Pioneer DJ

Service Manual



DDJ-200

ORDER NO.
QRT1028

DJ CONTROLLER

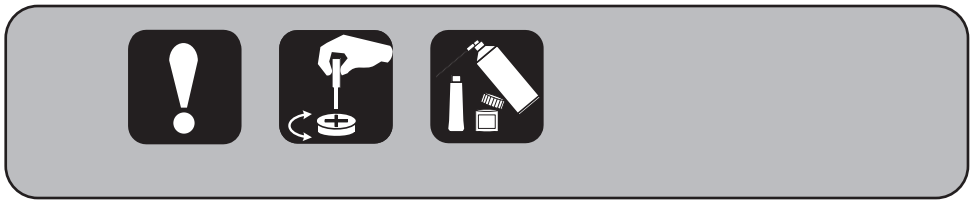
DDJ-200

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

Model	Type	Power Requirement	Remarks
DDJ-200	SYXJ	DC 5 V (USB bus power only)	
DDJ-200	XJCN	DC 5 V (USB bus power only)	

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

Model	Order No.	Remarks
DDJ-200	QRT1029	SCHEMATIC DIAGRAM, PCB CONNECTION DIAGRAM, PCB PARTS LIST of DDJ-200



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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.

CAUTION
Since the fuse may be in the neutral of the mains supply, disconnect the mains to de-energize the phase conductors.

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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

Parts that is difficult to replace

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.	Part No.	Function	Remarks
MAIN ASSY	JA101	DKN1679	USB JACK	Terminal part with through-hole
	U1001*	CWX4751	BLUETOOTH MODULE	LGA package

* If it is diagnosed as “U1001 failure” according to [5.2 TROUBLESHOOTING : Bluetooth can not connect], replace MAIN ASSY.

1.3 SERVICE NOTICE

About power supply voltage abnormality detection

In this unit, the uCOM constantly monitors the voltage of the input power supply.
If abnormality is detected, FX TRANSITION button is blinking immediately and then LED other than FX TRANSITION button is lights off .
Method of recover is power supply OFF / ON only.
If abnormality is detected, USB power supply adapter and PC may be abnormal.
Replace power supply you are using.

Demo Mode

This unit will automatically enter demo mode if it is left unoperated for 10 minutes in normal operation mode.
To cancel this mode, operate any control or button of this unit.
The default setting of time to switch to the demo mode is 10 minutes.
Demo mode can be invalidated or it’s possible to change time until start demo mode in the setting of utilities mode.
(For details, refer to the operating instructions)

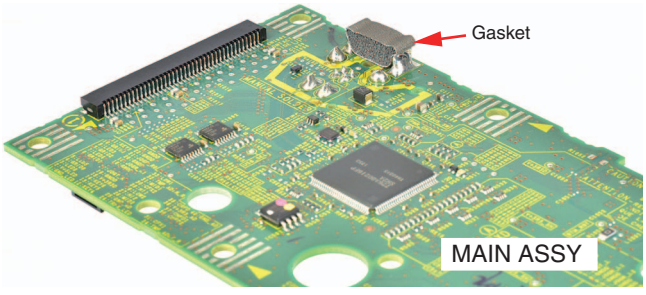
How to modify when rattling of product is occurred

- Place the blocks (Height more than 25 mm and Diameter ϕ lower than 30 mm is recommended) at 9 points (■) under the upper-panel of control panel (avoid the button and knob) and attach the PC BOARD and chassis part according to the screw tightening order manually.
  (The block is available at the home center, etc.)(Refer to "7 DISASSEMBLY" about the screw tightening order.)
- Take care not to press the screwdriver strongly to the product in any case.
- Do not use the electric screwdriver.



Paste Gasket on the back face of PCB

When Gasket is peeled off during PCB replacement and repair, if it is difficult to reuse the Gasket, order a new Gasket and attach it.
(Position : Paste into silk frame of PCB)



2. SPECIFICATIONS

2.1 ACCESORIES

- USB cable (DDE1150)
- Split cable (DDE1151)
- Quick Start Guide (SYXJ : DRH1543)
  (WeDJ/rekordbox) (XJCN : DRH1545)
- Precautions for use (SYXJ : DRH1544)
  (XJCN : DRH1546)
- Warranty (SYXJ only)
- Warranty (for some regions) *1

*1 : The included warranty is for the European region.
— For the North American region, the corresponding information is provided on the last page of both the English and French versions of the " Precautions for use ".
— For the Japanese region, the corresponding information is provided on the back cover of the " Precautions for use ".

2.2 SPECIFICATIONS

General - Main Unit

Power ..... DC 5 V
Rated current ..... 500 mA
Main unit weight ..... 1.2 kg (2.6 lbs.)
Max. dimensions ..... 378 mm (W) × 208 mm (D) × 48.2 mm (H)
(14.9 in. (W) × 8.2 in. (D) × 1.9 in. (H))
Tolerable operating temperature ..... +5 °C to +35 °C (+41 °F to +95 °F)
Tolerable operating humidity ..... 5 % to 85 % (no condensation)

Input/output terminals

USB terminal
B type ..... 1 set

Bluetooth® section

Wireless system ..... *Bluetooth* Low Energy
Maximum transmission distance ..... Approximately 10 m* in unobstructed circumstances
Frequency band used ..... 2.4 GHz
Modulation method ..... FH-SS (Frequency hopping spread spectrum)

* Transmission distances are a guideline. Transmission distance may change depending on the surrounding environment.
• The specifications and design of this product are subject to change without notice.

