software	GGS1187	Used in the writing of serial number to be performed after the MAIN ASSY replase. Refer to " 8.3 METHOD OF WRITING SERIAL NUMBER ".
License-key card for Service	GGP1152 GGP1153	For activation of rekordbox dj For activation of rekordbox DVS

3.3 PCB LOCATIONS



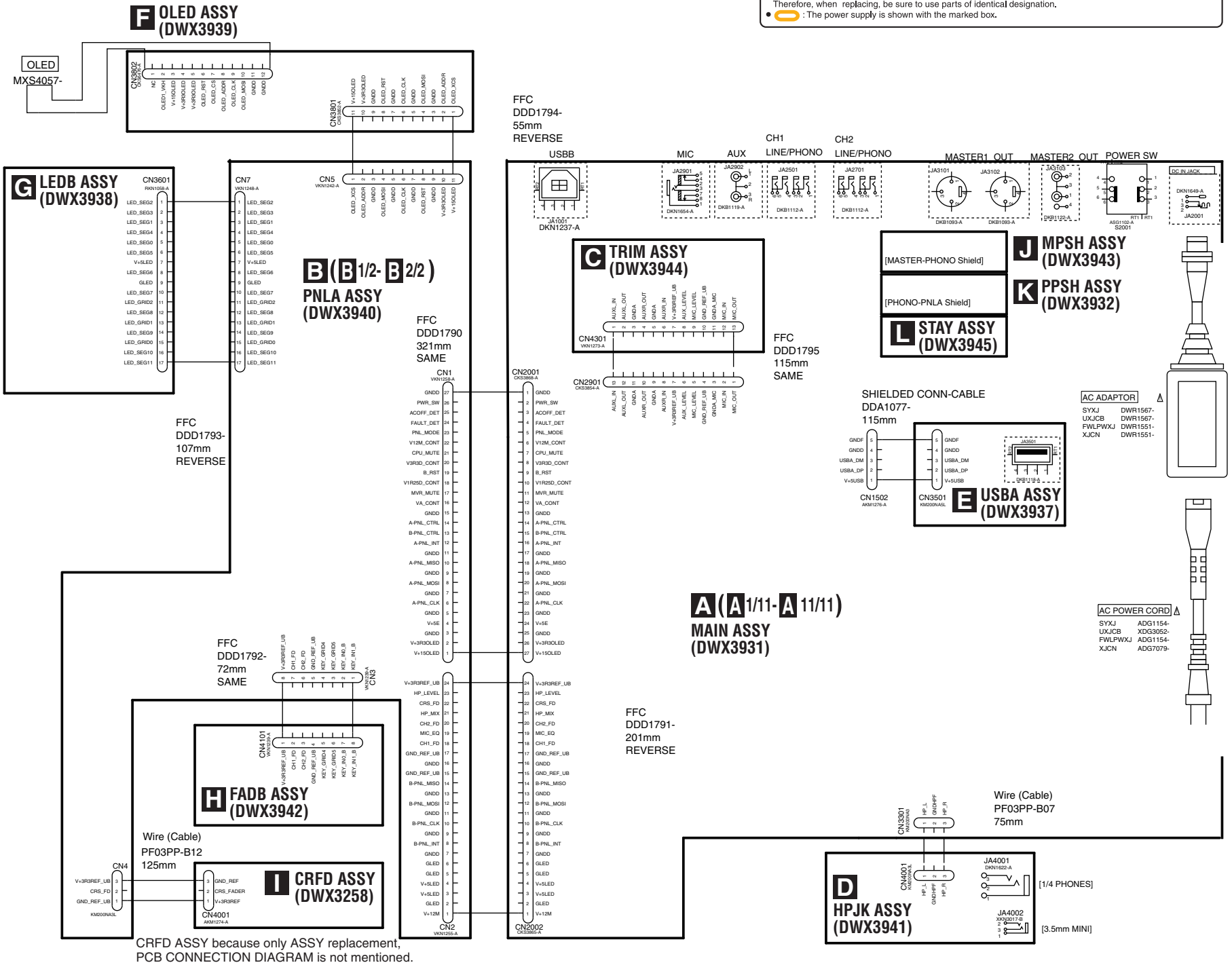
NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

Mark	No.	Description	Part No.
LIST OF ASSEMBLIES			
NSP	1	..MOTHER ASSY	DWM2633
	2	..MAIN ASSY	DWX3931
	2	..USBA ASSY	DWX3937
	2	..LEDB ASSY	DWX3938
	2	..OLED ASSY	DWX3939
	2	..MPSH ASSY	DWX3943
	2	..TRIM ASSY	DWX3944
NSP	1	..PNL ASSY	DWM2634
	2	..PNLA ASSY	DWX3940
	2	..HPJK ASSY	DWX3941
	2	..FADB ASSY	DWX3942
	2	..PPSH ASSY	DWX3932
NSP	2	..STAY ASSY	DWX3945
NSP	1	..CRFD ASSY	DWX3258

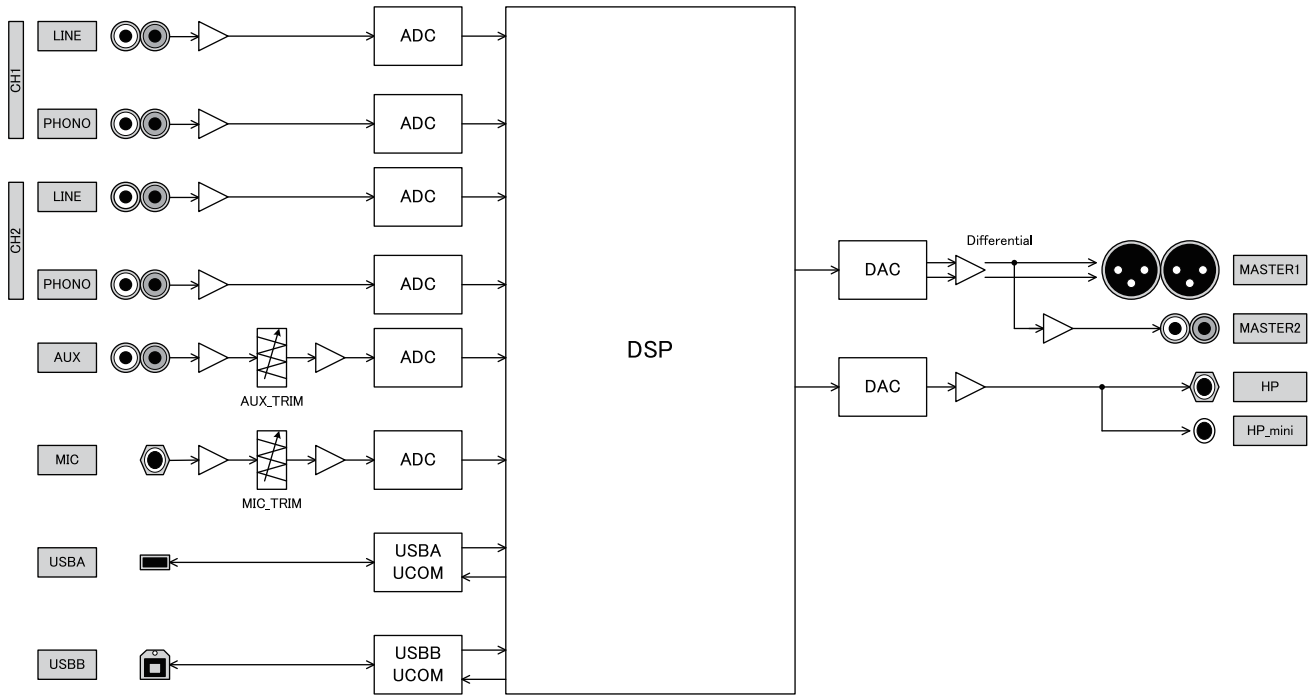
4. BLOCK DIAGRAM

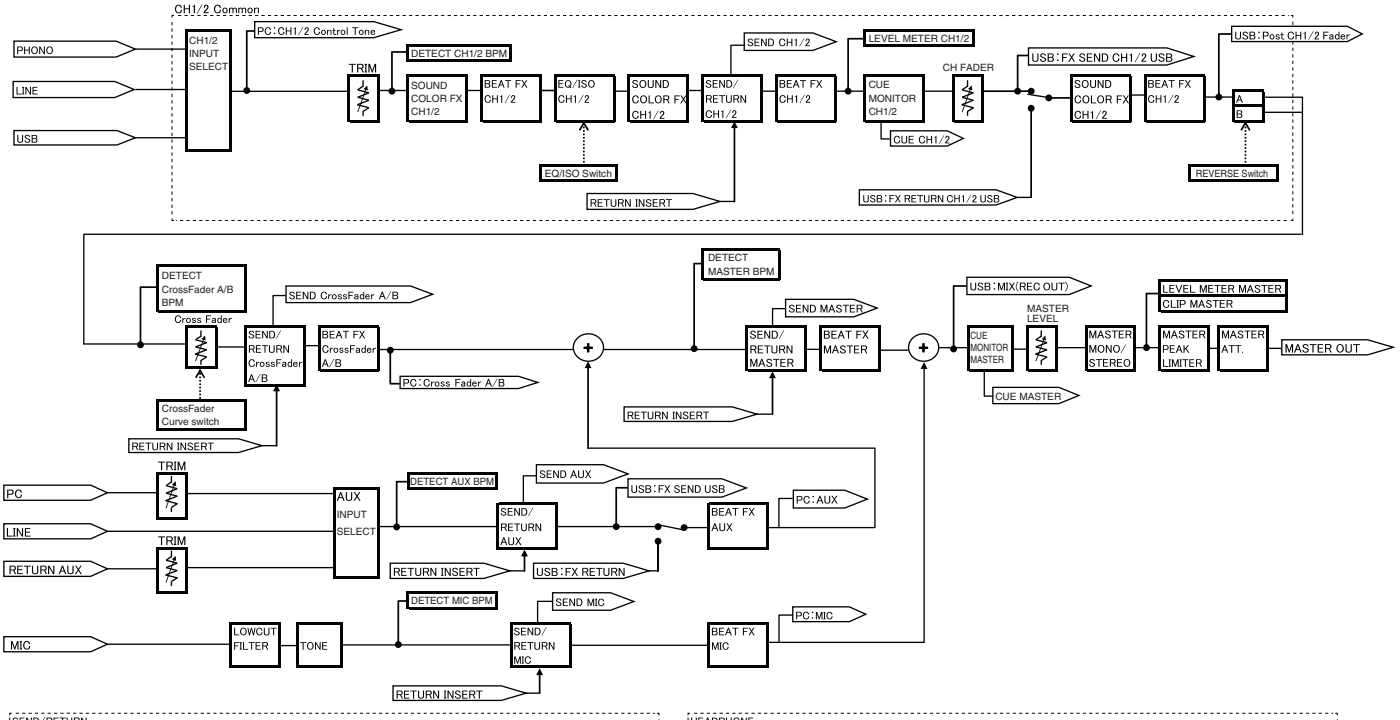
4. BLOCK DIAGRAM
4.1 OVERALL WIRING DIAGRAM

- 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.
- : The power supply is shown with the marked box.

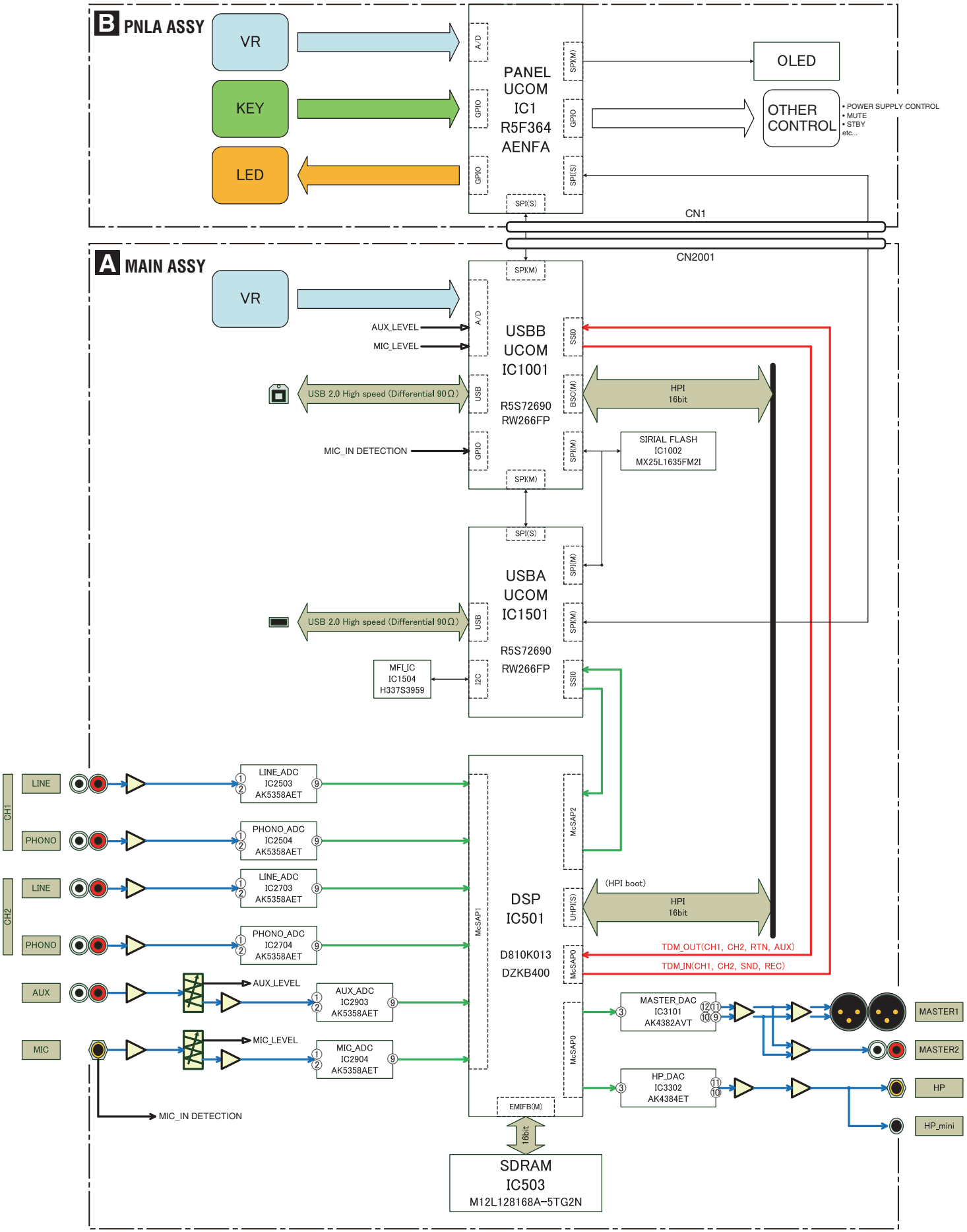


4.2 AUDIO BLOCK DIAGRAM

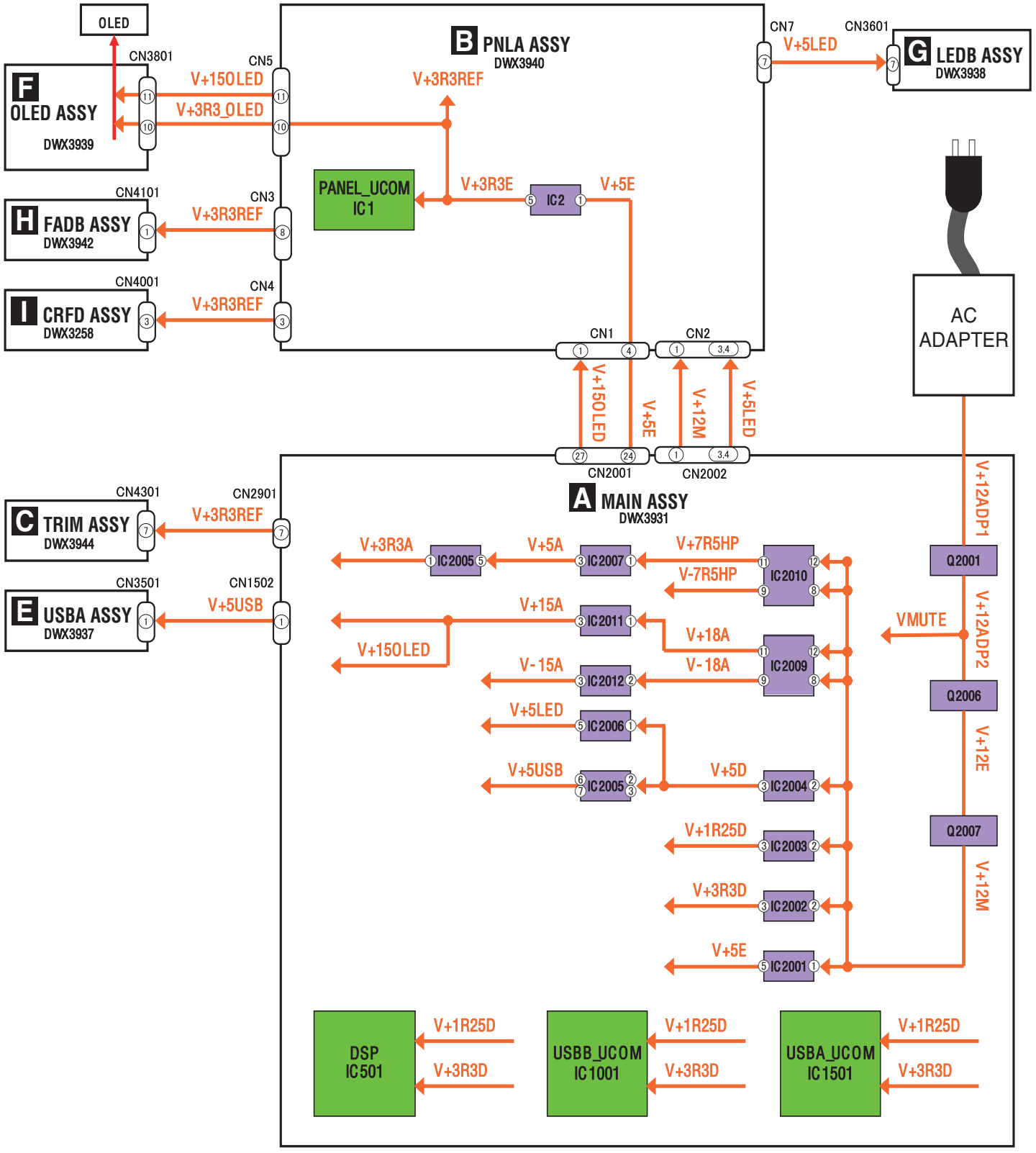




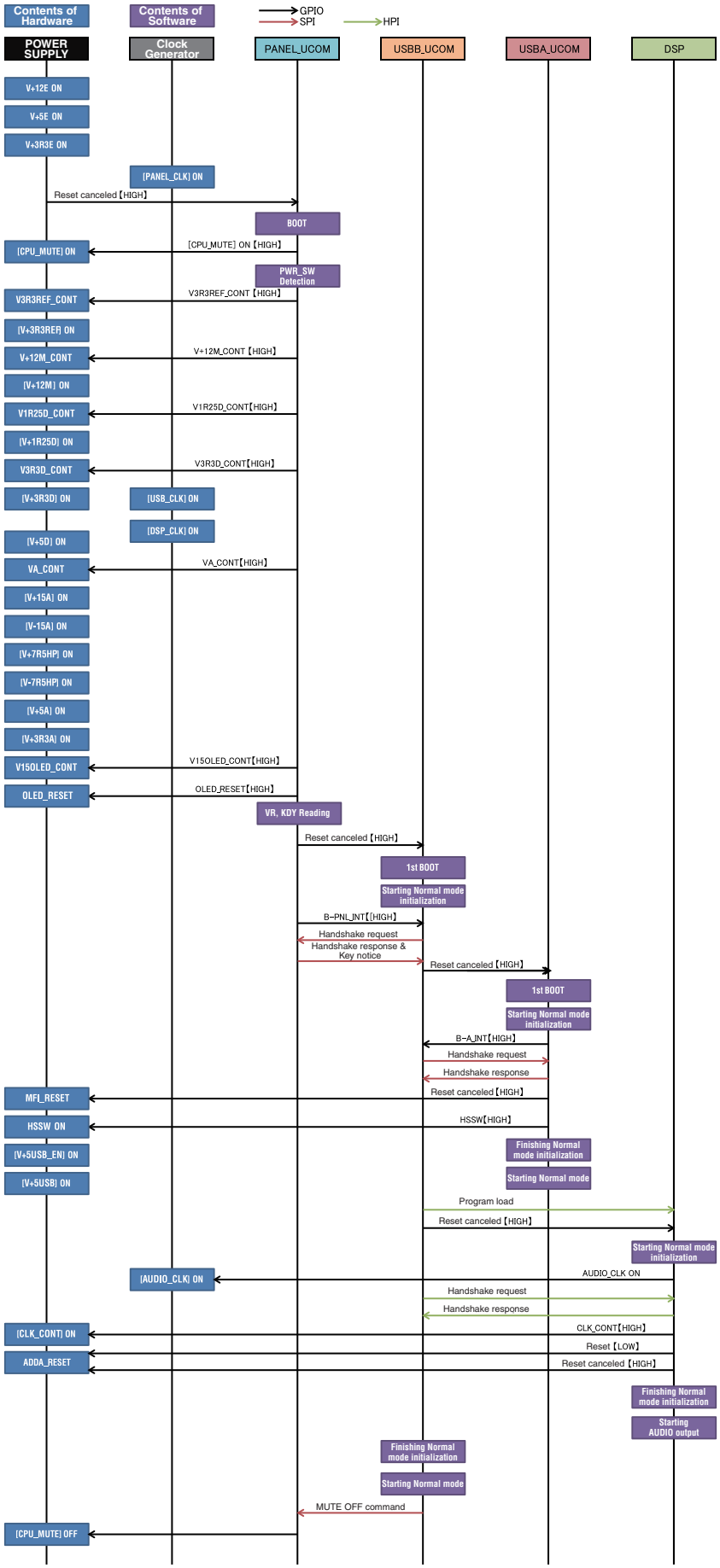
4.3 AUDIO SYSTEM BLOCK DIAGRAM



4.4 POWER BLOCK DIAGRAM



5. DIAGNOSIS
5.1 STARTUP SEQUENCE



5.2 TROUBLESHOOTING

Table of Contents in Troubleshooting

About [Observation Point ○-∗∗ etc.]

Diagnosis/waveform confirmation-point numbers described in this section correspond to the numbers on the schematic diagrams and PCB connection diagrams.
In addition, classify the ASSY in the first number.

* ASSY classification by diagnosis points (First number = ASSY classification)		
[1-**]	MAIN ASSY PNLA ASSY	(DWX3931) (DWX3940)
[2-**]	MAIN ASSY PNLA ASSY	(DWX3931) (DWX3940)
[3-**]	MAIN ASSY	(DWX3931)
[4-**]	MAIN ASSY HPJK ASSY	(DWX3931) (DWX3941)
[5-**]	MAIN ASSY	(DWX3931)
[6-**]	OLED ASSY	(DWX3939)
[7-**]	CRFD ASSY PNLA ASSY	(DWX3258) (DWX3940)
[8-**]	MAIN ASSY	(DWX3931)

Measurment Condition

IN/OUT	MEASURMENT CH	INPUT CH	INPUT LEVEL	INPUT FREQUENCY	RL	OTHER SETTING	OTHER SETTING
IN	LINE	CH1/2	0dB	1K	-	TRIM LEVEL VR = CENTER	-
IN	PHONO	CH1/2	-40dB	1K	-	TRIM LEVEL VR = CENTER	-
IN	MIC	MIC	-40dB	1K	-	TRIM LEVEL VR = MAX	ALL EQ = CENTER
IN	AUX	AUX	0dB	1K	-	AUX TRIM VR = CENTER	-
IN	USB	USB1/2	0dB	1K	-	TRIM LEVEL VR = CENTER	-
OUT	MASTER1/2	CH1/LINE	0dB	1K	10K Ω	MASTER LEVEL VR = CENTER	ALL EQ = CENTER FADER = MAX
OUT	HP/HPmini	CH1/LINE	0dB	1K	32 Ω	HP LEVEL = CENTER	ALL EQ = CENTER FADER = MAX

Output diagnosis = CH1 LINE input

Setting of switches

SWITCH	SETTING
HP MONO/STEREO	STEREO
HP MIXING	CENTER
MIC LEVEL	MIN
EQ CURVE	EQ
CROSS FADER CURVE	CENTER
RETURN TYPE	INSERT
CH CUE	OFF
MASTER CUE	ON

UTILITY SETTING	At the time of diagnosis should be to the factory default setting and factory reset.

[0] Prior confirmation

[0-1] Confirming inner wire

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Inner wire not inserting, disconnection, contact point failure	Related point	Confirm that wiring materials are inserted firmly. Check the wire for disconnection.	If not inserted, insert firmly. If disconnected, replace wire.	4.1 OVERALL WIRING DIAGRAM

[0-2] Prior confirmation of power supply

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Abnormality of the power supply of failure point	Power supply of the doubted IC etc.	Check the power supply used for the points to be diagnosed.	If abnormality is found, locate the power supply using the power supply map and conduct the repair.	4.4 POWER BLOCK DIAGRAM 5.3 POWER SUPPLY DIAGNOSIS INFORMATION

[1] Start Trouble

V+12E power supply abnormality or PANEL_UCOM (IC7001) start error may be the cause. In the case of blinking, refer to "5.3 POWER SUPPLY DIAGNOSIS INFORMATION."

[1-1] Power supply doesn't turn ON. UTILITY (WAKE UP) is not blinking

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Power supply abnormal / Wire abnormal	MAIN ASSY JA2001 1pin 1-1	Check the V+12_ADP1 power supply.	- If V+12_ADP1 can be checked, go to [2]. - If V+12_ADP1 cannot be confirmed there is a possibility of failure of the AC adaptor or destruction (failure) of the P2001. Replace parts.	4.4 POWER BLOCK DIAGRAM
2	Power supply abnormal	MAIN ASSY Q2001 4pin 1-2	Check the V+12ADP2 power supply.	- If V+12_ADP2 can be checked, go to [3]. - If V+12_ADP2 cannot be confirmed there is a possibility of failure of the Q2001. Check condition of the solder/replace parts.	4.4 POWER BLOCK DIAGRAM
3	Power supply abnormal	MAIN ASSY Q2006 6pin 1-3	Check the V+12E power supply.	- If V+12E can be checked, go to [4]. - If V+12E cannot be confirmed there is a possibility of failure of the Q2006. Check condition of the solder/replace parts.	4.4 POWER BLOCK DIAGRAM
4	Power supply abnormal	MAIN ASSY IC2001 5pin 1-4	Check the V+5E power supply.	- If V+5E can be checked, go to [5]. - If V+5E cannot be confirmed there is a possibility of failure of the IC2001. Check condition of the solder/replace parts.	4.4 POWER BLOCK DIAGRAM
5	RESET signal abnormal	PNLA ASSY IC2 5pin 1-5	Check the V+3R3E signal.	- If V+3R3E can be checked, go to [6]. - If V+3R3E cannot be confirmed there is a possibility of failure of the IC2. Check condition of the solder/replace parts.	-
6	16MHz CLK abnormal	PNLA ASSY X1 3pin 1-6	Check the 16M_CLK signal (at 1.65 V center, 16 MHz oscillation waveform).	- If output signal can be checked, go to [7]. - If output signal cannot be confirmed there is a possibility of failure of the Crystal (x1) Block. Check condition of the solder/replace parts.	- waveform 1-6
7	PANEL_UCOM reset	PNLA ASSY IC3 1pin 1-7	Confirm that M16_xRST signal becomes HIGH.	- If the output signal doesn't become HIGH, there is a possibility of failure of the IC3. Check condition of the solder/replace parts.	-
8	PANEL_UCOM failure	PNLA ASSY	If it does not improve in the above.	There is a possibility of failure of the PANEL_UCOM(IC1) Check condition of the solder/replace parts.	-

[2] Abnormality display

As OLED ASSY abnormality display doesn't exist, check the conditions using the three LEDs above the MAIN ASSY.
Each IC may have a communication error.

[2-1] MAIN ASSY D1001 is not blinking. (Lighting state, light-off state)

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	USBB_CLK abnormal	MAIN ASSY IC1001 84pin 2-1	Check the USBB_CLK (at 1.65 V center, 13.33 MHz oscillation waveform).	- If output signal can be checked, go to [2]. - If output signal cannot be confirmed there is a possibility of failure of the Crystal(X1001) Block. - Check condition of the solder/replace parts.	- waveform 2-1
2	PANEL_UCOM to USBB_UCOM RESET communication failure	MAIN ASSY IC1001 88pin 2-2	Confirm that B_RST becomes HIGH.	- If B_RST HIGH can be confirmed, go to [3]. - If B_RST HIGH cannot be confirmed, check the communication line between PANEL_UCOM and USBB_UCOM.	-
3	USBB_UCOM to FLASH communication failure	MAIN ASSY 2-3		- USBB_UCOM(IC1001) to SW IC(IC1003) to FLASH(IC1002) communication line may have abnormality. Check condition of the solder/replace parts. - Still if symptoms do not improve, replace the PC board.	-

[2-2] MAIN ASSY D1501 is not blinking. (Lighting state, light-off state)

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	USBA_CLK abnormal	MAIN ASSY IC1501 84pin 2-4	Check the USBA_CLK (at 1.65 V center, 13.33 MHz oscillation waveform).	- If output signal can be checked, go to [2]. - If output signal cannot be confirmed there is a possibility of failure of the Crystal(X1001) Block. - Check condition of the solder/replace parts.	- waveform 2-4
2	USBB_UCOM to USBA_UCOM RESET communication failure	MAIN ASSY IC1501 88pin 2-5	Confirm that A_RST becomes HIGH.	- If A_RST HIGH can be confirmed, go to [3]. - If A_RST HIGH cannot be confirmed, check the communication line between USBB_UCOM and USBA_UCOM.	-
3	USBA_UCOM to FLASH communication failure	MAIN ASSY 2-6		- USBA_UCOM(IC1501) to SW IC(IC1003) to FLASH(IC1002) communication line may have abnormality. Check condition of the solder/replace parts. - Still if symptoms do not improve, replace the PC board.	-

[2-3] MAIN ASSY D501 is not blinking. (Lighting state, light-off state)

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	DSP CLK abnormal	MAIN ASSY IC502 2pin 2-7	Check the DSP_PLL (at 1.65 V center, 24.576MHz oscillation waveform).	- If output signal can be checked, go to [2]. - If output signal cannot be confirmed there is a possibility of failure of the Crystal(X501) Block . - Check condition of the solder/replace parts.	- waveform 2-7
2	USBB_UCOM to DSP RESET communication failure	MAIN ASSY IC1501 88pin 2-8	Confirm that DSP_RST becomes HIGH.	- Check the communication line between USBB_ UCOM and USBA_UCOM.	-
3	USBB_UCOM to DSP communication (HPI) failure	MAIN ASSY 2-9		- USBB_UCOM(IC1001) to DSP(IC501) HPI communication line may have abnormality. - Check condition of the solder/replace parts. - Still if symptoms do not improve, replace the PC board.	-

[3] AUDIO INPUT

[3-1] LINE, PHONO cannot be inputted

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
0	Prior confirmation	PC, LINE, PHONO changeover switch Each CH TRIM CH level meter	Confirm that position is correct. When you enter the audio, check the CH level meter is lighting.	- In the case that CH level meter is lighting =>OUTPUT may be faulty. Go to [4] AUDIO OUTPUT - In the case that CH level meter is not lighting =>go to [1]	Operating Instructions
1	Parts failure	MAIN ASSY CH*_LINE_L/R, CH*_PHONO_L/R MAIN CH=CH1 3-1-1 3-1-2 3-2-1 3-2-2	[Confirming the input before ADC] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of the analog circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>go to [2]	-
2	Parts failure	MAIN ASSY IC2503 (CH1_LINE_ADC) IC2504 (CH1_PHONO_ADC) MAIN CH=CH1 3-3-1 3-3-2 3-4-1 3-4-2	[Confirming the input after ADC] Check the signals between ADC and DSP (other than sticking to LOW or HIGH) via relevant signal route.	- In the case that signal is sticking =>There is a possibility of failure of the CH*_ADC and peripheral circuit. Check condition of the solder of ADC and peripheral circuit/replace parts or replace MAIN ASSY.	-

[3-2] MIC is not inputted

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
0	Prior confirmation	MIC LEVEL TRIM MASTER level meter	Confirm that position is correct . When you enter the audio, check the MASTER level meter is lighting.	- In the case that MASTER level meter is lighting =>OUTPUT may be faulty. Go to [4] AUDIO OUTPUT - In the case that MASTER level meter is not lighting =>go to [1]	Operating Instructions
1	Parts failure	MAIN ASSY beforeTRIM 3-5	[Confirming the input] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of previous analog circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>go to [2]	-
2	Parts failure	MAIN ASSY after TRIM 3-6	[Confirming the input] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of previous analog circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>go to [3]	-
3	Connection failure/ Parts failure	MAIN ASSY MIC_ADC_IN 3-7	[Confirming the input] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of previous analog circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>go to [4]	-
4	Parts failure	MAIN ASSY MIC_ADC IC2904 9/10/11/12pin 3-8	[Confirming the input after ADC] Check the signals between ADC and DSP (other than sticking to LOW or HIGH) via relevant signal route.	- In the case that signal is sticking =>There is a possibility of failure of the MIC_ADC (IC2904) and peripheral circuit. Check condition of the solder of ADC and peripheral circuit/replace parts or replace MAIN ASSY.	-

[3-3] AUX is not inputted

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
0	Prior confirmation	AUX input changeover switch AUX TRIM CH level meter	- Confirm that position is correct. - When you enter the audio, check the CH level meter is lighting.	- In the case that CH level meter is lighting =>OUTPUT may be faulty. Go to [4] AUDIO OUTPUT - In the case that CH level meter is not lighting=>go to [1]	Operating Instructions
1	Parts failure	MAIN ASSY before AUX_L TRIM before AUX_R TRIM 3-9	[Confirming the input] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of previous analog circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>go to [2]	-
2	Connection failure/ Parts failure	MAIN ASSY AUX_L_ADC_IN AUX_R_ADC_IN 3-10	[Confirming the input] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of previous analog circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>go to [3]	-
3	Parts failure	MAIN ASSY AUX_ADC IC2903 9/10/11/12pin 3-11	[Confirming the input after ADC] Check the signals between ADC and DSP (other than sticking to LOW or HIGH) via relevant signal route.	- In the case that signal is sticking =>There is a possibility of failure of the AUX_ADC (IC2903) and peripheral circuit. Check condition of the solder of ADC and peripheral circuit/replace parts or replace MAIN ASSY.	-

[4] AUDIO OUTPUT

[4-1] MASTER1/MASTER2 is not outputted

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Output confirmation	MASTER1 / MASTER2	Check the terminal which is not outputted.	- Two are not outputted =>go to [2] - Only MASTER1 is not outputted =>go to [5] - Only MASTER2 is not outputted =>go to [6]	-
2	Parts failure	MAIN ASSY MDAC_RST IC3101 5pin 4-1	[Confirming the RESET signal] Confirm that MDAC_RST signal becomes HIGH.	- In the case LOW =>go to [3] - In the case HIGH =>MDAC_RST signal route may have solder fault. Check condition of the solder/replace parts.	-
3	Parts failure	MAIN ASSY IC3101 9/10/11/12pin 4-2	[Confirming the audio output] Check the audio signals (other than sticking to LOW or HIGH) via relevant signal route.	- In the case that audio signal doesn't exist. =>There is a possibility of failure of the DSP(IC501) or AUDIO_CLK . Replace MAIN ASSY. - In the case that audio signal exists =>go to [4]	-
4	Parts failure	MAIN ASSY IC3102,IC3103 1/7pin 4-3 4-4	[Confirming the audio output] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist. =>There is a possibility of failure of the IC3102, IC3103 and peripheral circuit. Check condition of the solder/replace parts.	-
5	Parts failure	MAIN ASSY IC3104,IC3105 1/7pin 4-5 4-6	[Confirming the audio output] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist. =>There is a possibility of failure of the IC3104, IC3105 and peripheral circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>There is a possibility of failure of the JACK and peripheral circuit. Check condition of the solder/replace parts.	-
6	Parts failure	MAIN ASSY IC3106 1/7pin 4-7	[Confirming the audio output] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist. =>There is a possibility of failure of the IC3106 and peripheral circuit. Check condition of the solder/replace parts. - In the case that audio signal exists =>There is a possibility of failure of the JACK and peripheral circuit. Check condition of the solder/replace parts.	-

[4-2] PHONES is not outputted

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Parts failure	MAIN ASSY DAC_RESET IC3302 5pin 4-8	[Confirming the RESET signal] Confirm that HPDAC_RST signal becomes HIGH.	- In the case HIGH =>go to [2] - In the case LOW =>HPDAC_RST signal route may have solder fault. Check condition of the solder/replace parts.	-
2	Parts failure	MAIN ASSY CN3302 10/11pin 4-9 4-10	[Confirming the audio output] Check the audio signals (other than sticking to LOW or HIGH) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of the DSP(IC501) or AUDIO_CLK. Replace MAIN ASSY. - In the case that audio signal exists. In the case that HP is not outputted =>go to [3]	-
3	Parts failure	MAIN ASSY IC3304 1/7pin 4-11 4-12	[Confirming the audio output] Check the audio signals (sine wave) via relevant signal route.	- In the case that audio signal doesn't exist =>There is a possibility of failure of previous analog circuit. Check condition of the solder of the IC3304 and peripheral circuit/replace parts. - In the case that audio signal exists =>go to [4]	-
4	Parts failure/ Connection failure	HPJK ASSY CN4001 1/3pin 4-13	[Confirming the audio output] Check the audio signals (sine wave) via relevant signal route.	- In the case that HP audio signal doesn't exist =>There is a possibility of failure of the analog circuit. Check condition of the solder of peripheral circuit/replace parts - In the case that audio signal exists =>There is a possibility of failure of JACK and wire of HPJK ASSY. Replace wire.	-

[5] DVS

[5-1] USB does not recognized

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
0	Prior confirmation	PC,LINE,PHONO changeover switch CH level meter	- Confirm that changeover switch is set to PC. - Install the latest driver. - Confirm that DJM-450 utility of PC is set correctly.	Set correctly.	Operating Instructions
1	Connection failure	MAIN ASSY USBB : IC1001 93/94/95pin 5-1 5-2 5-3 5-4	[Power supply] Confirm that voltage is approximately 5V (4.75 - 5.25V) in the condition that DJM-450 is connected to the PC. [D±USB] Confirm that wave form is generated in the condition that DJM-450 is connected to the PC.	- [Power supply] In the case of abnormality =>There is a possibility of failure of the MAIN ASSY. Replace MAIN ASSY. In the case of normal =>go to [2] - [D±USB] In the case of abnormality =>There is a possibility of failure of the MAIN ASSY. Replace MAIN ASSY.	-

[6] OLED

OLED is controlled by PANEL_UCOM(IC1).

[6-1] OLED is not lighting.

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Signal failure	OLED ASSY CN3801 8pin OLED_RST 6-1	Check the output signals and connection conditions of OLED communication line inside the PNLA ASSY. OLED_RST	- If output signals don't exist, check the installation of PANEL_UCOM (IC1) and wire conditions. In the case of no problems=>go to [2].	-
2	Signal failure	OLED ASSY CN3801 1pin OLED_XCS 2pin OLED_ADDR 4pin OLED_MOSI 6pin OLED_CLK 8pin OLED_RST 6-1 6-2	Check the output signals (other than sticking to LOW or HIGH) and connection conditions of OLED communication line inside the PNLA ASSY. OLED_RST OLED_CLK OLED_MOSI OLED_ADDR OLED_XCS	- If output signals don't exist, check the installation of PANEL_UCOM (IC1). If there are no problems, ports may be broken. Replace parts. - Check the wire conditions. If connection conditions have problems, repair using soldering. - If each signals are normal and OLED is not lighting, there is a possibility of failure of the OLED ASSY parts. Replace parts.	-

[7] CROSS FADER

[7-1] CROSS FADER operation is abnormal

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Calibration	Calibration	Conduct the calibration in the test mode and confirm that the conditions become normal.	If calibration cannot be conducted or result is NG=> go to [7-2].	6.1 TEST MODE

[7-2] CROSS FADER doesn't operate

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	CRFD ASSY doesn't operate.	CRFD ASSY [Power supply] V+3R3REF IC4001 5pin [GND] GNDREF IC4001 2pin [AD_CRS_ FADER signal] IC4001 4pin, R4002,R4003 [7-1] same as 7-1 7-2 7-3	[Power supply] Confirm that power supply is 3.3V. [GND] Confirm that GNDREF is connected with GNDD of MAIN ASSY. [AD_CRS_FADER signal] Check the AD_CRS_FADER signal of each diagnostic point while operating the CROSS FADER	- [Power supply] In the case of abnormal =>IC4001 may have solder fault. If solder fault repairing cannot solve the abnormality => go to [2]. - [GND] In the case of abnormal =>IC4001 may have solder fault. If solder fault repairing cannot solve the abnormality =>go to [2]. - [AD_CRS_FADER signal] In the case that signal is not outputted =>Resistance or IC4001 may have solder fault. Repair or replace parts. - All above described are normal =>go to [2]	-
2	Connection failure/ Signal failure	PNLA ASSY [Power supply] V+3R3REF_UB CN4 3pin [GND] GND_REF_UB CN4 1pin [CROSS_ FADER signal] CRS_FD CN4 2pin [7-1] same as 7-4 7-5 7-6	[Power supply] Confirm that power supply is 3.3V. [GND] Confirm that GND_REF_UB is connected with GNDD_REF of PNLA ASSY. [CROSS_FADER signal] Check the CROSS_FADER signal of each diagnostic point while operating the CROSS FADER	- [Power supply] In the case of normal =>Wire may have disconnection. In the case of abnormality =>go to [3] - [GND] In the case of normal =>Wire may have disconnection. In the case of abnormality =>go to [3] - [CROSS FADER signal] In the case that signal is not outputted, wire may have disconnection. Replace parts. -If it does not improve in the above, resistances or PANEL_UCOM(IC1) may have solder fault. Repair or replace parts.	-

[8] USBA

[8-1] Connected device are not recognized

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
1	Parts failure	MAIN ASSY IC2005 6/7pin 8-1	- Confirm that voltage is 5 V.	- In the case of over 5V => go to [3] - In the case of under 5V =>There is a possibility of failure of the IC2005 . Replace parts.	-
2	Parts failure	MAIN ASSY V5USBA_FA IC2005 8pin 8-2	[Confirming the communication signals] Confirm that V5USBA_FA becomes HIGH.	- In the case HIGH => go to [4] - In the case LOW =>USBPSW_FA route may have solder fault. Check condition of the solder/replace parts.	-
3	Parts failure		If it does not improve in the above.	- Connected equipment may be abnormal	-

[8-2] SEND/RETURN is not possible.