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3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

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

No.	Procedures	Check points
1	Check the firmware version in Service Mode.	The version of the firmware must be the latest.
2	Confirm whether the customer complaint has been resolved. If the problem pointed out by the customer occurs with a specific operation, such as JOG, Fader or Equalizer, perform that specific operation for checking.	The customer complaint must not be repeated. Operations must be normal.
3	Check the LED.	All LED's must be light on in Service Mode.
4	Check the each operation (KEY, JOG, VR, Fader etc.).	All operations (KEY, JOG, VR, Fader etc.) must be operate normally in Service Mode.
5	Check the pairing with the smartphone via Bluetooth.	Perform pairing the WeDJ and must be recognized correctly.
6	Check the connection with the PC via USB B.	Must be recognized correctly by the rekordbox DJ(PC/Mac).
7	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

3.2 JIGS LIST

■ Jigs List

Jig Name	Part No.	Purpose of use / Remarks
USB cable	GGP1193	For PC connection

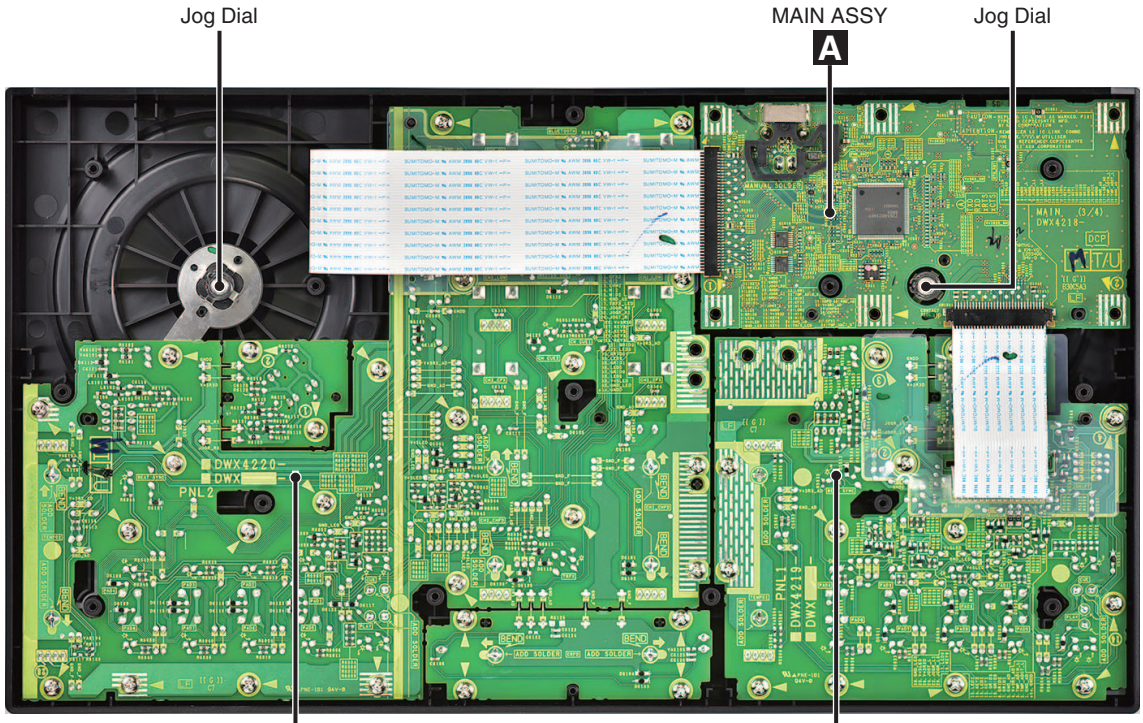
■ Lubricants and Glues List

Name	Part No.	Remarks
Grease	GEM1100	Refer to "7. DISASSEMBLY : [4-1] Procedure for applying grease during reassembly of the Jog Dial"

MODE	CHECK CONTENTS	OBJECT	OPERATION POINT / SETTING		INDICATION POINT	STATE	CHECK
SERVICE MODE 1	Version	Firmware			Left DECK : [PAD 1] - [PAD 8], [PLAY/PAUSE]	Values are indicated by number of light on One digit place display : [MASTER CUE] button lights on First decimal place display : [HP CUE 1] button lights on Second decimal place display : [HP CUE 2] button lights on	❑ Ver.
	Operating element	All LED light on	Right DECK	[SHIFT]	All LED	Light on by pressing button	❑
		Push SW	DECK section	BEAT SYNC Left/Right	BEAT SYNC Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				CUE Left/Right	CUE Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				PLAY/PAUSE Left/Right	PLAY/PAUSE Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD1 Left/Right	Performance PAD1 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD2 Left/Right	Performance PAD2 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD3 Left/Right	Performance PAD3 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD4 Left/Right	Performance PAD4 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD5 Left/Right	Performance PAD5 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD6 Left/Right	Performance PAD6 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD7 Left/Right	Performance PAD7 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
				Performance PAD8 Left/Right	Performance PAD8 Left/Right	Repeat in order of light on => light off by pressing button	❑ / ❑
			Mixer section	MASTER CUE	MASTER CUE	Repeat in order of light on => light off by pressing button	❑
				HEADPHONES CUE [1/2]	HEADPHONES CUE [1/2]	Repeat in order of light on => light off by pressing button	❑ / ❑
				TRANSITION FX	TRANSITION FX	Repeat in order of light on => light off by pressing button	❑
		All LED dimmer out	Right DECK	[SHIFT]	All LED	Dimmer out by pressing button	❑
		All LED light off	Right DECK	[SHIFT]	All LED	Light off by pressing button	❑
		Knob, Fader, JOG dial operation	Left DECK	JOG dial	1*	Lighting point of LED moves according to rotation motion, Left DECK : [BEAT SYNC] button lights on	❑
			Left DECK	TEMPO slider	1*	Change LED display number according to position of Slider, HEADPHONES CUE[1] button lights on	❑
			Mixer section	EQ HI CH1	1*	2*, Right DECK : Performance PAD4 lights on	❑
				EQ MID CH1	1*	2*, Right DECK : Performance PAD3 lights on	❑
				EQ LOW CH1	1*	2*, Right DECK : Performance PAD2 lights on	❑
				CFX CH1	1*	2*, Right DECK : Performance PAD1 lights on	❑
				Channel fader CH1	1*	2*, Right DECK : [CUE] button lights on	❑
				Cross fader	1*	2*, [TRANSITION FX] button lights on	❑
				EQ HI CH2	1*	2*, Right DECK : Performance PAD8 lights on	❑
				EQ MID CH2	1*	2*, Right DECK : Performance PAD7 lights on	❑
				EQ LOW CH2	1*	2*, Right DECK : Performance PAD6 lights on	❑
				CFX CH2	1*	2*, Right DECK : Performance PAD5 lights on	❑
				Channel fader CH2	1*	2*, Right DECK : [PLAY/PAUSE] button lights on	❑
			Right DECK	JOG dial	1*	Lighting point of LED moves according to rotation motion, Right DECK : [BEAT SYNC] button lights on	❑
			Right DECK	TEMPO slider	1*	Change LED display number according to position of Slider, HEADPHONES CUE[2] button lights on	❑

1* : Left DECK : [PAD 1] - [PAD 8], [CUE], [PLAY/PAUSE]
2* : Change LED display number according to position of VR,