NO.	Cause	Diagnosis point	Confirmation item	Treatment	Reference
0	Prior confirmation	SEND/RETURN _ON/OFF switch SEND/RETURN _LEVEL	- Confirm that SEND/RETURN_ON/OFF switch becomes ON. Confirm that SEND/RETURN_LEVEL other than MIN		-
1	Connection failure	MAIN ASSY USBA IC1501 93/94pin 8-3 8-4	[D±USB] Confirm that wave form is generated in the condition SEND/RETURN is ON.	[D±USB] In the case of abnormality =>There is a possibility of failure of the MAIN ASSY . Replace MAIN ASSY.	-

5.3 POWER SUPPLY DIAGNOSIS INFORMATION

■ Detection of power supply voltage failure

With this unit, PANEL UCOM (IC1) always monitors the power supply voltage. If an error is detected, startup will be immediately turned OFF.
At this time, LED of WAKE UP button blinks.

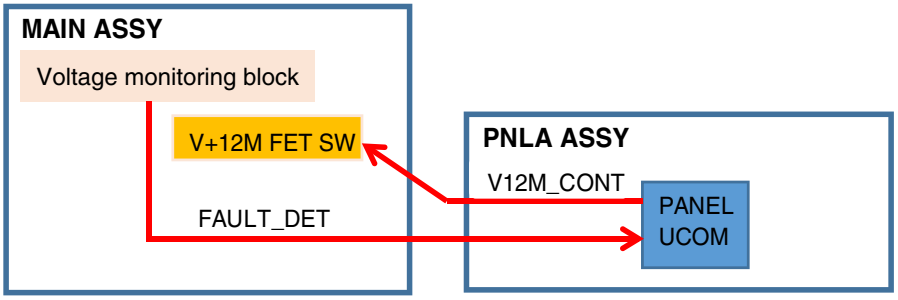
■ Power supply to be monitored

Name of power supply indicates the voltage
(example: V+3R3A ... 3.3V)

FAULT DET	High Value	Low Value
V+3R3A	4.08V	1.84V
V+3R3D	4.24V	2.35V
V+1R25D	1.76V	0.83V
V+5D	6.61V	-
V+5A	6.5V	3.71V
V+15OLED	-	10.31V
V+15A	-	11.31V
V-15A	-10.5V	-
V-7R5	-3.25V	-

■ Overview of detection system

- Signal notifying an error from the voltage monitoring circuit block (FAULT_DET)
  (With this unit, PANEL UCOM controls the power supply)
- Signal receiving FAULT_DET to shut down V+12M (V12M_CONT)



■ Diagnostic method

- Error detection OFF MODE
  If you turn ON the power supply while pressing CH1 CUE, CH2 CUE, and BFX ON buttons at the same time, you can turn ON the power supply in the mode that does not turn OFF the secondary power supply even in case of voltage failure.

* This is the mode for identifying the power supply whose voltage is abnormal.
It is necessary to pay attention to it because IC may be damaged to lead to destruction if the power supply is continuously turned ON out of necessity.

① While the power supply is turned OFF, check the monitored voltage does not short out with GND.
② While monitoring each monitored voltage, turn ON the power supply in this mode and check no error is generated.
* A single power ON should be within 10 seconds.

5.4 CONFIRMATION OF EACH INTERFACE CONNECTION

■ USB

[1. USB B connector]

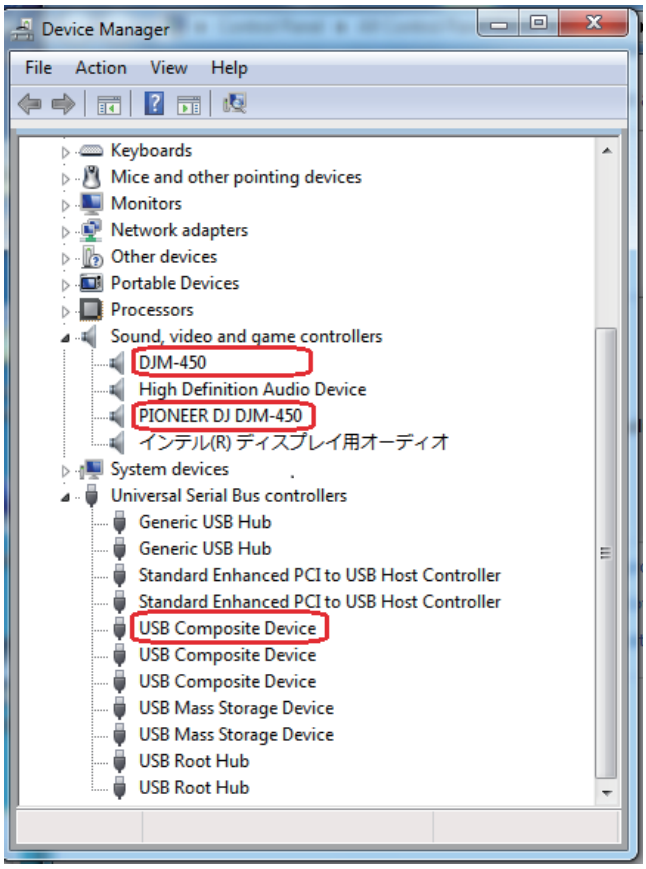
By using a PC, you can confirm that USB communication is normal between the USB B terminals of this unit and the PC.
* Driver software is required to be installed.

- Confirm using the device manager.

When this unit was connected to the PC, device is added to the device manager.
When all the contents are displayed correctly, this unit can normally communicate via the USB.

In the case of Windows7
"Start" -> "Control panel" -> "System" -> "Device manager"
Added and displayed device
- Sound, video, and game controller
DJM-450
PIONEER DJ DJM-450

Opening the device manager on the PC makes the connection work easier to check.



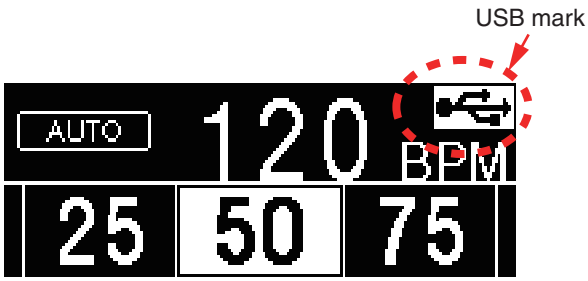
[2. USB A connector]

Confirm that USB communication is normal between the USB A terminals of this unit and the external devices.
* Use a USB memory.

- Confirm using the display of this unit.

USB mark is lighting : USB memory is recognized normally.
USB mark is not lighting : USB memory is not inserted.

* Memory needs several seconds to be recognized.



6. SERVICE MODE
6.1 TEST MODE

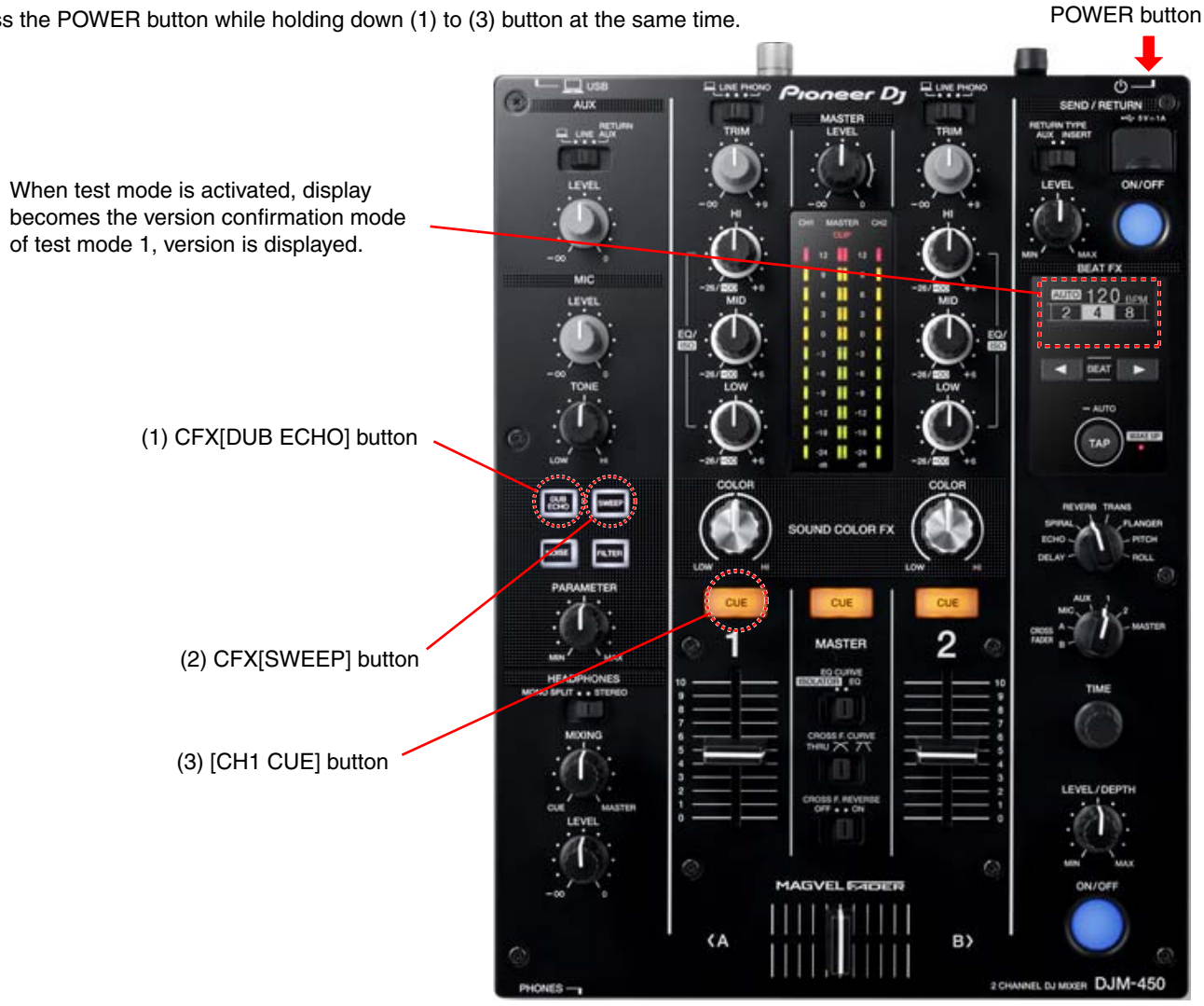
Outline of Test Mode

Test mode of this unit consists of 12 modes. Pressing [TAP] advances the mode to next.
First mode is always the mode 1 when a test starts. Next of the last mode is the mode 1.

mode 1	Version confirmation mode	mode 7	Volume confirmation mode
mode 2	Fader setting mode	mode 8	Fader confirmation mode
mode 3	All light-off mode	mode 9	Level meter LED confirmation mode
mode 4	All lighting mode	mode 10	Volume A/D value confirmation mode
mode 5	KEY confirmation mode	mode 11	Fader A/D value confirmation mode
mode 6	SW confirmation mode	mode 12	Device confirmation mode

How to Start Test Mode

Press the POWER button while holding down (1) to (3) button at the same time.



Please power supply is turned ON while pressing (1) to (3) button at the same time.
Holding down (1) to (3) button until display becomes the version confirmation mode .

Test mode Exit Method

Pease power supply is turned OFF by press the POWER button.

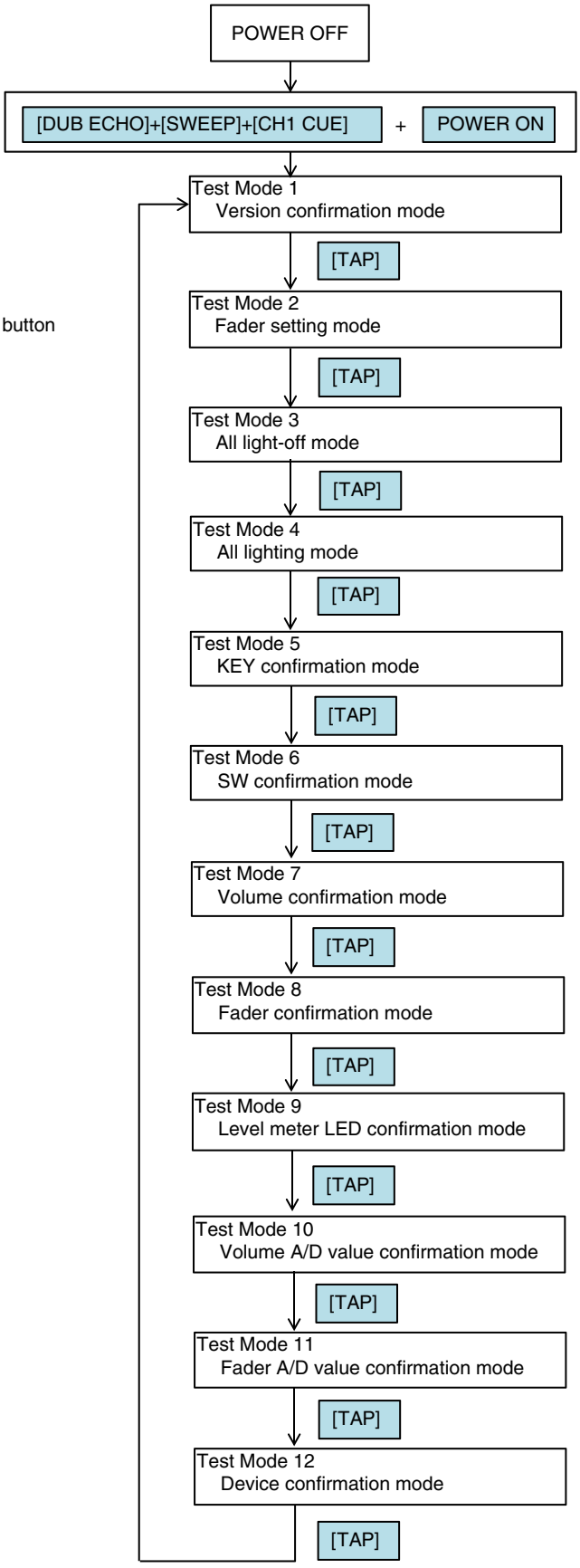
Mode Changing Method

Press the [TAP] button to change to next mode.

[BEAT DOWN] button

[BEAT UP] button

[TAP] button



Test mode1 Version confirmation mode

Outline

This mode is to display the firmware version in this unit.

Display mode title

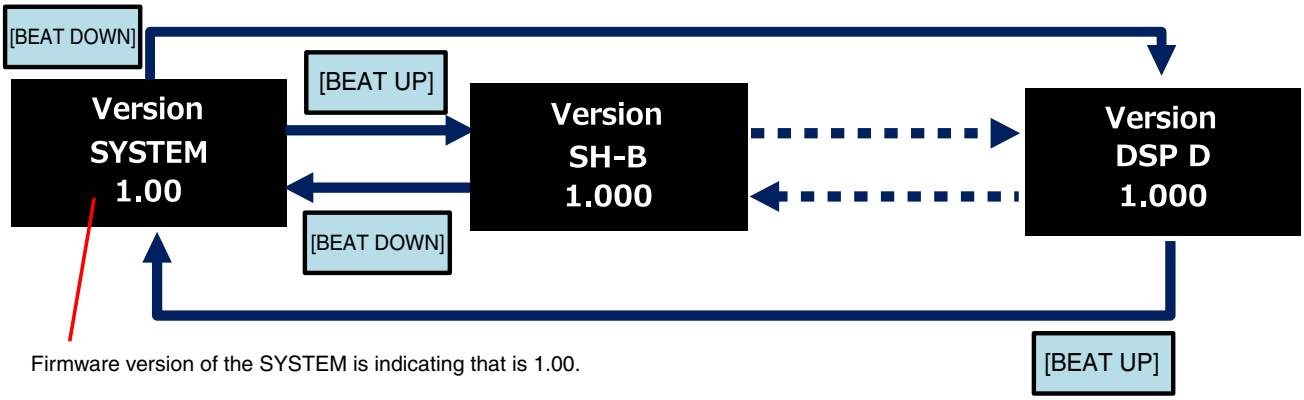
Version

Operation

[BEAT UP], [BEAT DOWN] : Page change
[TAP] : Mode change (To next mode)

Operation details

Software name	Displaying
SYSTEM	SYSTEM
SH0	SH-B
SH1	SH-A
SH-BOOT	BOOT
PANEL	PANEL
PANEL-BOOT	PANEL-B
DSP Program	DSP P
DSP Data	DSP D



Firmware version of the SYSTEM is indicating that is 1.00.

Test mode 2 Fader setting mode

Outline
Acquire the maximum and minimum A/D values of [Cross Fader] and set values.

Display mode title
CFDR SET

Operation
[CH1 CUE], [CH2 CUE] (lighting) : Page change(A/D value setting)
[NOISE], [FILTER] (lighting) : Setting start/Setting value saving
[TAP] : Mode change (to next mode)

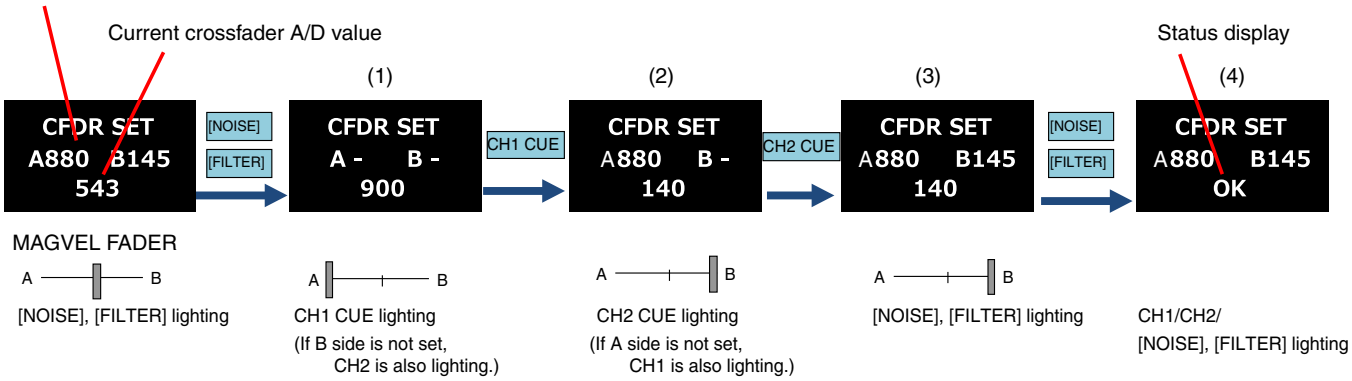
Operation details
(1) Starting the setting
Press down the [NOISE] and [FILTER] at the same time.
Start the setting of the maximum/minimum A/D values.
A/D values of A side and B side are displayed using "-" (bar) type.

(2) Setting of A side
Slide the [Cross Fader] to the left end and press the [CH1 CUE].
When values are determined, determined A/D values are displayed in A of the second line.

(3) Setting of B side
Slide the [Cross Fader] to the left end and press the [CH2 CUE]
When values are determined, determined A/D values are displayed in B of the second line.

(4) Saving the setting values
Press down the [NOISE] and [FILTER] at the same time.
Confirm the conditions depending on the status displayed in the display section.

A/D values currently saved in the A side/B side is displayed.
"000" is displayed if values are not saved.



* If error occurs, CUE lighting condition is that [NOISE] and [FILTER] become lighting, which is the setting start waiting condition.

[Status display] (Description of the status displayed in the display section)

Display	Description
OK	Save completed
NG	Parameter error
ERR	Save failed
E10	A side A/D value acquisition error
E20	B side A/D value acquisition error

Note
- When the both end A/D values of [Cross Fader] are not set, [CH1 CUE], [CH2 CUE], and [MASTER CUE] blink in the case of a normal startup.
- If deflection width becomes large by noise or operation mistake when trying acquiring A/D values, operation (setting) is assumed as an error. Retry is permitted maximum three times.
  If three time retries fail to acquire A/D values, acquisition error is determined.
- A/D values that are set in this mode become effective immediately after saving.
- Should an error occur, setting must be started again without changing the mode.

Test Mode 3 ALL light-off mode

Outline

LED and display will be lighting all off.

Display mode title

ALL CLEAR

* This is displayed for about 1 second at the start of mode.

Operation

[TAP](light-off) : Mode change (to next mode)
[BEAT UP],[BEAT DOWN] : Brightness adjustment (0-15)

Note

[Brightness adjustment mode]

- Using BEAT ◀/▶, brightness of OLED can be adjusted.
- Brightness setting values can be checked depending on lighting of MASTER LEVEL -24dB (10 digit) and CH2 LEVEL 6 to -24dB (1 digit).

Test mode 4 All lighting mode

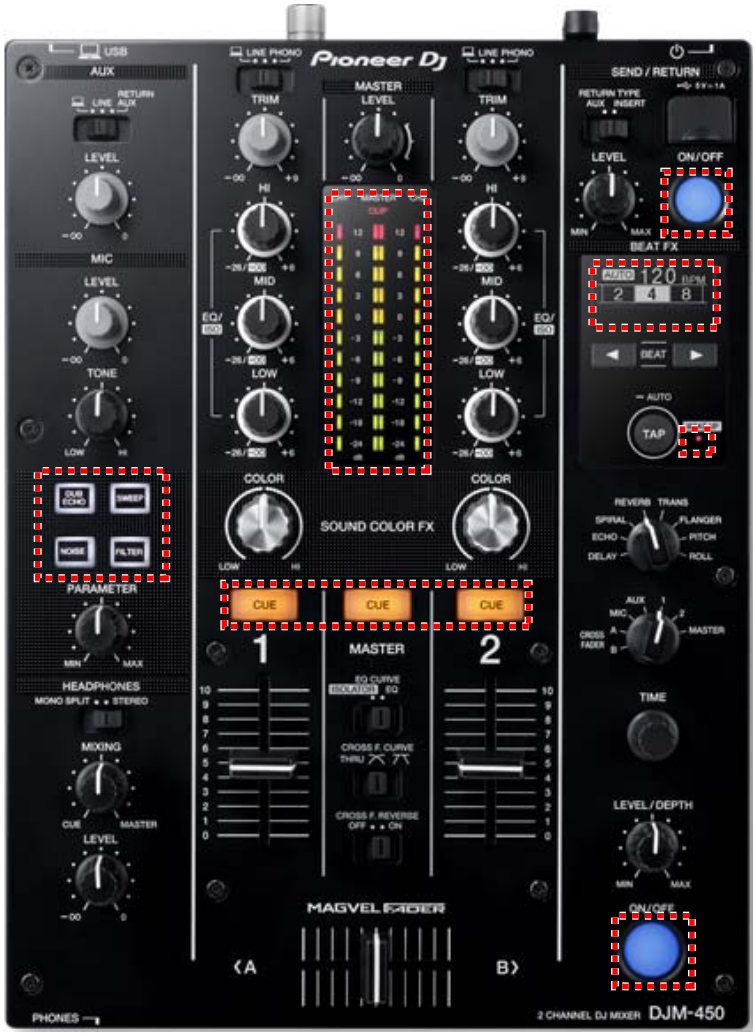
Outline
LED and display will be all lighting.

Display mode title
ALL SET
* This is displayed for about 1 second at the start of mode.

Operation
[TAP] : Mode change (to next mode)
[BEAT UP],[BEAT DOWN] : Brightness adjustment (0-15)

Note
[Brightness adjustment mode]
• Using BEAT ◀/▶, brightness of OLED can be adjusted.
• Brightness setting values can be checked depending on lighting of MASTER LEVEL -24dB (10 digit) and CH2 LEVEL 6 to -24dB (1 digit).

Lighting points during all lighting



Test mode 5 KEY confirmation mode

Outline

Press the KEY and confirm each key operation depending on lighting of the LED and description in the display.

Display mode title

KEY TEST

Operation

Each KEY to be confirmed : Refer to the following table.
[TAP] : Mode change (to next mode)

Operation details

Operation key	lighting LED	Display
DUB ECHO	DUB ECHO	CFX 1
SWEEP	SWEEP	CFX 2
NOISE	NOISE	CFX 3
FILTER	FILTER	CFX 4
CUE CH1	CUE CH1 LED	CUE 1
CUE CH2	CUE CH2 LED	CUE 2
CUE MASTER	CUE MASTER LED	CUE MST
SEND/RETURN ON/OFF	SEND/RETURN ON/OFF LED	S/R ON
BEAT DOWN (◀)	None	BEAT <
BEAT UP (▶)	None	BEAT >
TAP	None (because it is used for mode transition.)	None (because it is used for mode transition.)
EFFECT ON/OFF	EFFECT ON/OFF LED	EFX ON

Test mode 6 SW confirmation mode

Outline

LEDs corresponding to selected switches are lighting.
Change of the TIME knob is displayed on the display section.

Display mode title

SW TEST

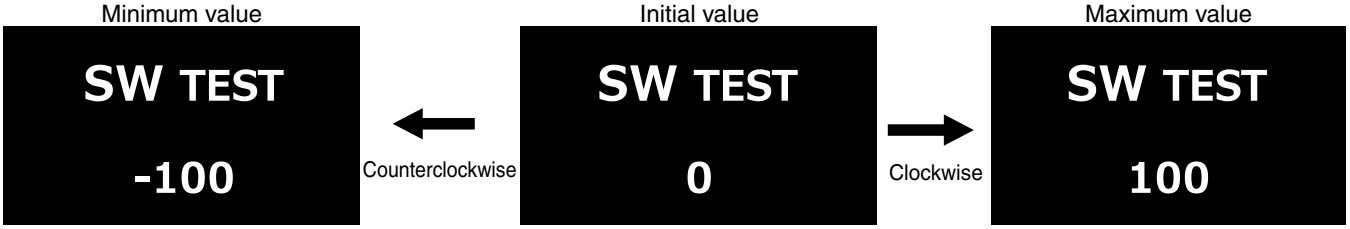
Operation

Each switch to be confirmed :Refer to the following table.
TIME knob
[TAP] : Mode change (to next mode)

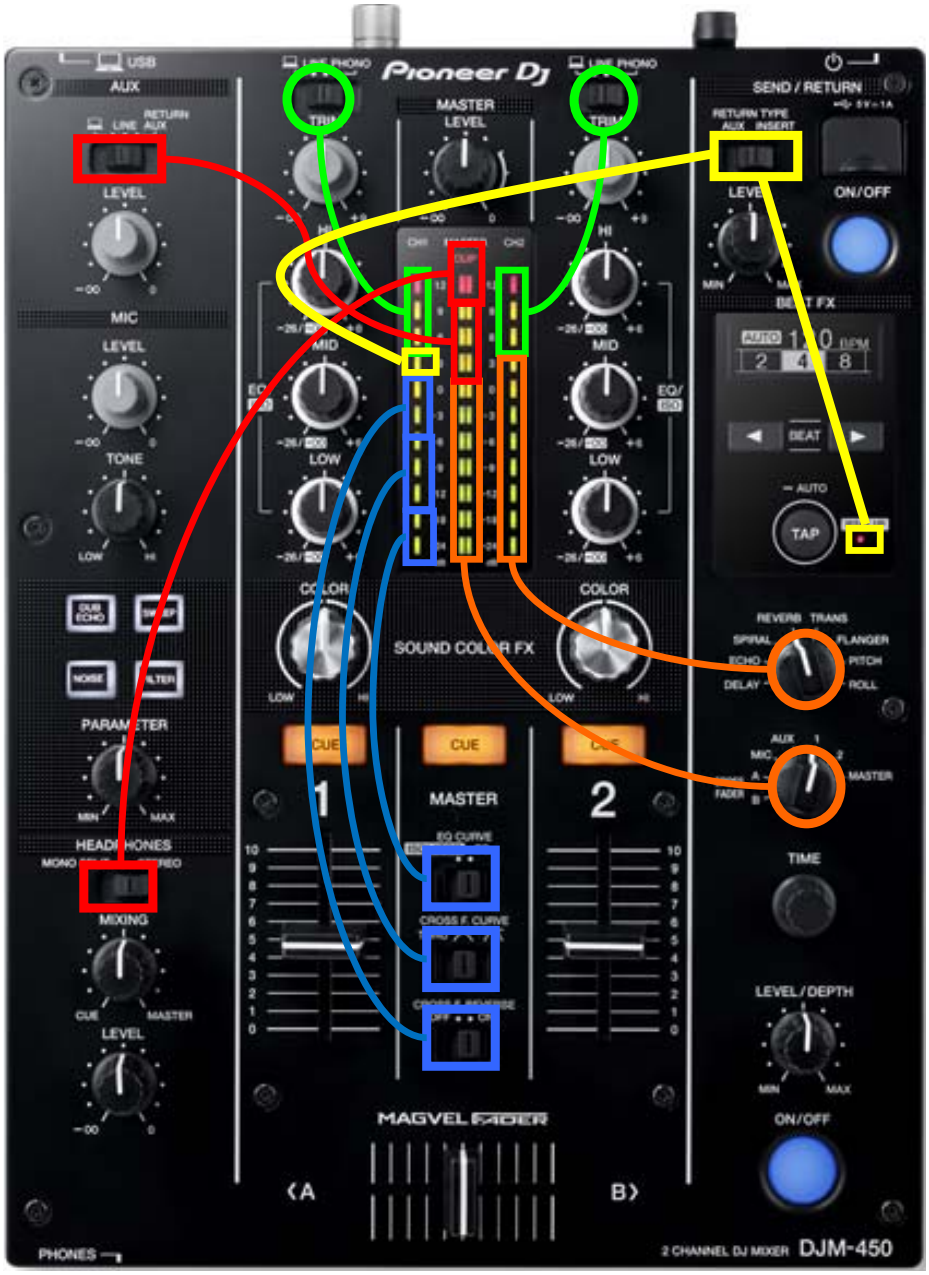
Operation details

Operation switch		Lighting LED	
INPUT SELECT CH1	: USB	CH1 Level Meter LED	12dB
	: LINE		9dB
	: PHONO		6dB
INPUT SELECT CH2	: USB	CH2 Level Meter LED	12dB
	: LINE		9dB
	: PHONO		6dB
AUX	: USB	MASTER Level Meter LED	9dB
	: LINE		6dB
	: RETURN AUX		3dB
HEAD PHONES	: MONO SPLIT	MASTER Level Meter LED	CLIP
	: STEREO		12dB
EQ CURVE	: ISOLATOR	CH1 Level Meter LED	-24dB
	: EQ		-18dB
CROSS FADER CURVE	: LEFT	CH1 Level Meter LED	-6dB
	: MID		-9dB
	: RIGHT		-12dB
FADER REVERSE	: OFF	CH1 Level Meter LED	-3dB
	: ON		0dB
SND/RTN TYPE	: AUX	CH1 Level Meter LED	3dB lighting
	: INSERT	WAKE UP LED	lighting
Channel Select SW	: CF.B	MASTER Level Meter LED	-24dB
	: CF.A		-18dB
	: MIC		-12dB
	: AUX		-9dB
	: 1		-6dB
	: 2		-3dB
	: MASTER		0dB
Effect Select SW * SW left is assumed 1 and right is assumed 8.	: 1	CH2 Level Meter LED	-24dB
	: 2		-18dB
	: 3		-12dB
	: 4		-9dB
	: 5		-6dB
	: 6		-3dB
	: 7		0dB
	: 8		3dB

TIME knob
Operation range Initial value : 0
Maximum value : 100
Minimum value : -100



Correlation diagram of the operation switch and lighting LED



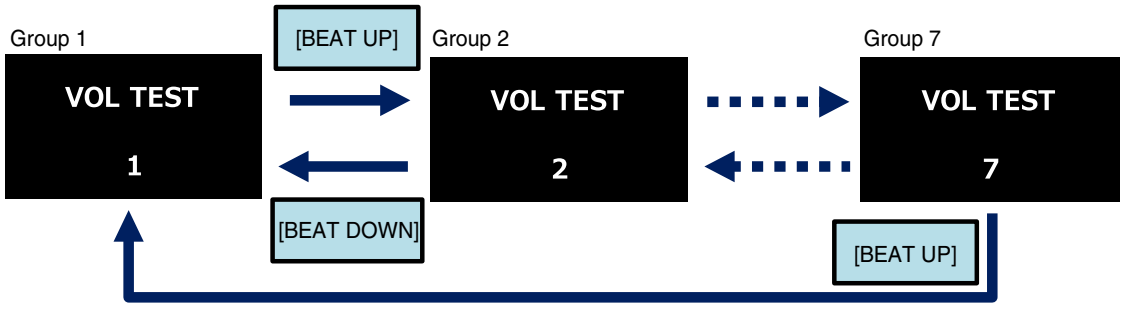
Test mode 7 Volume confirmation mode

Outline
Confirm the A/D converted value of the rotary volume depending on Level Meter LED and lighting in the display.

Display mode title
VOL TEST

Operation
Confirmed each volume : Refer to the following table.
[BEAT UP], [BEAT DOWN] : Group change
[TAP] (lighting) : Mode change (to next mode)

Operation details
Divide each rotary volume into 7 groups and switch using [BEAT UP], [BEAT DOWN].



Group 1

Operation volume	Lighting LED/Display	Lighting range
CH1 TRIM	CH1 Level Meter LED	"- ∞ " : Lights Off "+9": Full Illuminate
CH2 TRIM	CH2 Level Meter LED	"- ∞ " : Lights Off "+9": Full Illuminate
MASTER LEVEL	MASTER Level Meter LED	"- ∞ " : Lights Off "0" : Full Illuminate

Group 2

Operation volume	Lighting LED/Display	Lighting range
CH1 HI	CH1 Level Meter LED	"-26/ -∞": Lights Off "+6": Full Illuminate
CH2 HI	CH2 Level Meter LED	"-26/ -∞": Lights Off "+6": Full Illuminate
AUX LEVEL	MASTER Level Meter LED	"- ∞ " : Lights Off "0" : Full Illuminate

Group 3

Operation volume	Lighting LED/Display	Lighting range
CH1 MID	CH1 Level Meter LED	"-26/ -∞": Lights Off "+6": Full Illuminate
CH2 MID	CH2 Level Meter LED	"-26/ -∞": Lights Off "+6": Full Illuminate
MIC LEVEL	MASTER Level Meter LED	"-12" : Lights Off "+12": Full Illuminate

Group 4

Operation volume	Lighting LED/Display	Lighting range
CH1 LOW	CH1 Level Meter LED	"-26/ -∞": Lights Off "+6": Full Illuminate
CH2 LOW	CH2 Level Meter LED	"-26/ -∞": Lights Off "+6": Full Illuminate
MIC TONE	MASTER Level Meter LED	"-12" : Lights Off "+12": Full Illuminate

Group 5

Operation volume	Lighting LED/Display	Lighting range
CH1 COLOR	CH1 Level Meter LED	"LOW": Lights Off "HI": Full Illuminate
CH2 COLOR	CH2 Level Meter LED	"LOW": Lights Off "HI": Full Illuminate
CFX PARAMETER	MASTER Level Meter LED	"MIN" : Lights Off "MAX": Full Illuminate

Group 6

Operation volume	Lighting LED/Display	Lighting range
HEAD PHONES MIXING	CH1 Level Meter LED	"CUE": Lights Off "MASTER": Full Illuminate
HEAD PHONES LEVEL	CH2 Level Meter LED	"- ∞ " : Lights Off "0": Full Illuminate
EFFECT LEVEL/DEPTH	MASTER Level Meter LED	"MIN" : Lights Off "MAX": Full Illuminate

Group 7

Operation volume	Lighting LED/Display	Lighting range
SND/RTN LEVEL	CH1 Level Meter LED	"MIN" : Lights Off "MAX": Full Illuminate

Grouping details

: Group 1
: Group 2
: Group 3
: Group 4
: Group 5
: Group 6
: Group 7

Test mode 8 Fader confirmation mode

Outline
Confirm the values of CH1 to CH2 fader and cross fader depending on the meter LED.

Display mode title
FDR TEST

Operation
Confirmed each fader : Refer to the following table.
[TAP] : Mode change (to next mode)

Operation details

Operation fader	Lighting LED/ Display	Lighting range
CH1 FADER	CH1 Level Meter LED	"0": Lights Off "10": Full Illuminate
CH2 FADER	CH2 Level Meter LED	"0": Lights Off "10": Full Illuminate
CROSS FADER	MASTER Level Meter LED	"A": Lights Off "B": Full Illuminate

Note
For CROSS FADER, reflect to the LED on the basis of both end A/D values saved in the "mode 2 Fader setting mode."
If they are not saved, use the A/D immediate data.

Test mode 9 Level meter LED confirmation mode

Outline
Confirm the lighting of the level meter LED.

Display mode title
LED TEST

Operation
[CH1 CUE], [CH2 CUE], [MASTER CUE](lighting) : Level meter lighting (Refer to the following table.)
[TAP] : Mode change (to next mode)

Operation details
When each CUE is pressed, corresponding level meter LEDs begin lighting from the bottom one by one (MASTER level meter contains CLIP LED).
Initial value is all light-off.
After CH1 or CH2 is pressed 11 times, or after MASTER is depressed 12 times, (In the condition that CLIP LED is lighting), if it is depressed again, entire light-off condition comes back again.

Operation button	Lighting meter
CH1 CUE	CH1 Level Meter
CH2 CUE	CH2 Level Meter
MASTER CUE	MASTER Level Meter/CLIP LED

Test mode 10 Volume A/D value confirmation mode

Outline

Displaying rotary volume A/D values in the display section and confirm the deflection width.

Display mode title

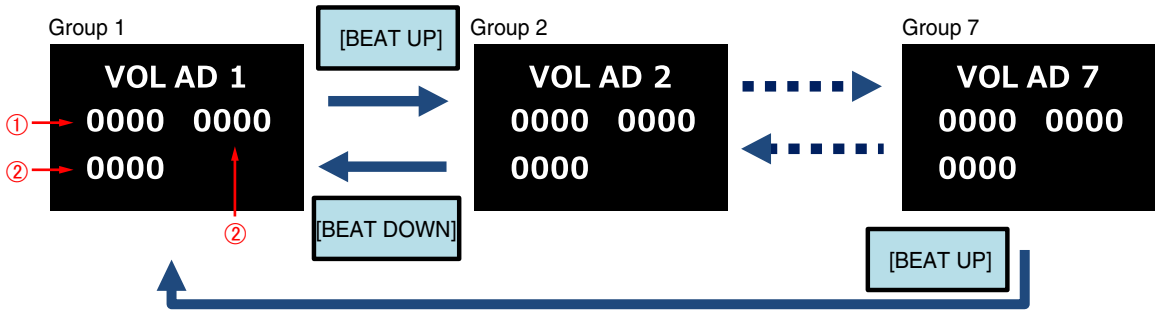
VOL AD

Operation

Confirmed each rotary volume	: Refer to the following table.
[BEAT UP], [BEAT DOWN]	: Group change
[EFFECT ON/OFF]	: A/D value measurement
[TAP]	: Mode change (to next mode)

Operation details

Divide each rotary volume into 7 groups and switch using [BEAT UP], [BEAT DOWN].
Confirm maximum deflection width of A/D converted value of each rotary volume in the display section.
Align to the position to be measured, when press the [EFFECT ON/OFF], start measuring.
Deflection width is displayed in the corresponding level meter.
When press again [EFFECT ON/OFF], A/D value is reset. During measurement, maximum deflection width is being displayed.
[EFFECT ON/OFF] is lighting during measurement, it will be light-off by a reset.
In addition, A/D value of each rotary volume is displayed on the display.



Grouping is the same as grouping of “Test mode 7 Volume confirmation mode”

Group 1

Operation volume	Lighting LED/Display	Display description
CH1 TRIM	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
CH2 TRIM	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
MASTER LEVEL	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ③

Group 2

Operation volume	Lighting LED/Display	Display description
CH1 HI	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
CH2 HI	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
AUX LEVEL	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ③

Group 3

Operation volume	Lighting LED/Display	Display description
CH1 MID	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
CH2 MID	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
MIC LEVEL	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ③

Group 4

Operation volume	Lighting LED/Display	Display description
CH1 LOW	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
CH2 LOW	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
MIC TONE	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ③

Group 5

Operation volume	Lighting LED/Display	Display description
CH1 COLOR	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
CH2 COLOR	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
CFX PARAMETER	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ③

Group 6

Operation volume	Lighting LED/Display	Display description
HEAD PHONES MIXING	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
HEAD PHONES LEVEL	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
EFFECT LEVEL/DEPTH	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ③

Group 7

Operation volume	Lighting LED/Display	Display description
SND/RTN LEVEL	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①

Note

As the A/D values displayed in the display section are values before hysteresis processing and have deflection width, there may be an error margin of approximately ±2.

Test mode 11 Fader A/D value confirmation mode

Outline
Displaying fader A/D values in the display section and confirm the deflection width.

Display mode title
FDR AD

Operation
Confirmed each fader : Refer to the following table.
[EFFECT ON/OFF] : Deflection width measurement
[TAP] : Mode change (to next mode)

Operation details
Confirm maximum deflection width of A/D converted value of each fader in the display section.
Align to the position to be measured, when press the [EFFECT ON/OFF], start measuring.
Deflection width is displayed in the corresponding level meter.
When press again [EFFECT ON/OFF], A/D value is reset. During measurement, maximum deflection width is being displayed.
[EFFECT ON/OFF] is light during measurement, it will be light-off by a reset.
In addition, A/D value of each fader is displayed on the display.