3.3 PCB LOCATIONS

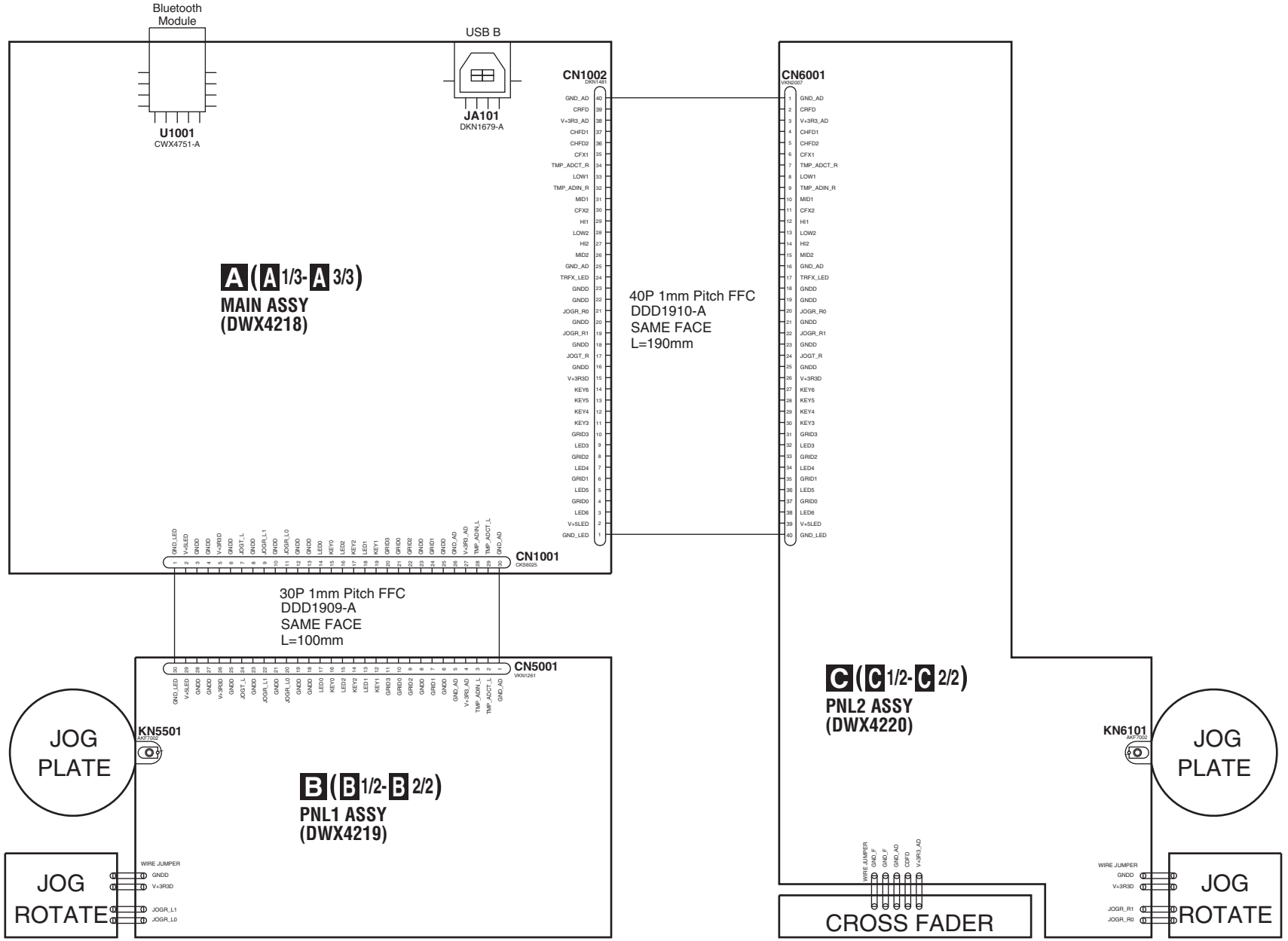


NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

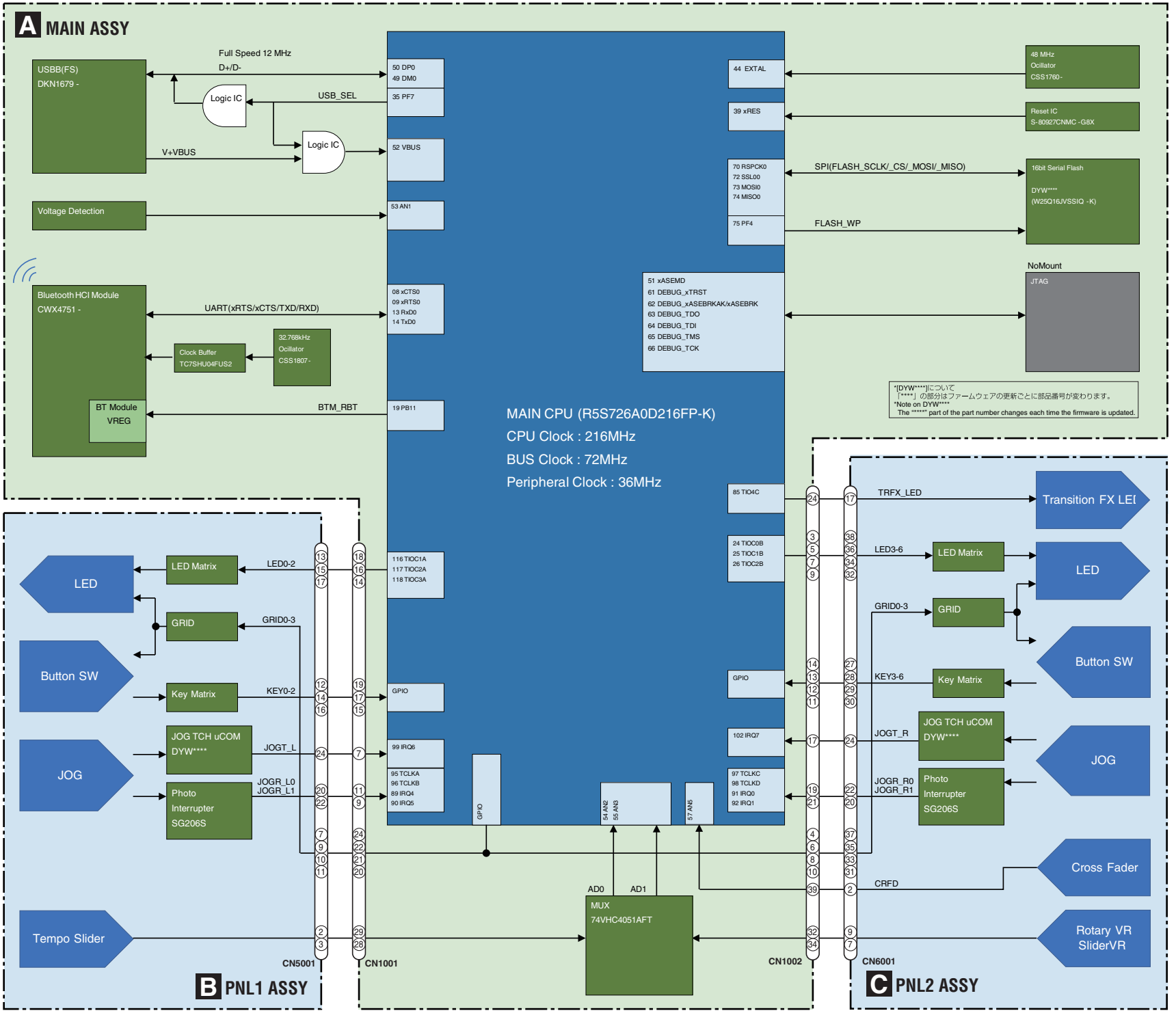
LIST OF ASSEMBLIES

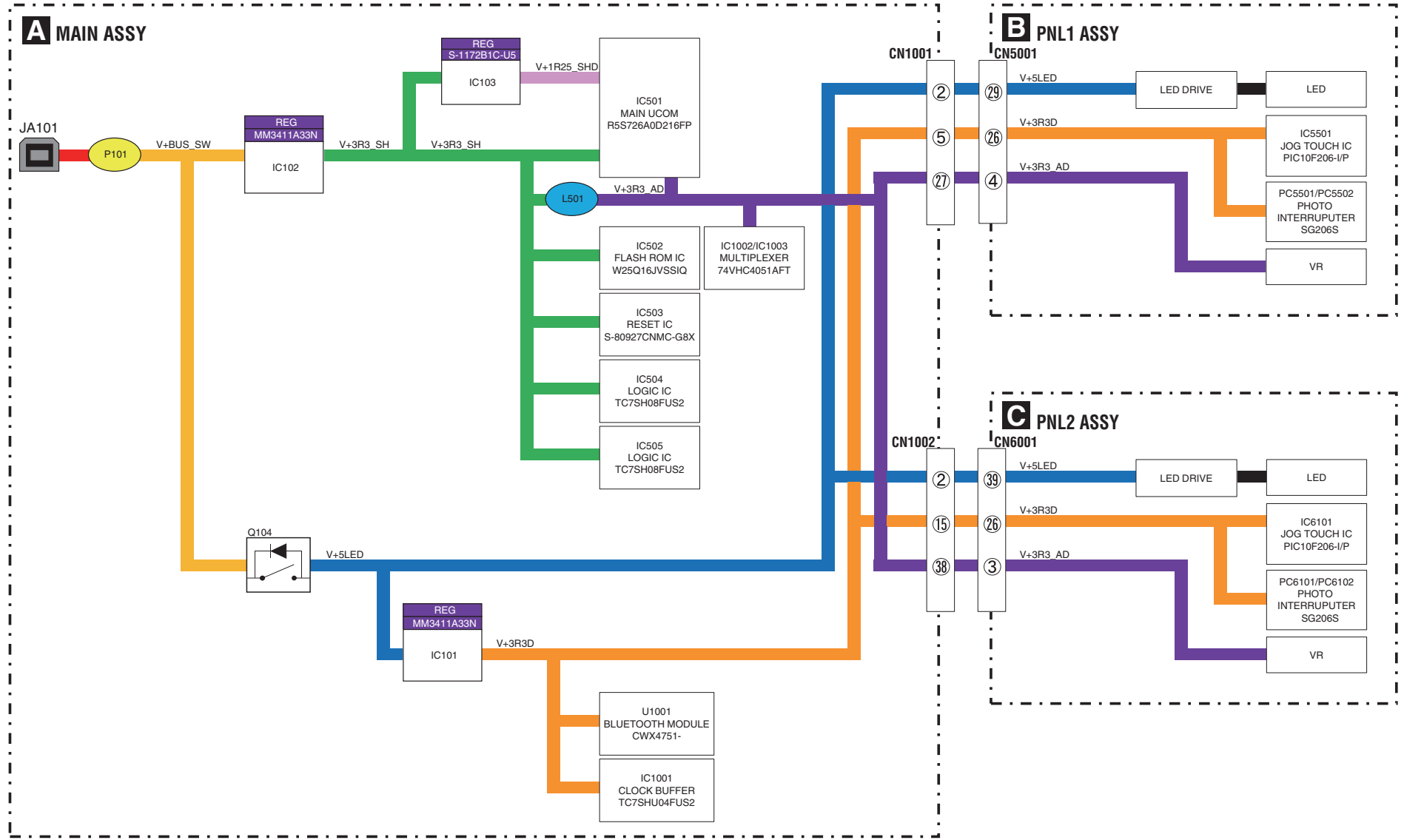
Mark	No.	Description	Part No.
	1	MAIN ASSY	DWX4218
NSP	1	PNLA ASSY	DWM2704
	2	PNL1 ASSY	DWX4219
	2	PNL2 ASSY	DWX4220

4. BLOCK 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.


A MAIN ASSY
USBB(FS)
DKN1679 -
Full Speed 12 MHz
D+/D-
Logic IC
USB_SEL
Logic IC
V+VBUS
Voltage Detection
Bluetooth HCI Module
CWX4751 -
UART(xRTS/xCTS/TXD/RXD)
Clock Buffer
TC7SHU04FUS2
32.768kHz
Ocillator
CSS1807 -
BT Module
VREG
BTM_RBT
50 DP0
49 DM0
35 PF7
52 VBUS
53 AN1
08 xCTS0
09 xRTS0
13 RxD0
14 TxD0
19 PB11
116 TIOC1A
117 TIOC2A
118 TIOC3A
GPIO
99 IRQ6
95 TCLKA
96 TCLKB
89 IRQ4
90 IRQ5
54 AN2
55 AN5
57 AN6
MAIN CPU (R5S726A0D216FP-K)
CPU Clock : 216MHz
BUS Clock : 72MHz
Peripheral Clock : 36MHz
44 EXTAL
39 xRES
70 RSPCK0