Operation fader	Lighting LED/Display	Display description
CH1 FADER	CH1 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ①
CH2 FADER	CH2 Level Meter	Lighting from deflection width value -24
	Display	A/D value (0000 to 1023) is displayed in ②
CROSS FADER	MASTER Level Meter	Lighting from deflection width value -24
	Display	A/D value is displayed in ③ *

*(Different by unit)

Note
As the A/D values displayed in the display section are values before hysteresis processing and have deflection width, there may be an error margin of approximately ±2.

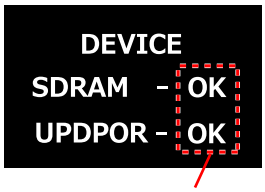
Test mode 12 Device confirmation mode

Outline
Confirm the conditions of SDRAM and ports for update.

Display mode title
DEVICE

Operation
[TAP] : Mode change (to next mode)

Operation details
If CHECK is displayed, as check is still being conducted, wait until OK/NG is displayed, then conduct the confirmation.
If test result of the update port is NG, following LED indicates which port is abnormal.



Display the check result

Device	Display		
	Title	Description	
DSP SDRAM	SDRAM	CHK	During checking
		OK	Normal
		NG	Abnormal
UPDATE PORT	UPDPORT	CHK	During checking
		OK	Normal
		NG	Abnormal

Port name	NG display LED
PNL_MODE	CH1 Level Meter -24dB LED
A-PNL_MOSI	CH1 Level Meter -18dB LED
A-PNL_MISO	CH1 Level Meter -12dB LED
A-PNL_CLK	CH1 Level Meter -9dB LED
A-PNL_CTRL	CH1 Level Meter -6dB LED
A-PNL_INT	CH1 Level Meter -3dB LED

6.2 ABOUT THE DEVICE

Device Information List

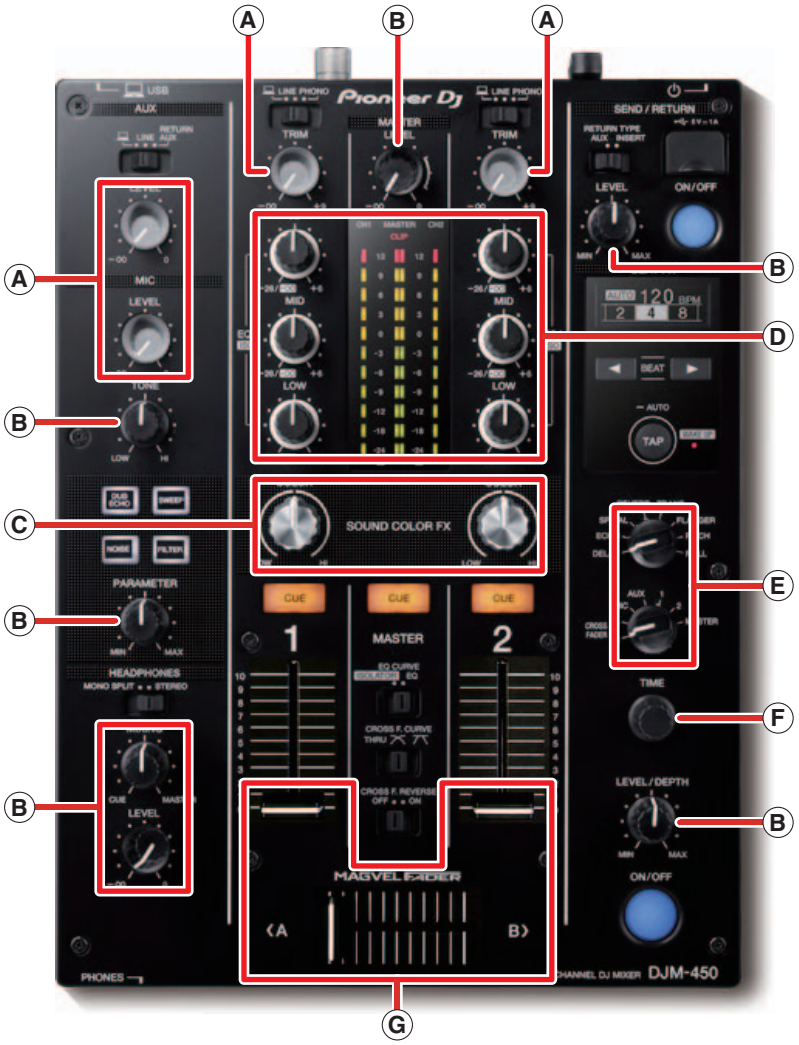
Device name	Function	Part No.	Reference No.	ASSY
PANEL UCOM	Main, LED, OLED, KEY and VR control	DYW**** *1	IC1	PNLA ASSY
USBB UCOM	USBB control	R5S72690RW266FP	IC1001	MAIN ASSY
FLASH	ROM for USBB UCOM	DYW**** *1	IC1002	MAIN ASSY
USBA UCOM	USBB control	R5S72690RW266FP	IC1501	MAIN ASSY
DSP	Audio DSP	D810K013DZKB400	IC501	MAIN ASSY
DSP_SDRAM	RAM for DSP (Work)	M12L128168A-5TG2N	IC503	MAIN ASSY

*1 : [****] of DYW**** changes each time the firmware is updated.

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.

[1] Knob Locations



Ⓐ DAA1372 x 4

Ⓑ DAA1183 x 7

Ⓒ DAA1373 x 2

Ⓓ DAA1279 x 6

Ⓔ DAA1185 x 2

Ⓕ DAA1374 x 1

Ⓖ

DAC2685 x 3

DAC2684 x 3

DNK5888 x 3

Note: The shipment position of each knob follows the left photo.

[2] Disassembly

[2-1] Diagnosis

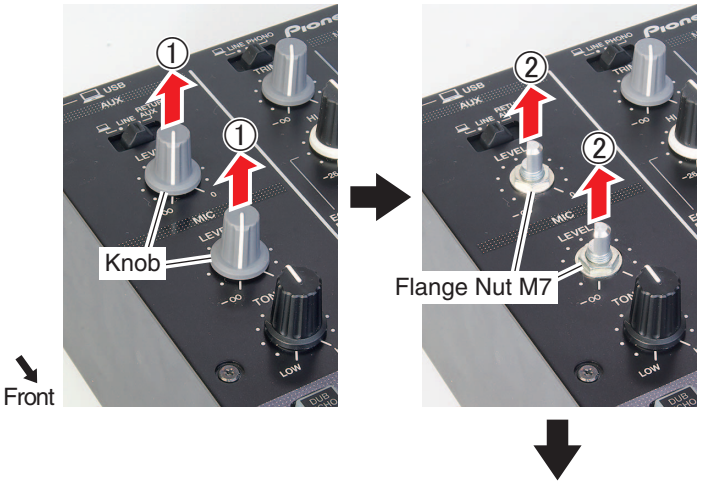
[2-1-1] Control Panel Section

① Remove the two Knobs. (DAA1372)

Note: They are easily removed with a dessert spoon.

② Remove the two Flange Nut M7s. (DBN1011)

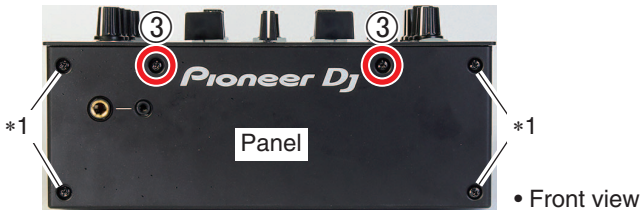
Note: Make sure that two nuts have been removed. PCB may be damaged if it is disassembled before removing the nuts.



③ Remove the two screws. (BBZ30P080FTB)

Note on assembling

∗1: Don't make a mistake because four screws to mount the Panel (DNK6657) are different Part No.



④ Remove the six screws. (DBA1446)

Note on assembling

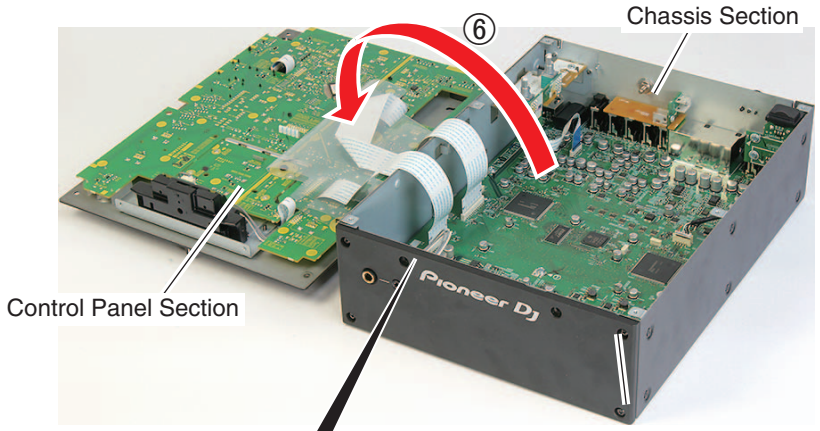
∗2: Attach first two screws in the order as shown by blue numbers. Remaining four screws can be attached in any order.

⑤ Remove the Control Panel Section.

Note: Pay attention for the two FFCs connected.

⑥ Arrange the Control Panel Section as shown in the photo.

Diagnosis

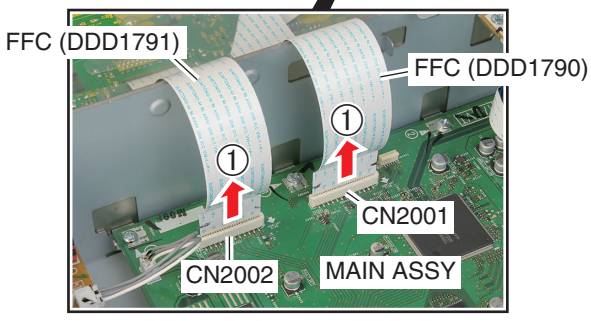


[2-1-2] Diagnosis of PNLA ASSY (side-B)

Remove the Control Panel Section.
(Refer to the "**[2-1-1] Control Panel Section**")

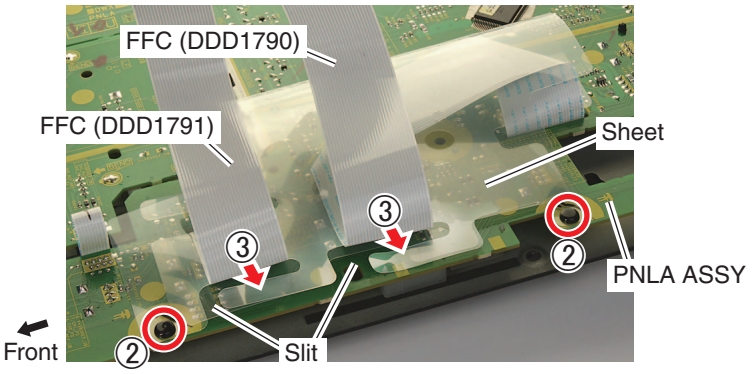
---

① Disconnect the two connectors.



② Remove the two Rivet (Plastic)s. (RBM-003)

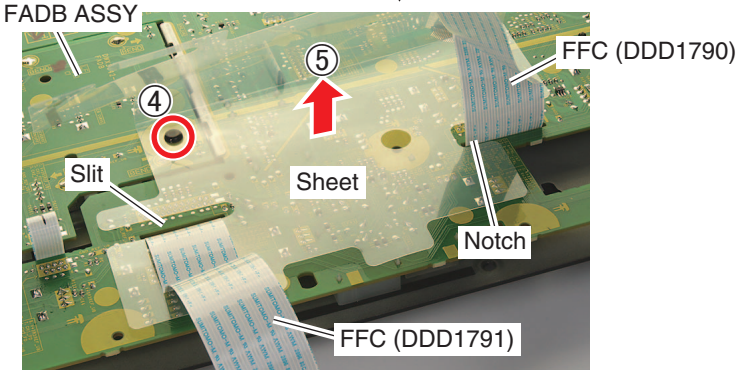
③ Remove the two FFCs from the two slits of Sheet (DEC3714).



④ Open the two folded Sheet (DEC3714) and then remove the Rivet (Plastic) (RBM-003).

⑤ Remove the two FFCs from the slit and notch of the Sheet, and then remove the Sheet.

⑥ Connect the two connectors disconnected in step ①.



Diagnosis

: ① x 23

[2-2] Control Panel Section

Remove the Control Panel Section and then remove the Sheet (DEC3714).
(Refer to the "**[2-1] Diagnosis**")

[2-2-1] PNLA ASSY, LEDB ASSY

① Remove all Knobs 23 places of the Control Panel Section.

Notes

Rotary knobs are easily removed with a dessert spoon.

*3: Each of the three Slider Knobs has a lock mechanisms.
(Refer to the next page)

Disassembly / Assembly of the Slider Knob

① Push up the lower edge of the Slider Knob 2 with tweezers and then remove the Slider Knob.

Note

∗4: Push up of the Slider Knob 2 is only possible from one side.

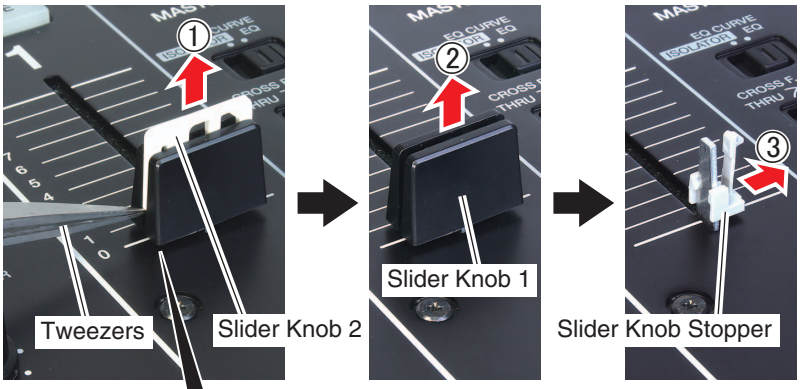
② Remove the Slider Knob 1 upward.

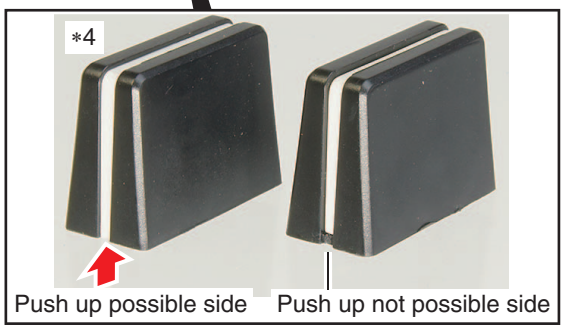
③ Remove the Slider Knob Stopper horizontally.

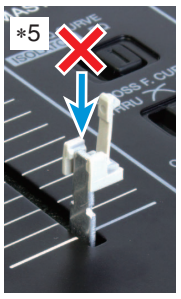
Notes on assembling

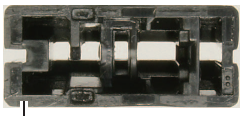
∗5: Don't insert the Slider Knob Stopper from above.

∗6: Pay attention to the direction of each Slider Knob.





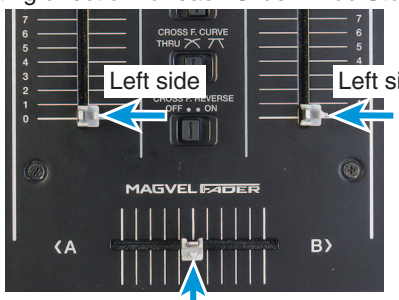




Bottom side of the Slider Knob 1

Direct the concave side toward the opposite side from Slider Knob Stopper.

∗6 Mounting direction for each Slider Knob Stopper.



[2-2-1] PNLA ASSY, LEDB ASSY (continuation)

② Remove the Nut (Accessory of VR) and Washer (DEC3731), 19 pieces respectively.

Note on assembling

∗7: Attach first three nuts in the order as shown by blue numbers. Remaining 16 nuts can be attached in any order.

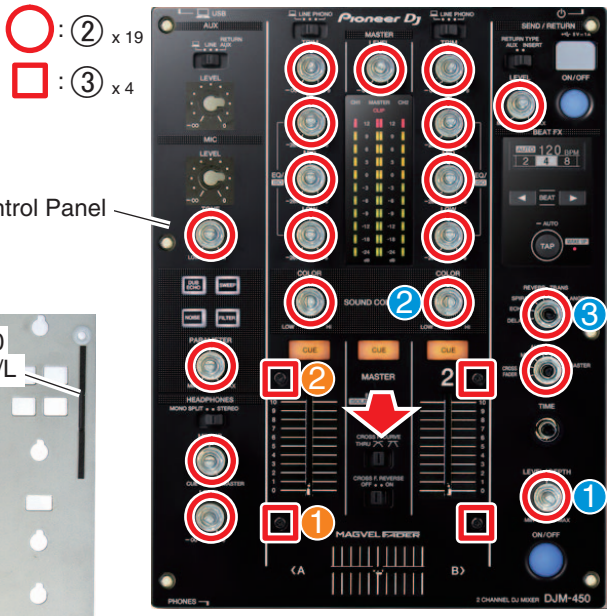
③ Remove the four screws (DBA1446) and then remove the Control Panel.

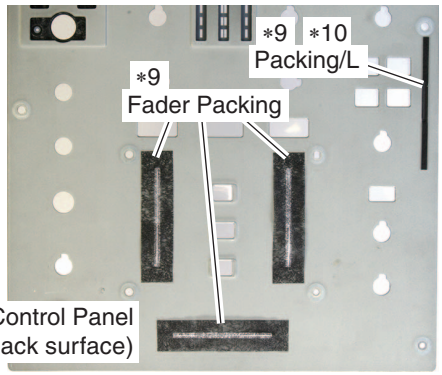
Notes on assembling

∗8: Attach first two screws in the order as shown by orange numbers. Remaining two screws can be attached in any order.

∗9: If Fader Packing or Packing/L is damaged, replace it with new one.

∗10: Packing/L must be attached outside of engraved marks on the Control Panel (Back surface). If attached inside of the marks, it may cause problems in button control.

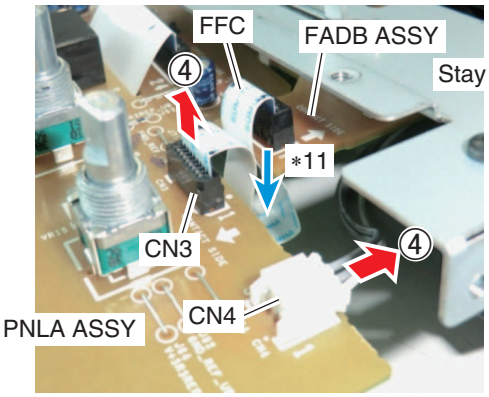




④ Disconnect the two connectors and then remove the Stay (DNF2011) (with the FADB ASSY and Cross Fader ASSY).

Note on assembling

∗11: Bend the FFC (DDD1792) as shown in the photo, and then lay it in the gap between FADB ASSY and PNLA ASSY.



⑤ Release the two hooks of OLED ASSY (DEA1065).

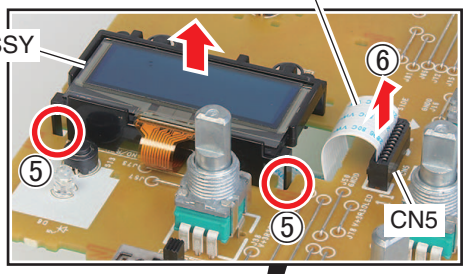
⑥ Disconnect the connector and then remove the OLED ASSY.

⑦ Remove the Holder (DNK6660).

Note on assembling

∗12: Pay attention to the direction of Holder.

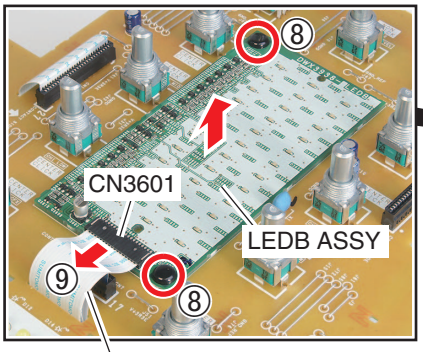
FFC (DDD1794)
For styling, refer to the next page.