72 SSL00
73 MOSI0
74 MISO0
75 PF4
51 xASEMD
61 DEBUG_xTRST
62 DEBUG_xASEBRKAK/xASEBRK
63 DEBUG_TDO
64 DEBUG_TDI
65 DEBUG_TMS
66 DEBUG_TCK
85 TIO4C
24 TIOC0B
25 TIOC1B
26 TIOC2B
GPIO
102 IRQ7
97 TCLKC
98 TCLKD
91 IRQ0
92 IRQ1
48 MHz
Ocillator
CSS1760-
Reset IC
S-80927CNMC -G8X
SPI(FLASH_SCLK/_CS/_MOSI/_MISO)
16bit Serial Flash
DYW****
(W25Q16JVSSIQ -K)
FLASH_WP
NoMount
JTAG
*[DYW****]について
「****」の部分はファームウェアの更新ごとに部品番号が変わります。
*Note on DYW****
The ****** part of the part number changes each time the firmware is updated.
LED
LED Matrix
LED0-2
GRID
GRID0-3
Button SW
Key Matrix
KEY0-2
JOG
JOG TCH uCOM
DYW****
JOGT_L
Photo
Interrupter
SG206S
JOGR_L0
JOGR_L1
Tempo Slider
CN5001
B PNL1 ASSY
CN1001
AD0
AD1
MUX
74VHC4051AFT
CN1002
TRFX_LED
Transition FX LED
LED3-6
LED Matrix
LED
GRID0-3
GRID
Button SW
KEY3-6
Key Matrix
JOG TCH uCOM
DYW****
JOGT_R
JOG
JOGR_R0
JOGR_R1
Photo
Interrupter
SG206S
Cross Fader
CRFD
Rotary VR
SliderVR
CN6001
C PNL2 ASSY


A MAIN ASSY
JA101
P101
V+BUS_SW
REG
MM3411A33N
IC102
V+3R3_SH
REG
S-1172B1C-U5
IC103
V+1R25_SHD
V+3R3_SH
IC501
MAIN UCOM
R5S726A0D216FP
L501
V+3R3_AD
IC502
FLASH ROM IC
W25Q16JVSSIQ
IC1002/IC1003
MULTIPLEXER
74VHC4051AFT
IC503
RESET IC
S-80927CNMC-G8X
IC504
LOGIC IC
TC7SH08FUS2
IC505
LOGIC IC
TC7SH08FUS2
Q104
V+5LED
REG
MM3411A33N
IC101
V+3R3D
U1001
BLUETOOTH MODULE
CWX4751-
IC1001
CLOCK BUFFER
TC7SHU04FUS2
CN1001
CN1002
B PNL1 ASSY
CN5001
V+5LED
LED DRIVE
LED
V+3R3D
IC5501
JOG TOUCH IC
PIC10F206-I/P
V+3R3_AD
PC5501/PC5502
PHOTO
INTERRUPUTER
SG206S
VR
C PNL2 ASSY
CN6001
V+5LED
LED DRIVE
LED
V+3R3D
IC6101
JOG TOUCH IC
PIC10F206-I/P
V+3R3_AD
PC6101/PC6102
PHOTO
INTERRUPUTER
SG206S
VR

4.4 MATRIX LIST

KEY, LED

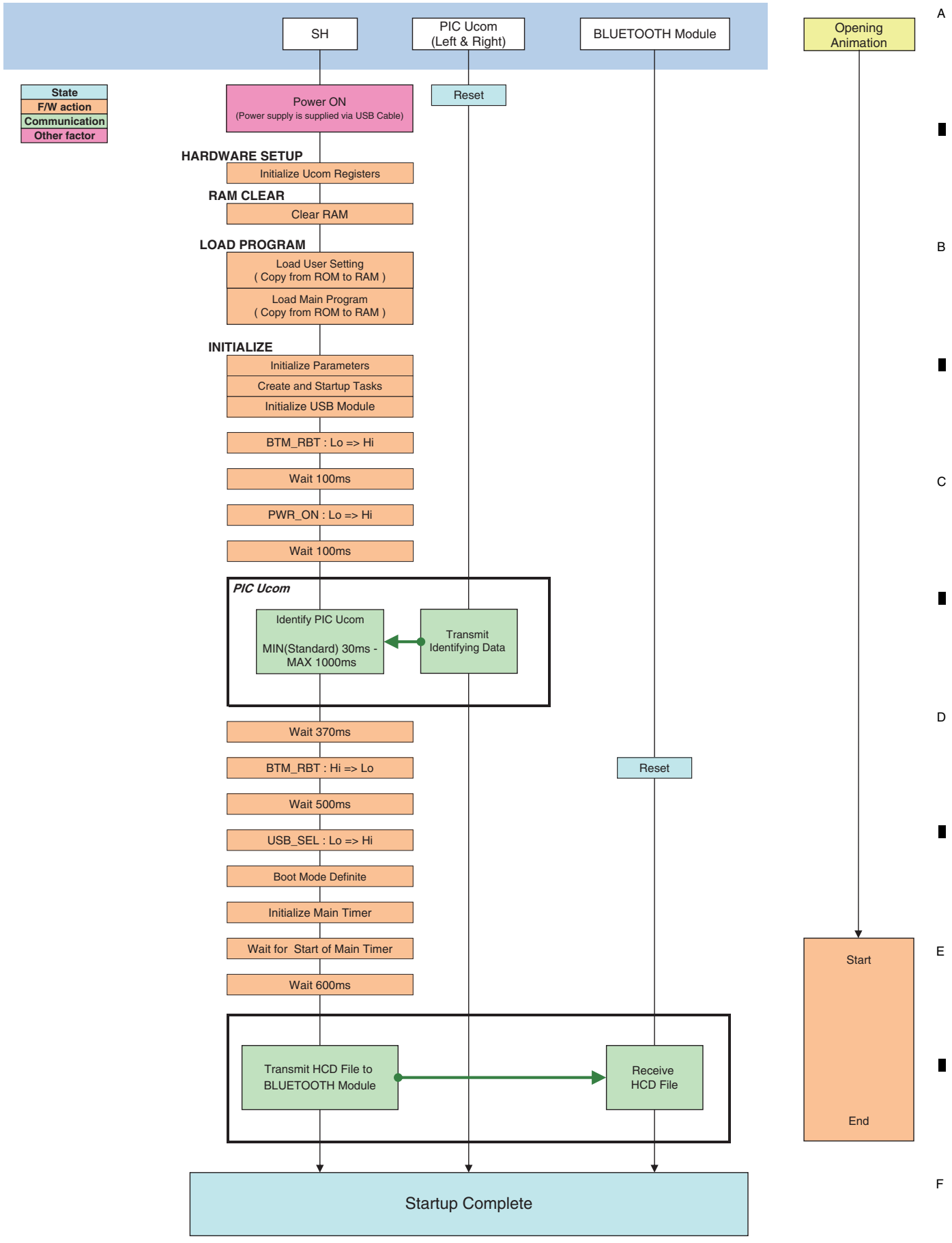
KEY ASSIGNMENT		GRID0	GRID1	GRID2	GRID3
PNL1	KEY0	PLAY	CUE	PAD5	BEAT SYNC
	KEY1	PAD3	SHIFT	PAD2	PAD4
	KEY2	PAD7	PAD1	PAD6	PAD8
PNL2	KEY3	BEAT SYNC	SHIFT	CUE	PLAY
	KEY4	PAD4	PAD3	PAD2	PAD1
	KEY5	PAD8	PAD7	PAD6	PAD5
	KEY6	TRFX	MASTER CUE	CH CUE2	CH CUE1