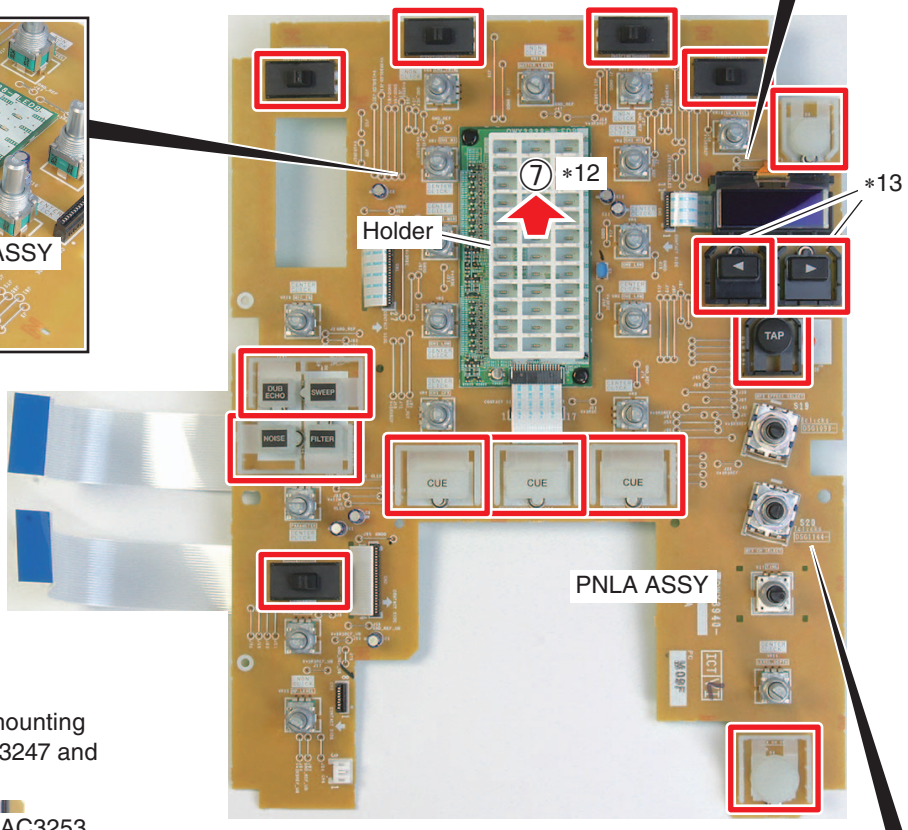
⑧ Remove the two Rivet (Plastic)s. (RBM-003)

⑨ Disconnect the connector and then remove the LEDB ASSY.

: ⑩ x 15



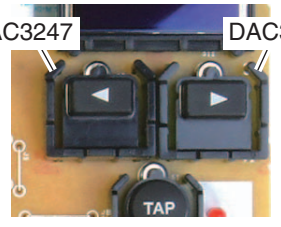
FFC (DDD1793)
For styling, refer to the next page.

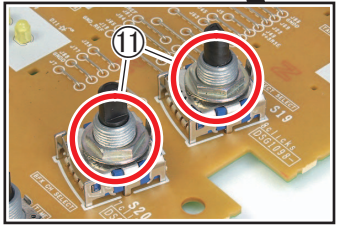


⑩ Remove all 15 Buttons.

Note on assembling

∗13: Make sure not to invert the mounting locations for the Button DAC3247 and DAC3253.

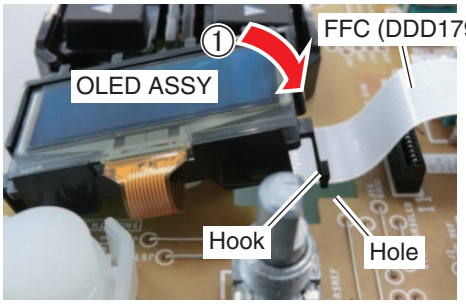


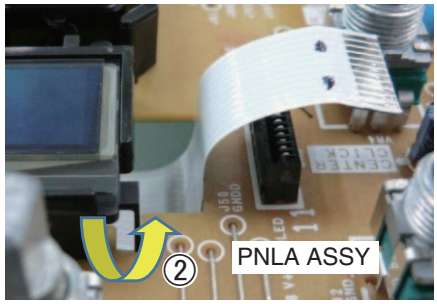


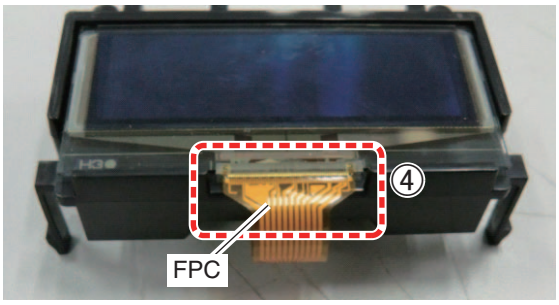
⑪ Remove the Flange Nut M9 (DBN1008).

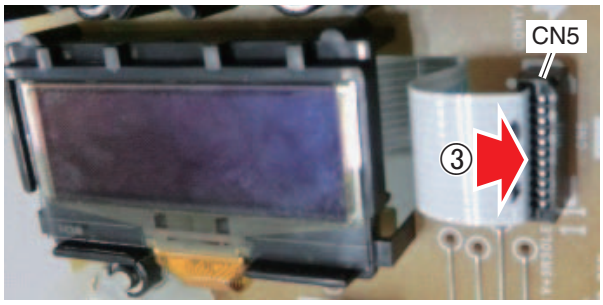
Styling of the FFC (DDD1794)

① Mount the two hooks of OLED ASSY (DEA1065) while leading the FFC (DDD1794) through the hole of PNLA ASSY.
② Lay the FFC (DDD1794) as shown by the yellow arrow.
③ Connect the FFC (DDD1794) to the connector.
④ Any loading on or bending of FPC in the area surrounded by broken line is strongly prohibited.





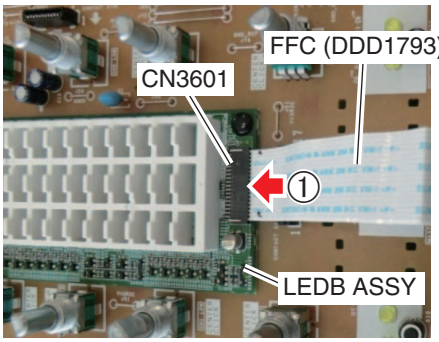


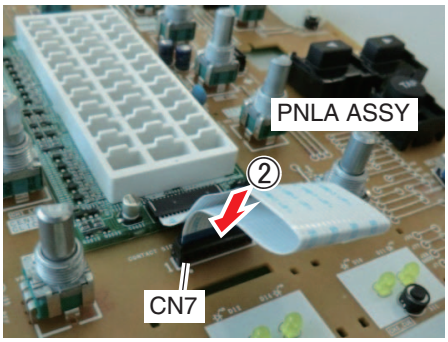


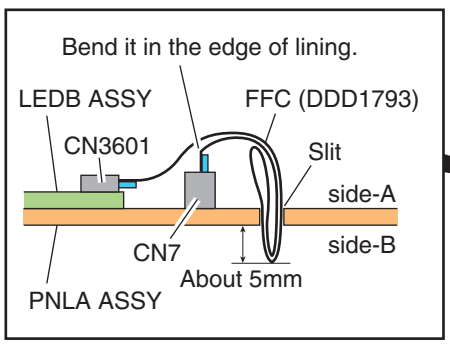
Styling of the FFC (DDD1793)

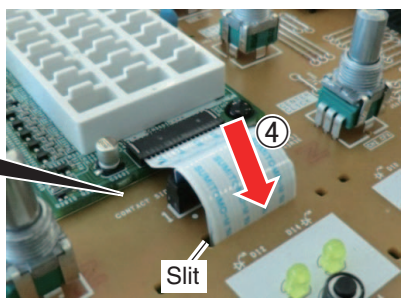
① Connect the FFC (DDD1793) to the LEDB ASSY.
② Connect the opposite side of FFC (DDD1793) to the PNLA ASSY.
③ Bend the FFC (DDD1793).
④ Insert the FFC (DDD1794) in the slit of PNLA ASSY.

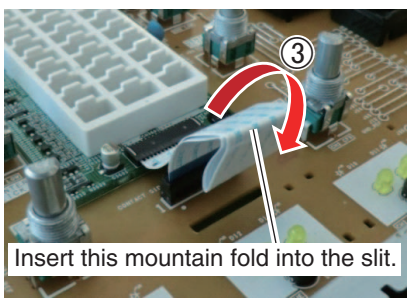
Note: Projection of FFC (DDD1793) to the PNLA ASSY (side-B) is set to about 5mm.







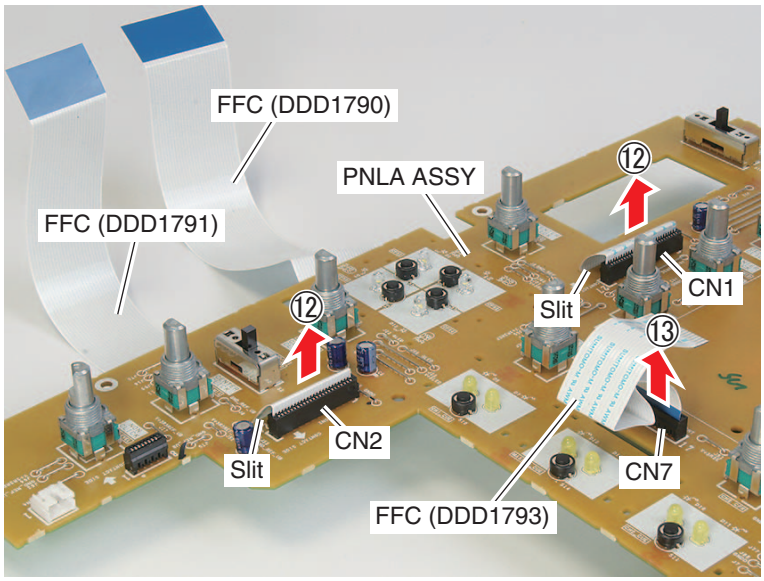




[2-2-1] PNLA ASSY, LEDB ASSY (continuation)

⑫ Pull out the two FFCs (DDD1790, DDD1791) from the slits of PNLA ASSY, and then remove the two FFCs by disconnecting the two connectors.

⑬ Disconnect the connector and then remove the FFC (DDD1793).



[2-2-2] OLED ASSY (DWX3939)

Remove the OLED ASSY (DEA1065) from the PNLA ASSY.

(Refer to the step ① to ③, ⑤, ⑥ of **"[2-2-1] PNLA ASSY, LEDB ASSY"**)

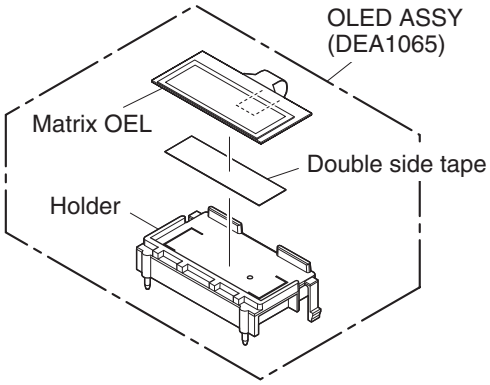
---

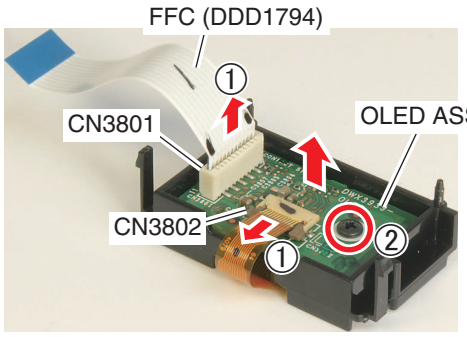
① Disconnect the two connectors.

Note: CN3802 connectors have lock mechanisms.

② Remove the screw (BPZ20P040FTB) and then remove the OLED ASSY (DWX3939)

Note: For the replacement of Matrix OEL, OELD ASSY (DEA1065) cannot be further disassembled (because Matrix OEL is affixed with double side tape), so that the whole OLED ASSY (DEA1065) must be replaced.





[2-2-3] FADB ASSY

Remove the Stay (DNF2011) from the PNLA ASSY.

(Refer to the step ① to ④ of **"[2-2-1] PNLA ASSY, LEDB ASSY"**)

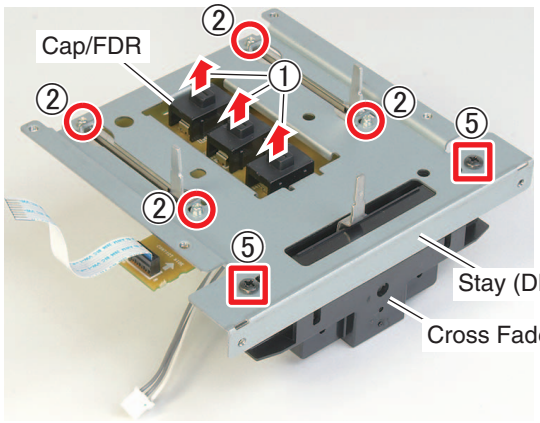
---

① Remove the three Cap/FDRs.

② Remove the four screws. (PMH20P040FTC)

③ Slide the FADB ASSY toward the Cross Fader ASSY, and then remove the FADB ASSY by releasing the two hooks.

④ Disconnect the connector.



[2-2-4] Cross Fader ASSY

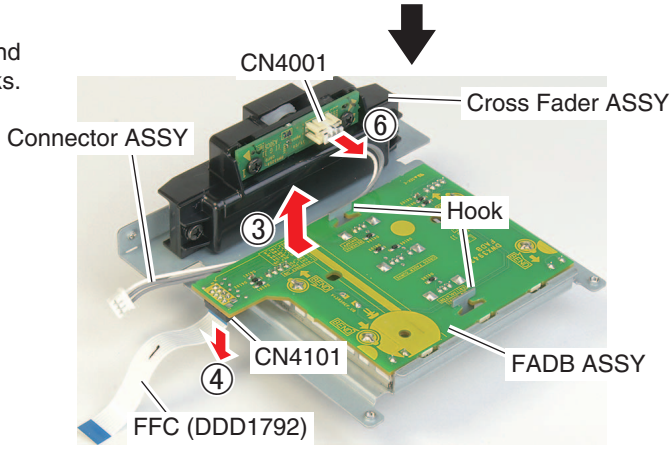
Remove the Stay (DNF2011) from the PNLA ASSY.

(Refer to the step ① to ④ of **"[2-2-1] PNLA ASSY, LEDB ASSY"**)

---

⑤ Remove the two screws (BPZ30P080FTC) and then remove the Cross Fader ASSY.

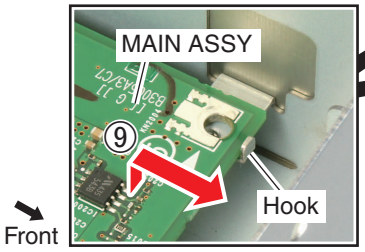
⑥ Disconnect the connector.



[2-3] Chassis Section

Remove the Control Panel Section.

(Refer to the **"[2-1-1] Control Panel Section"**, step ① of **"[2-1-2] Diagnosis of PNLA ASSY (side-B)"**)



[2-3-1] MAIN ASSY

① Disconnect the three connectors.
② Remove the TRIM ASSY (with the FFC).
③ Remove the seven screws. (BBZ30P060FTC)

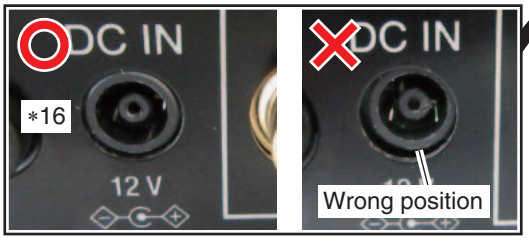
Note on assembling

∗14: Attach the seven screws in the order as shown by blue numbers. (Those numbers are also printed on the silk.)
Make sure that the screws on the Rear Panel side are attached first.

④ Remove the screw (BBZ30P060FTB) and then remove the MPSH ASSY and PPSH ASSY.
⑤ Remove the Nut (NKX2FTC) and Washer (DEC2920).
⑥ Remove the four screws. (PPZ30P080FTB)
⑦ Remove the four screws. (BPZ30P080FTB)
⑧ Remove the screw. (DBA1340)

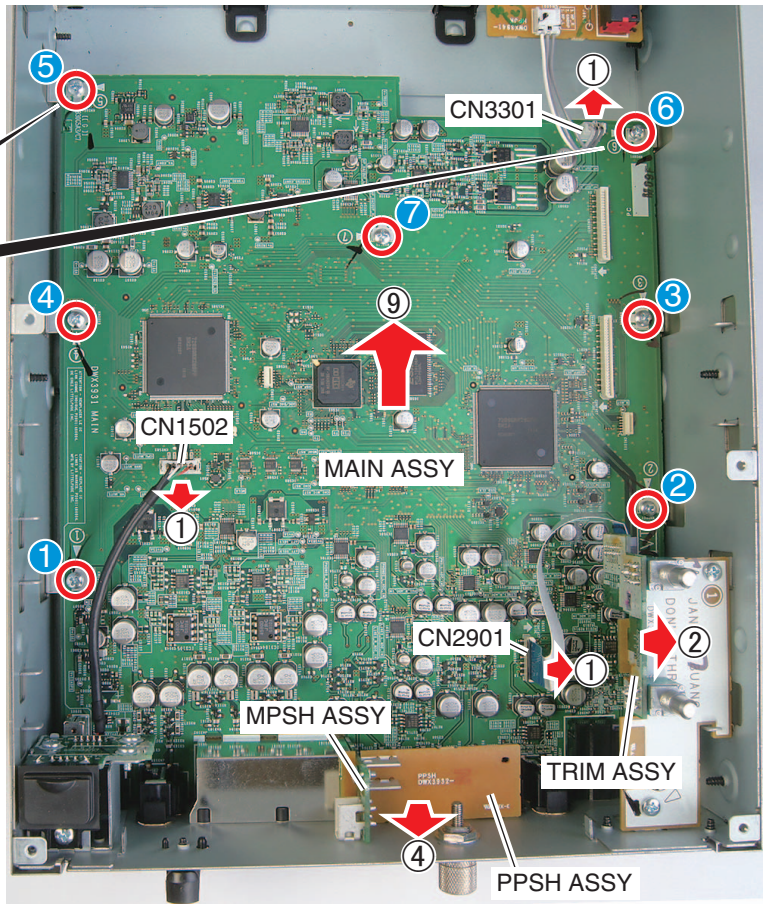
Notes on assembling

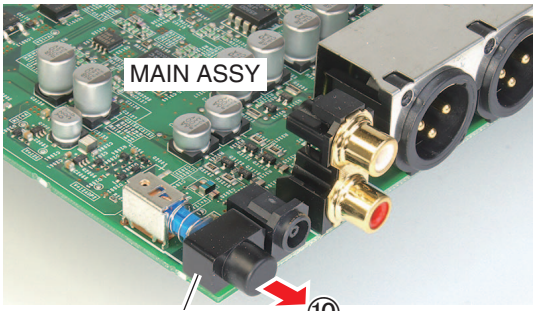
∗15: Attach first two screws in the order as shown by orange numbers. Remaining screws can be attached in any order.
∗16: Before attaching the terminal screws of Rear Panel side, make sure that the "DC IN" terminal is properly inserted into the hole of Rear Panel.



⑨ Release the two hooks while slightly lifting the front side of MAIN ASSY, and then remove the MAIN ASSY while sliding toward the front side.

⑩ Remove the Knob (DNK6607)



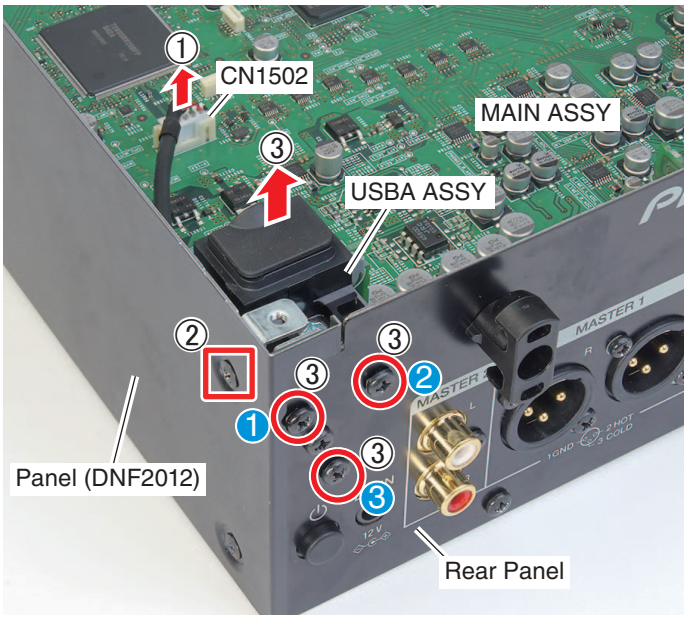


[2-3-2] USBA ASSY

① Disconnect the connector.
② Remove the screw. (DBA1290)
③ Remove the three screws (BBZ30P060FTB) and then remove the USBA ASSY (with the Stay and others).

Note on assembling

∗17: Attach the three screws of Rear Panel side in the order as shown by blue numbers.