LED ASSIGNMENT		GRID0	GRID1	GRID2	GRID3
PNL1	LED0	CUE	PLAY		BEAT SYNC
	LED1	PAD2	PAD1	PAD3	PAD4
	LED2	PAD6	PAD5	PAD7	PAD8
PNL2	LED3	PAD1	PAD2	PAD3	PAD4
	LED4	PAD5	PAD6	PAD7	PAD8
	LED5	PLAY	CUE		BEAT SYNC
	LED6	BLUETOOTH MIDI	MASTER CUE	CH CUE1	CH CUE2

VR, ANALOG SW

VR	VR SIGNAL	ANALOG SW No.	OUTPUT SIGNAL NAME	MAIN CPU INPUT
DECK1 TEMPO SLIDER	TMP_ADIN_L	IC1003	AD_0	IC501 54pin
	TMP_ADCT_L			
DECK2 TEMPO SLIDER	TMP_ADIN_R			
	TMP_ADCT_R			
CH1 EQ HI	HI1			
CH1 EQ MID	MID1			
CH1 EQ LOW	LOW1			
CH1 CFX	CFX1			
CH2 EQ HI	HI2	IC1002	AD_1	IC501 55pin
CH2 EQ MID	MID2			
CH2 EQ LOW	LOW2			
CH2 CFX	CFX2			
CH1 CH FADER	CHFD1			
CH2 CH FADER	CHFD2			
CH1 CH FADER	CHFD1			
CH2 CH FADER	CHFD2			

5. DIAGNOSIS
5.1 STARTUP SEQUENCE



5.2 TROUBLESHOOTING

Before troubleshooting, check that “Wire of each connector is inserted correctly”.

For the relationship of each power-supply and signal system, see “4.3 POWER BLOCK DIAGRAM.”
If software of the product is updated before performing diagnostics, check that software updating has been performed properly before proceeding to diagnostics.
If software updating has not been performed properly, update the software, following the instructions in “8.2 UPDATING OF THE FIRMWARE.”

Contents

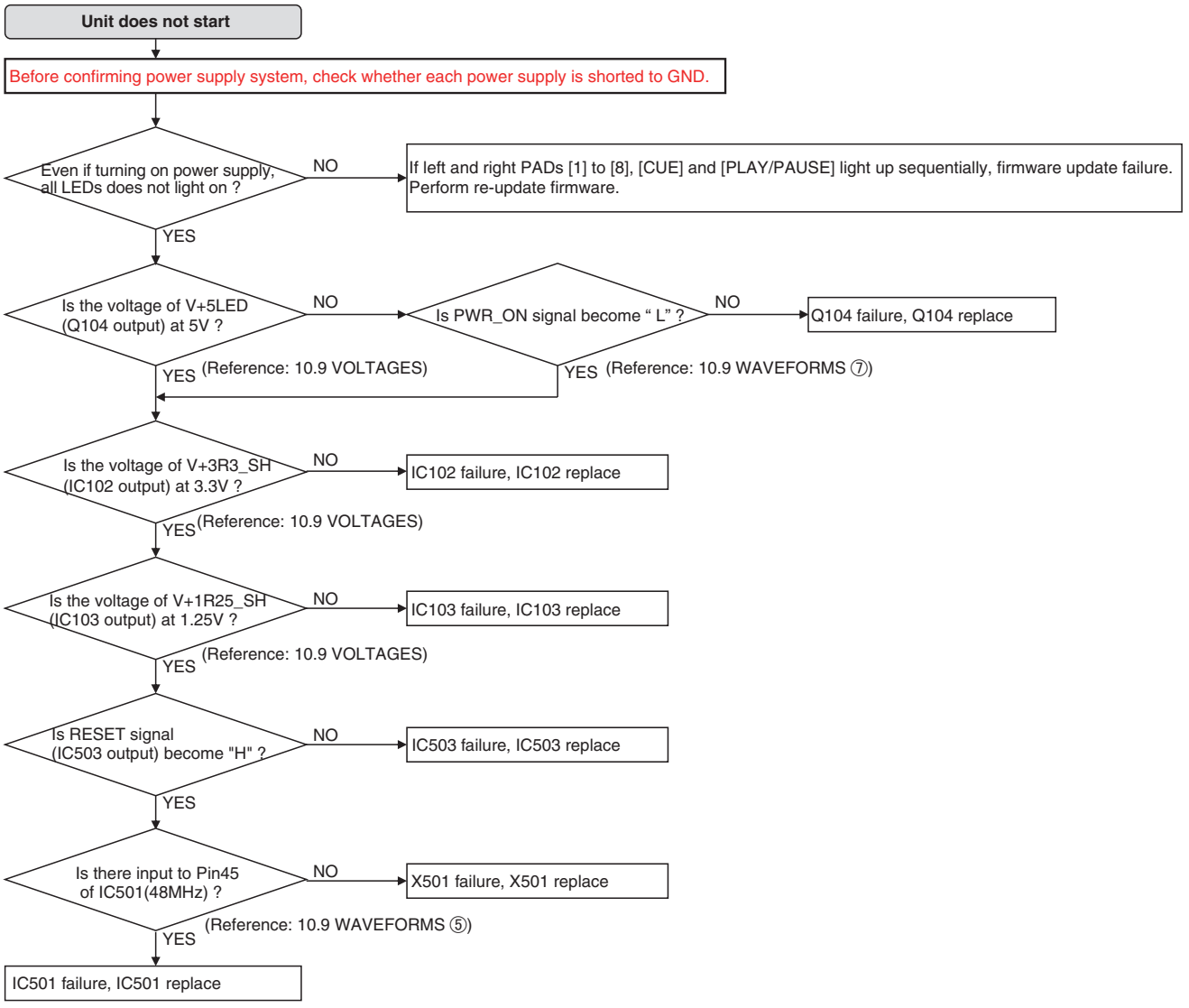
STARTUP/ COMMUNICATION SYSTEM ERROR
Unit does not start
Bluetooth can not connect
PC can not connect via USB