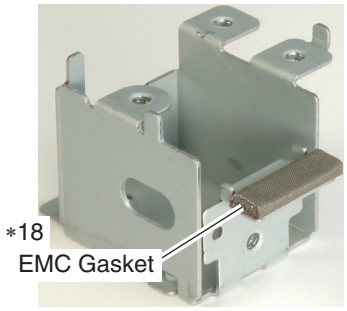


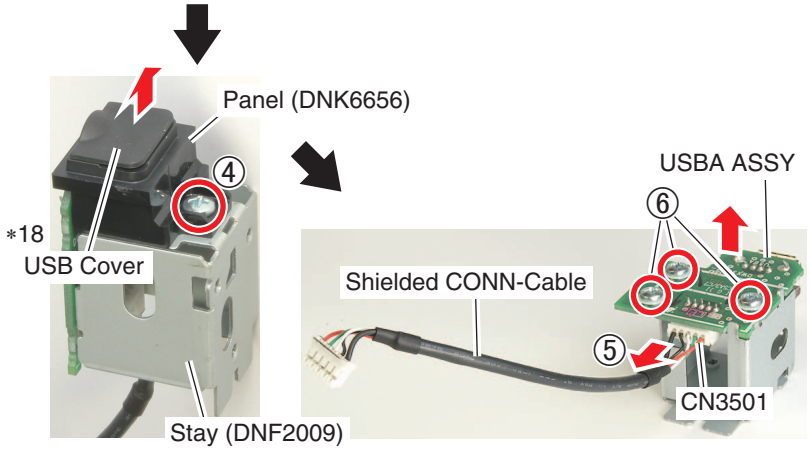
④ Remove the screw (BBZ30P060FTC) and then remove the Panel (DNK6656) (with the USB Cover).

⑤ Disconnect the connector.
⑥ Remove the three screws (BBZ30P060FTC) and then remove the USBA ASSY.

Note on assembling

∗18: If USB Cover or EMC Gasket is damaged, replace it with new one.



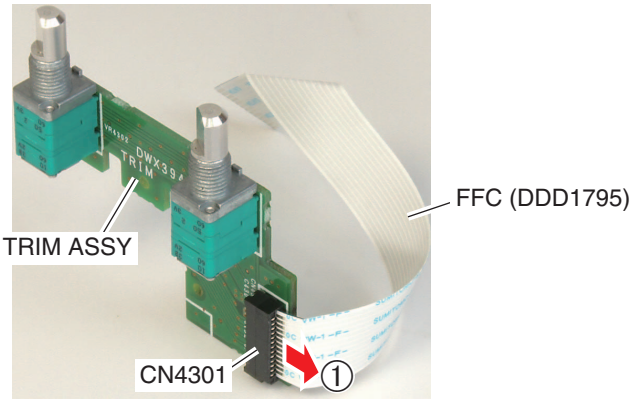


[2-3-3] TRIM ASSY

Remove the TRIM ASSY (with the FFC).
(Refer to the step ①, ② of **"[2-3-1] MAIN ASSY"**)

---

① Disconnect the connector.

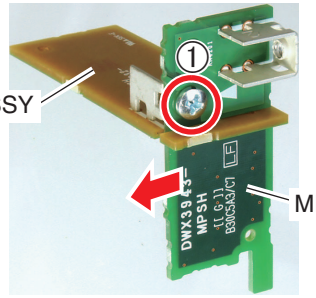


[2-3-4] MPSH ASSY, PPSH ASSY

Remove the MPSH ASSY and PPSH ASSY.
(Refer to the step ④ of **"[2-3-1] MAIN ASSY"**)

---

① Remove the screw (BBZ30P060FTC) and then remove the MPSH ASSY from the PPSH ASSY.

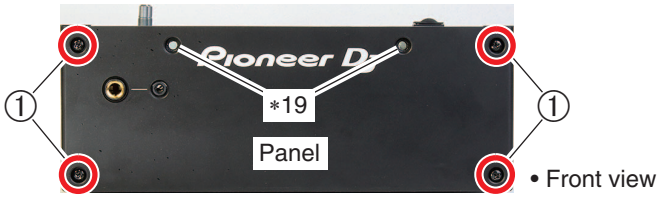


[2-3-5] HPJK ASSY

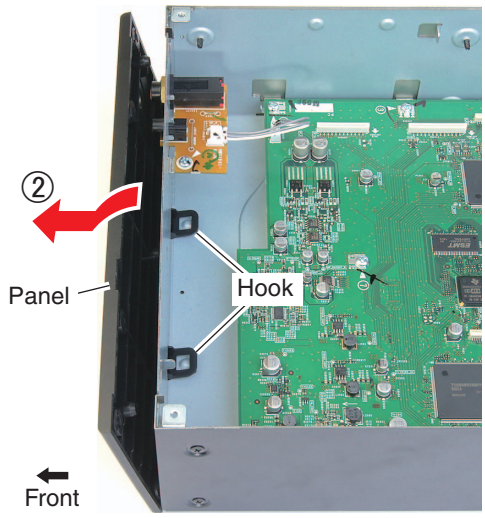
① Remove the four screws. (BBZ30P060FTB)

Note on assembling

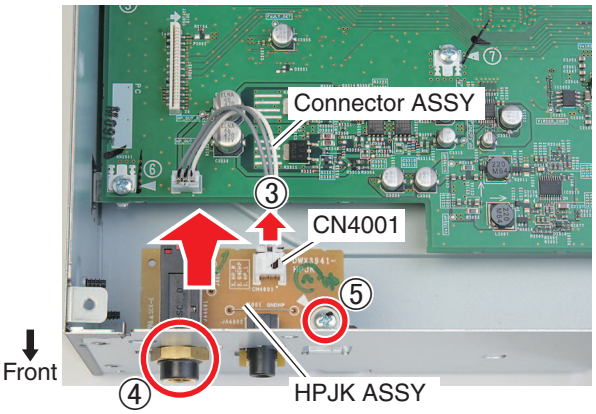
∗19: Don't make a mistake because two screws to mount the Control Panel Section are different Part No.



② Release the two hooks while tilting the upper part of Panel (DNK6657) toward the front side, and then remove the Panel.



③ Disconnect the connector.
④ Remove the Nut M12. (DBN1018)
⑤ Remove the screw (BBZ30P060FTC) and then remove the HPJK ASSY.



[2-3-6] STAY ASSY

Remove the TRIM ASSY (with the FFC).
(Refer to the step ①, ② of **"[2-3-1] MAIN ASSY"**)

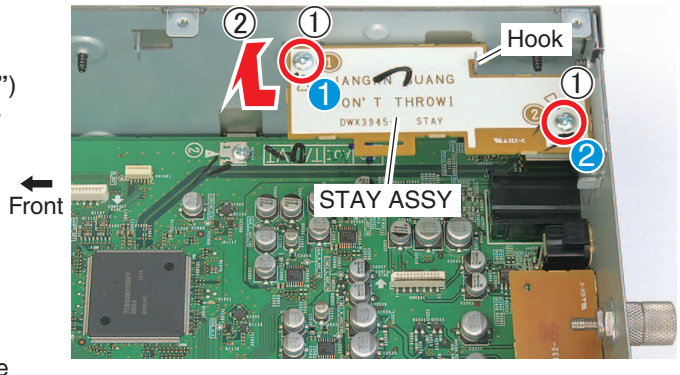
---

① Remove the two screws. (BBZ30P060FTC)

Note on assembling

∗20: Attach the two screws in the order as shown by blue numbers. (Those numbers are also printed on the silk.)

② Release the hook while sliding the STAY ASSY toward the front side, and then remove the STAY ASSY.



8. EACH SETTING AND ADJUSTMENT
8.1 NECESSARY ITEMS TO BE NOTED

Before carrying out the repair, be sure to check the version of firmware (6.1 TEST MODE [1. Version confirmation mode]).
If the version is not the latest, update it to the latest version.

If the following parts are replaced with new ones, carry out each item.

- MAIN ASSY
  (FLASH ROM IC: IC1002)

⇨

- Check the version of firmware.
- Update to the latest firmware version.
- Write the serial number.
- 6.1 TEST MODE
  Refer to the [2. Fader setting mode “CFDR SET”]

- Cross Fader ASSY

⇨

- 6.1 TEST MODE
  Refer to the [2. Fader setting mode “CFDR SET”]

8.2 UPDATING OF THE FIRMWARE

Method of firmware update

Down load the firmware and prepare a USB memory for update using your USB memory.
Update the firmware using the USB memory for update.

What you need to create USB memory for update :
FAT or FAT32 format USB memory (USB mass storage class)

Extraction file

Extraction the down loaded file [DJM-450_vxxx.zip]. Firmware file appears.
DJM-450_vxxx.upd

- ✓ "xxx" indicates the new firmware version.
- ✓ Depending on the computer settings, extension (.upd) might not be displayed.

Preparing for update

Copy the [DJM-450_vxxx.upd] file to the root directory of the USB memory.

- ✓ Don't change the file name.
- ✓ Don't store multiple firmware's in the USB memory.

How to update

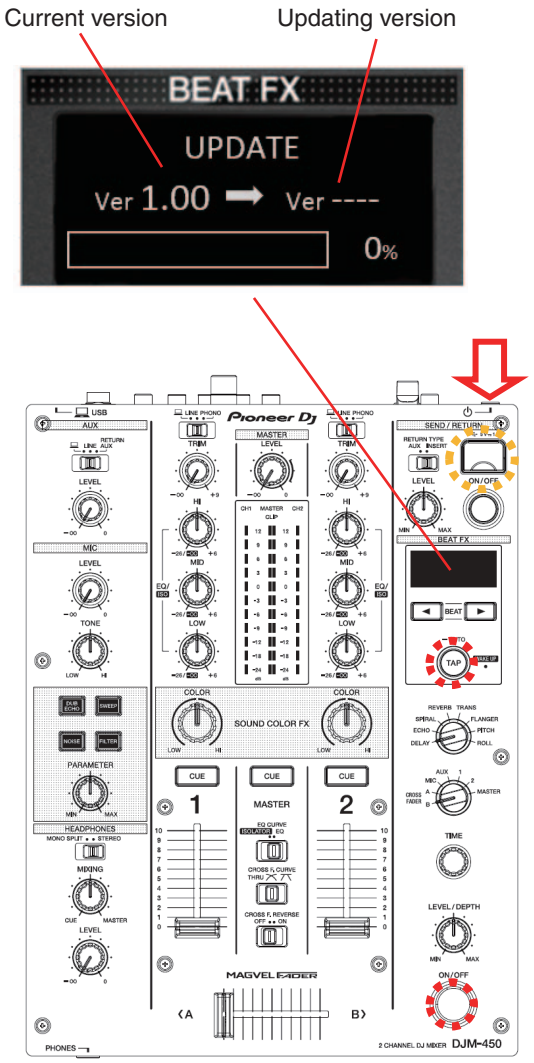
1. Starting the update mode.
   Keep pressing [ON/OFF (BEAT FX)] and [TAP] and power supply is turned ON.

2. Confirming the current version.
   Confirm the version displayed in the display section.
   If version is already xxx, firmware is the latest and then update is not needed.

3. Insert the USB memory for update into the USB port.
   Update will start.
   Progress state is displayed using bar graph and percentage terms.
   - ✓ Never pull out the USB memory or power supply is turned OFF during the updating.
   - ✓ Time needed to update is about 90 seconds.

4. When [COMPLETE] is displayed, power supply is turned OFF and pull out the USB memory for update.

Then, update is finished.
If update is not started, retry from the firmware down load.
If you still cannot update, it is considered the cause of USB memory.
Please try another USB memory.



8.3 METHOD OF WRITING SERIAL NUMBER

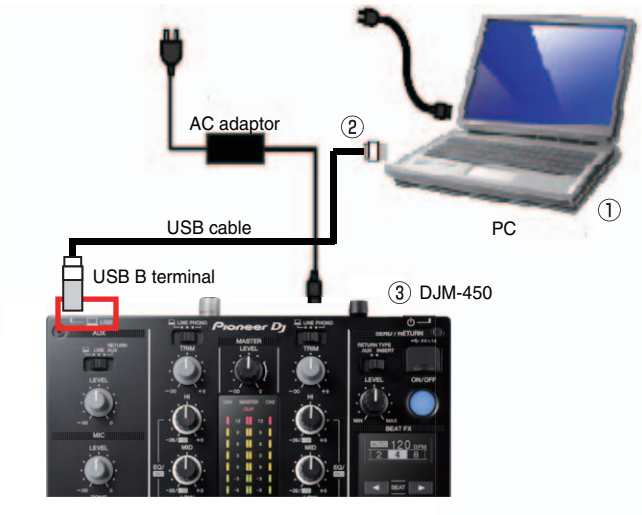
Prior preparation

① Download relevant software from the Niis.
② Save the extracted folder to the PC.

Structure of the extracted folder is as follows.

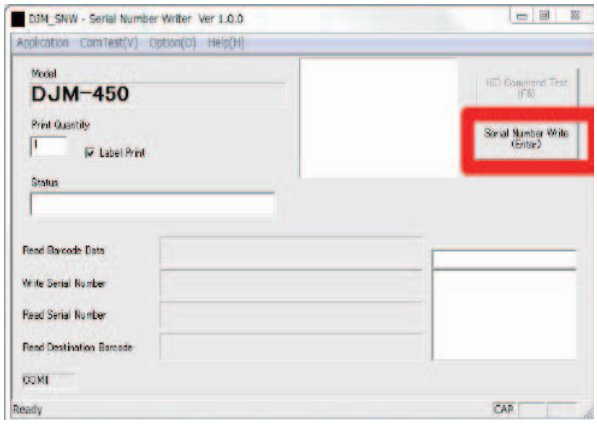
- Ini folder
- Log folder
- DJM_SNW.exe
- device.ini
- hidcom.dll

Connection method



Steps

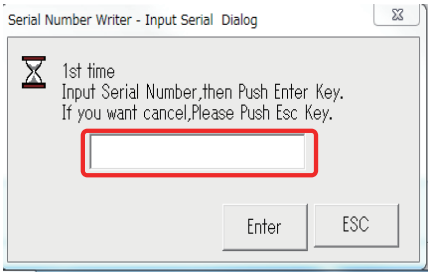
① Power supply is turned ON of the PC, double-click the "DJM_SNW.exe" in the saved folder, and if software is started, press [Serial Number Write] button.



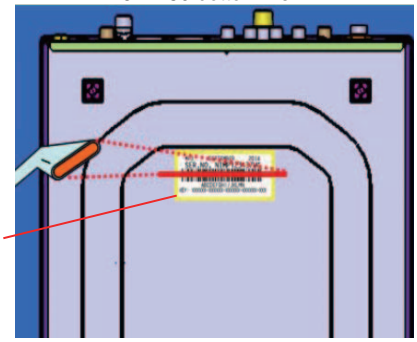
② Connect the USB A terminal of unit and PC using the USB cable.

③ Keep pressing the keys [NOISE] + [FILTER] + [CH1 CUE] and power supply is turned ON of DJM-450.

④ When power supply of DJM-450 is turned ON, dialog for serial number input (for the first time) is displayed on the software.
Manually input serial number or read the label in the bottom of unit using bar code reader and then press [Enter] button.
If manually input, be careful that " ' " is required before serial number (12 digit). (If it is forgotten, error is displayed.)
When using bar code reader, connect to the PC in prior.



DJM-450 bottom view



⑤ Dialog for serial number input (for the second time) is displayed again, manually input serial number as same as ④, or read using bar code reader and then press [Enter] button.

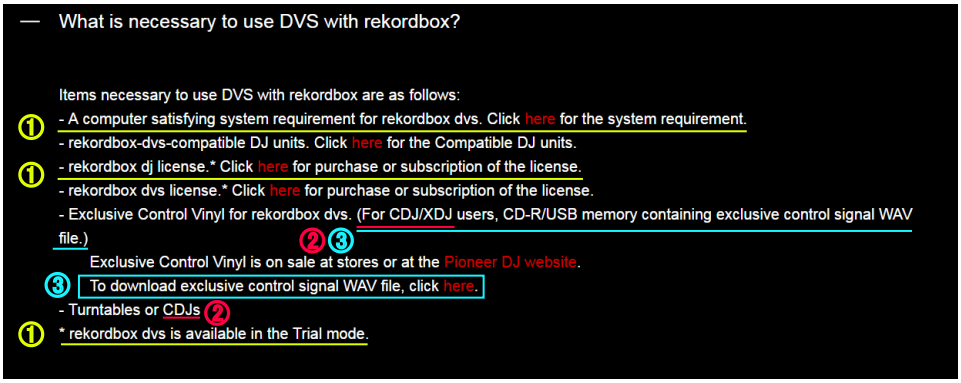
⑥ Confirm that serial number written to DJM-450 display is displayed.

⑦ When writing is normally finished, "OK" is displayed on software of the PC.

8.4 METHOD OF DVS CONNECTION CONFIRMATION

A thing required to being DVS in rekordbox

*Refer to the https://rekordbox.com/ja/support/faq.php?c=952#faq-id-437



① PC which is downloaded rekordbox dj and rekordbox dvs (Trial Mode is possible).
*Input a sound for operation confirmation into the rekodbox dj.
② CDJ or XDJ (all models are possible)
③ An analog cable for connect CDJ or XDJ to this unit
- A USB cable for connect the PC to this unit
- A USB memory including control signals for following rekordbox dvs
https://rekordbox.com/dvs/rekordbox_Control_Sognal.zip

Confirmation steps

① Connect USB-B terminal (back side) of this unit and PC using a cable.
② Connect output terminal of CDJ or XDJ to the LINE input terminal of CH1 of this unit.
③ Set the input changeover switch of CH1 to PC (Personal Computer Mark).
④ Insert a USB memory storing dvs specific control signals into CDJ or XDJ and play the specific control signals.

Connect the rekordbox dvs according to followings.
https://rekordbox.com/_app/files/img/rekordbox_dvs_Setup_Guide_en_b.pdf

Confirmation items

① Confirm that a circle of control signals appear.
② Confirm that REL is lighting.
③ Confirm that sound is outputted from MASTER output of the Mixer.

Repeat above confirmation items ① to ③ in regard to CH1 and CH2 and then confirm the DVS route.

Connection details

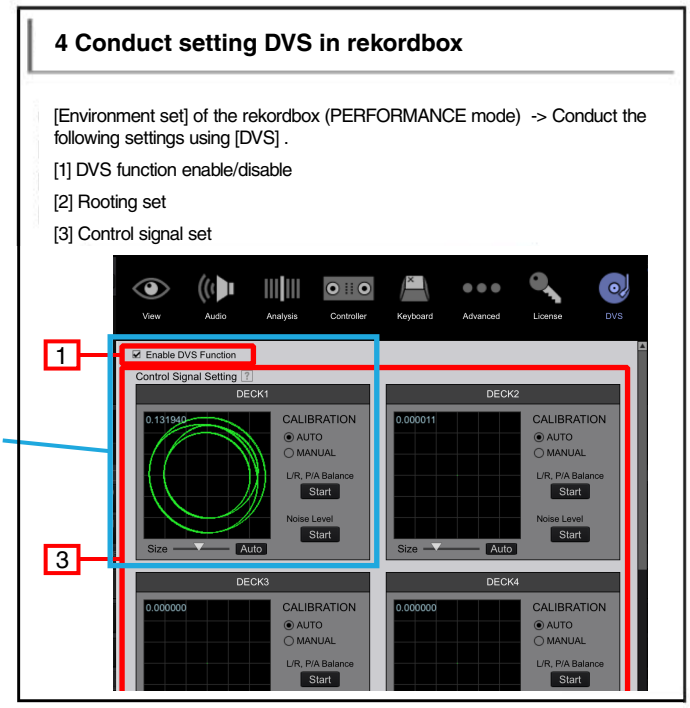
Connect the rekordbox dvs according to followings.
https://rekordbox.com/_app/files/img/rekordbox_dvs_Setup_Guide_en_b.pdf

Please refer to following details setup in the setting items.

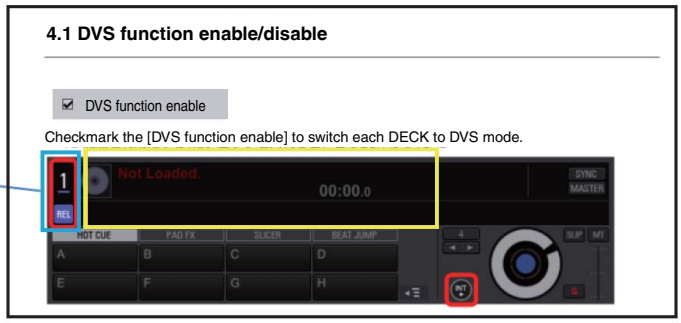
Setting items
Setup material items

[1]	Enables DVS function
[2]	Connects CDJs/DECK1 to MIXER CH1
[3]	No setting because it is not connecting using a turn table

Settings, play rekordbox dvs specific control signal at the CDJ.



① As shown above, confirm that a circle of item 4 appears.



② Set to the REL mode and confirm that the mode name of REL is lighting.

Assign a piece of music to the CH1 of rekordbox dvs.
Confirm that control signals are played by CDJ/XDJ.
③ Confirm that the level meter of CH1 of this unit is lighting.
④ Check the sound of MASTER output of this unit.

8.5 ITEMS FOR WHICH USER SETTING ARE AVAILABLE

For user setting item

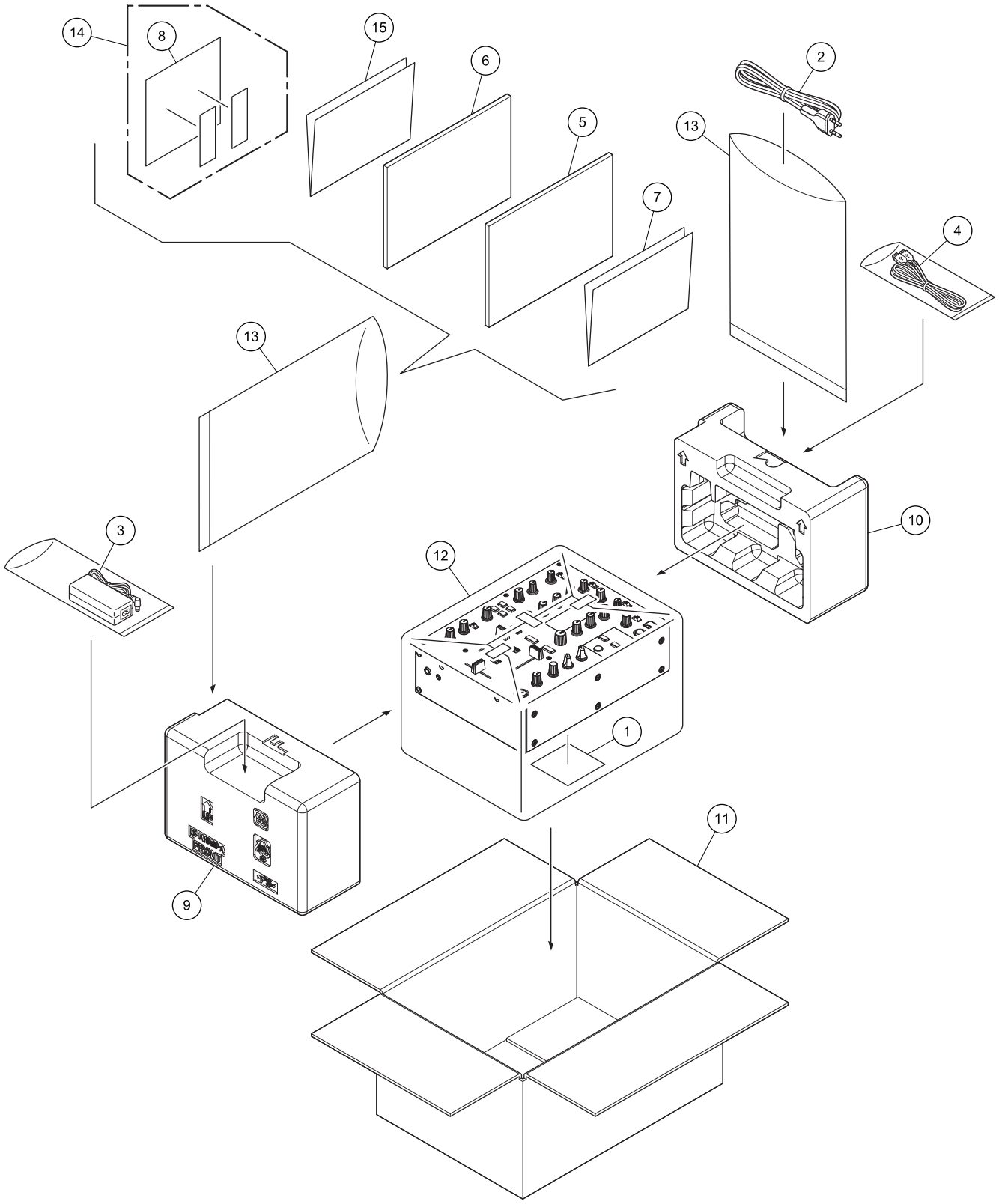
This unit has user setting the following items.
If you replaced the parts of subject (substrate ASSY), please change to the setting that had been ahead to check sheet before work.
If you can not change tells that the utility setting at the time of repair return is clear to the user,
please guidance to get re-set, if necessary.
It should be noted that each of setting value of the utility can be found in the display unit of main unit.

User setting items		Setting range	Initial value (Factory setting)	Parts	Content to be stored
MASTER OUT	PEAK LIMITER	OFF/ON	ON	IC1002 (MAIN ASSY)	Utility Settings
	ATT.	-12dB/-6dB/0dB	0dB		
	MONO/STEREO	MONO/STEREO	STEREO		
MIDI	CH	1 - 16	1		
	BUTTON TYPE	TOGGLE/TRIGGER	TOGGLE		
OLED BRIGHTNESS		1 - 3	3		
PC UTILITY		OFF/ON	OFF		
AOTO STANDBY		OFF/ON	ON		
FACTORY RESET		CANCEL/RESET	-		

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 ⚠ 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

Mark	No.	Description	Part No.
	1	Name Label	See Contrast table (2)
⚠	2	Power Cord	See Contrast table (2)
⚠	3	AC Adapter	See Contrast table (2)
	4	USB Cable	DDE1128
	5	Operating Instructions (Quick Start Guide)	See Contrast table (2)
	6	Operating Instructions (Quick Start Guide)	See Contrast table (2)
NSP	7	Warranty Card	See Contrast table (2)
NSP	8	Leaflet	DRM1419
	9	Packing Pad	DHA1959
	10	Packing Pad	DHA1960
	11	Packing Case	See Contrast table (2)
	12	Sheet	RHX1006
NSP	13	Polyethylene Bag	AHG7117
NSP	14	License Key Card ASSY (rekordbox dj, recordbox dvs)	DEA1064
NSP	15	Leaflet	See Contrast table (2)

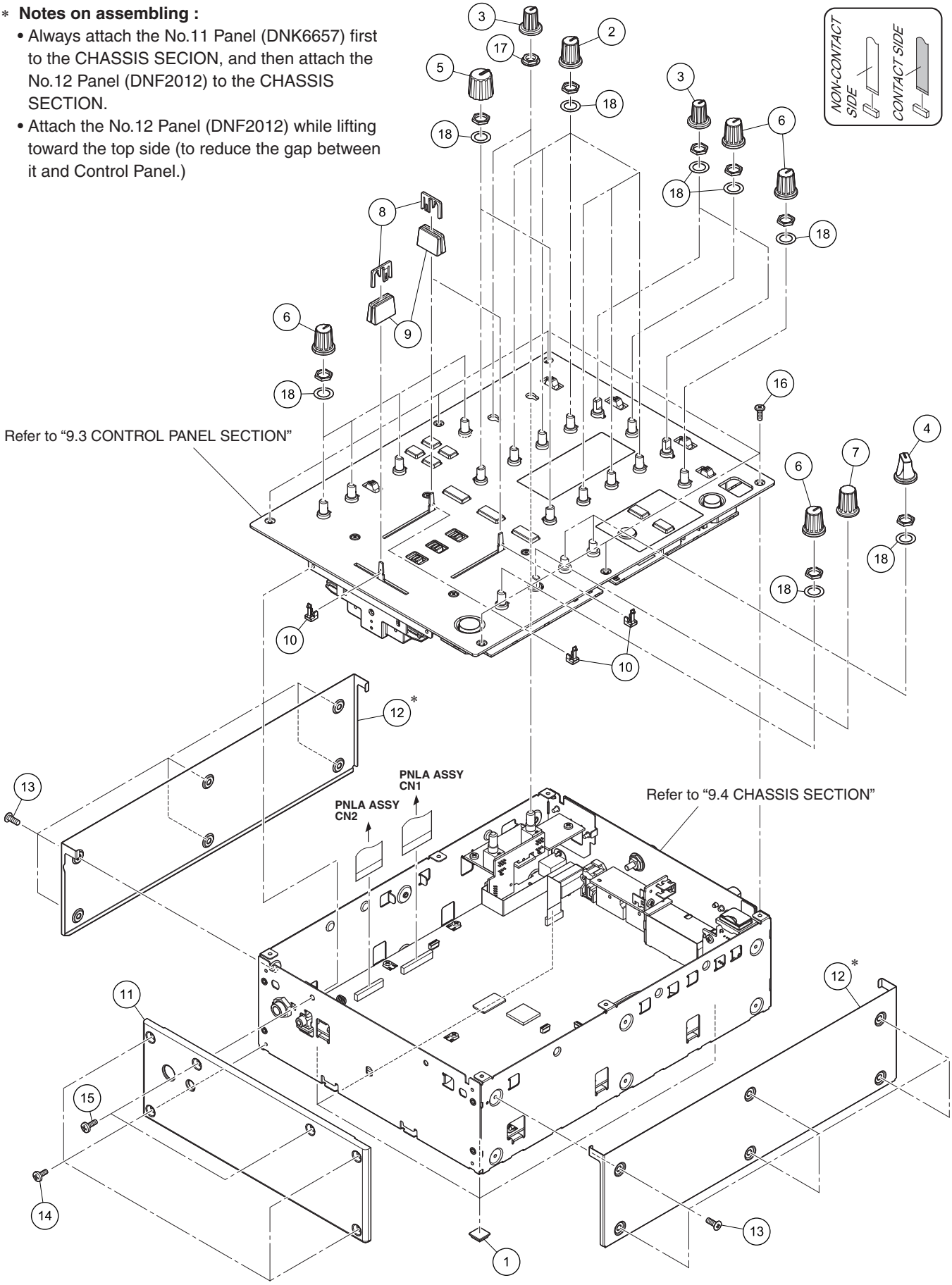
(2) CONTRAST TABLE

SYXJ, UXJCB, FWLPWXJ and XJCN are constructed the same except for the following:

Mark	No.	Symbol and Description	SYXJ	UXJCB	FWLPWXJ	XJCN
	1	Name Label	DRW2714	DRW2714	DRW2714	DRW2715
⚠	2	Power Cord	ADG1154	XDG3052	ADG1154	ADG7079
⚠	3	AC Adapter	DWR1567	DWR1567	DWR1551	DWR1551
	5	Operating Instructions (Quick Start Guide)	DRH1393	DRH1395	DRH1396	DRH1397
	6	Operating Instructions (Quick Start Guide)	DRH1394	Not used	Not used	Not used
NSP	7	Warranty Card	DRY1270	Not used	Not used	Not used
	11	Packing Case	DHG3496	DHG3522	DHG3523	DHG3525
NSP	15	Leaflet	DRH1431	DRH1431	DRH1431	DRH1432

9.2 EXTERIOR SECTION

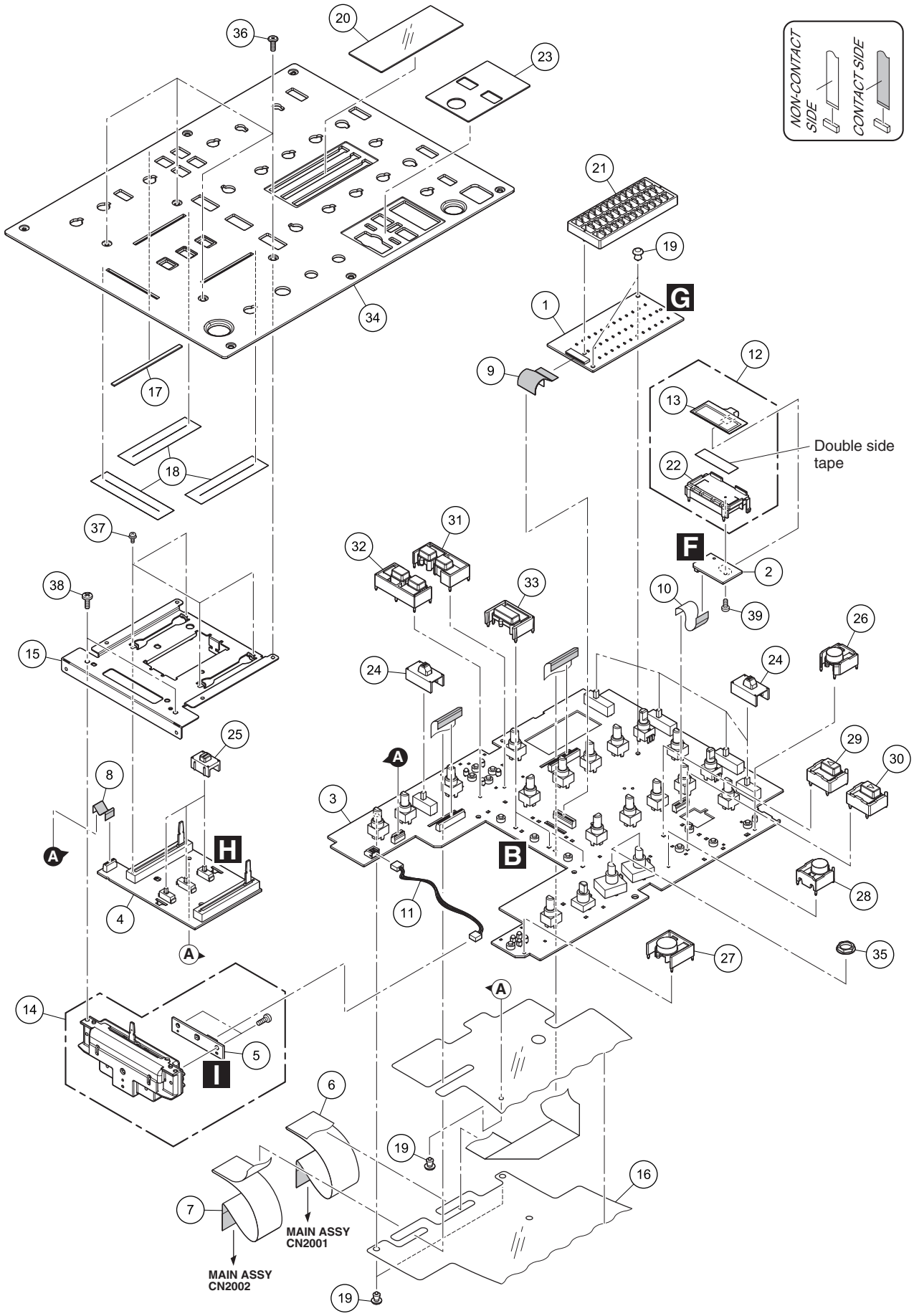
* **Notes on assembling :**
  - Always attach the No.11 Panel (DNK6657) first to the CHASSIS SECION, and then attach the No.12 Panel (DNF2012) to the CHASSIS SECTION.
  - Attach the No.12 Panel (DNF2012) while lifting toward the top side (to reduce the gap between it and Control Panel.)



EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Rubber Foot	VEB1325
	2	Rotary VR Knob (B)	DAA1279
	3	Knob	DAA1372
	4	Rotary SW Knob	DAA1185
	5	Knob	DAA1373
	6	Rotary VR Knob (B)	DAA1183
	7	Knob	DAA1374
	8	Slider Knob 2	DAC2685
	9	Slider Knob 1	DAC2684
	10	Slider Knob Stopper	DNK5888
	11	Panel	DNK6657
	12	Panel	DNF2012
	13	Screw (Fe)	DBA1290
	14	Screw	BBZ30P060FTB
	15	Screw	BBZ30P080FTB
	16	Screw	DBA1446
	17	Flange Nut M7	DBN1011
	18	Washer	DEC3731

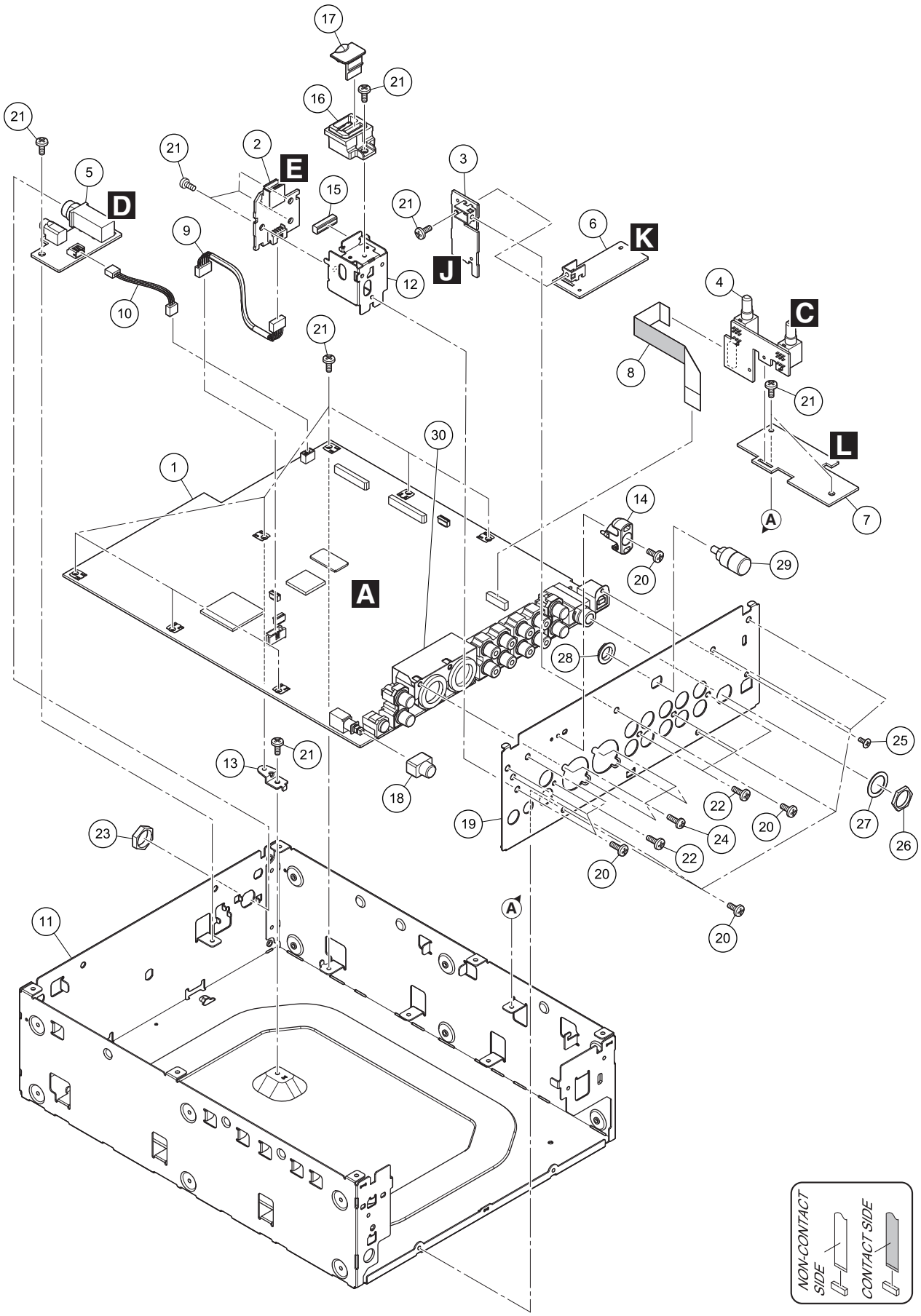
9.3 CONTROL PANEL SECTION



CONTROL PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	LEDB ASSY	DWX3938
	2	OLED ASSY	DWX3939
	3	PNLA ASSY	DWX3940
	4	FADB ASSY	DWX3942
NSP	5	CRFD ASSY	DWX3258
	6	FFC	DDD1790
	7	FFC	DDD1791
	8	FFC	DDD1792
	9	FFC	DDD1793
	10	FFC	DDD1794
	11	Connector ASSY	PF03PP-B12
	12	OLED ASSY	DEA1065
NSP	13	Matrix OEL	MXS4057
	14	Cross Fader ASSY	DXA2257
	15	Stay	DNF2011
	16	Sheet	DEC3714
	17	Packing/L	DEC3416
	18	Fader Packing	DEC2903
	19	Rivet (Plastic)	RBM-003
	20	Plate	DAK1009
	21	Holder	DNK6660
NSP	22	Holder	DNK6659
	23	Plate	DAK1010
	24	Cap/MIC	DAC2773
	25	Cap/FDR	DAC2771
	26	Button	DAC3252
	27	Button	DAC3257
	28	Button	DAC3248
	29	Button	DAC3247
	30	Button	DAC3253
	31	Button	DAC3249
	32	Button	DAC3251
	33	Button	DAC3250
	34	Control Panel	DNB1249
	35	Flange Nut M9	DBN1008
	36	Screw	DBA1446
	37	Screw	PMH20P040FTC
	38	Screw	BPZ30P080FTC
	39	Screw	BPZ20P040FTB

9.4 CHASSIS SECTION



CHASSIS SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	MAIN ASSY	DWX3931
	2	USBA ASSY	DWX3937
	3	MPSH ASSY	DWX3943
	4	TRIM ASSY	DWX3944
	5	HPJK ASSY	DWX3941
	6	PPSH ASSY	DWX3932
NSP	7	STAY ASSY	DWX3945
	8	FFC	DDD1795
	9	Shielded CONN-Cable	DDA1077
	10	Connector ASSY	PF03PP-B07
	11	Chassis	DNA1462
	12	Stay	DNF2009
NSP	13	PCB Stay (Fe)	VNE2489
	14	Hook	DNK6067
	15	EMC Gasket	DEC3715
	16	Panel	DNK6656
	17	USB Cover	DNK4999
	18	Knob	DNK6607
	19	Rear Panel	DNC2127
	20	Screw	BBZ30P060FTB
	21	Screw	BBZ30P060FTC
	22	Screw	BPZ30P080FTB
	23	Nut M12	DBN1018
	24	Screw	PPZ30P080FTB
	25	Screw (M3x5)	DBA1340
	26	Nut	NKX2FTC
	27	Washer	DEC2920
	28	Flange Nut M9	DBN1008
	29	Earth Terminal	DKE1019
NSP	30	Canon Shield	DNF1789

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