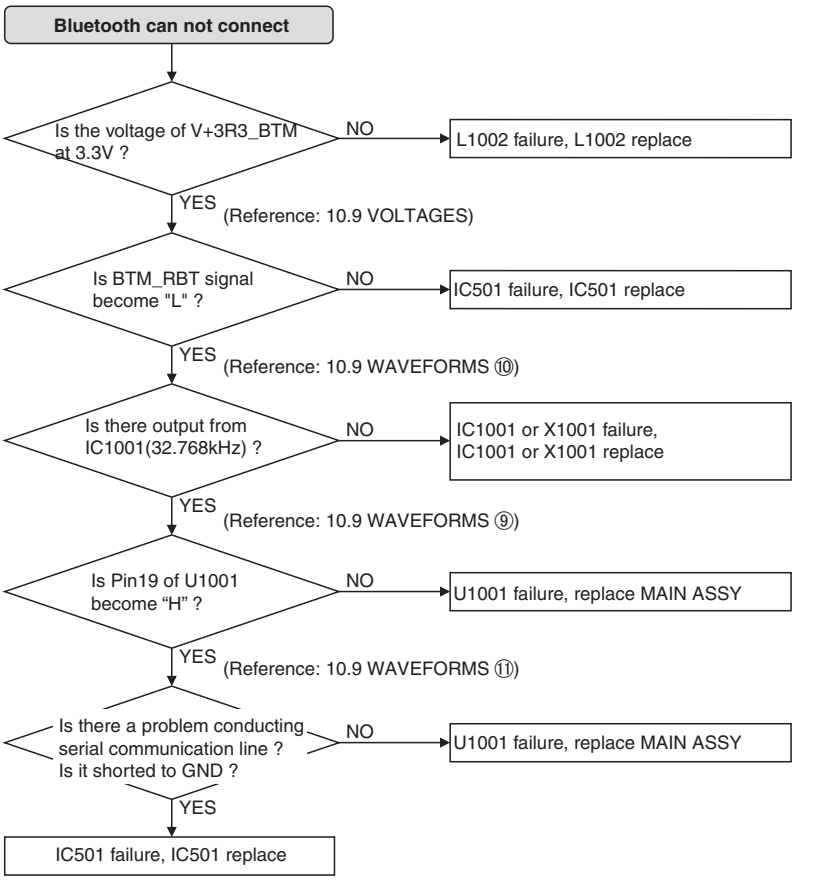
OPERATION PARTS AND LED ERROR
Button does not operation
VR does not operation
Turing of Jog Dial not controllable
Touch of Jog Dial not controllable
LED does not light

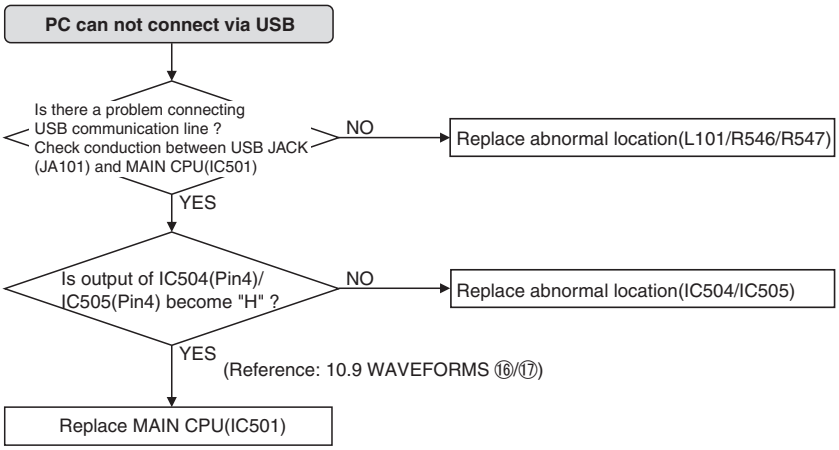
Waveform numbers and voltage confirmation-point numbers described in this section correspond to the numbers on the circuit diagrams and PCB diagrams.
Be sure to check the failure points, as well as check for failure in their peripheral circuits.

STARTUP/COMMUNICATION SYSTEM ERROR

After power supply was turned on, when TRANSITION FX button is blinking, voltage monitoring circuit is working.
Replace USB power supply adapter and PC you are using.




Bluetooth can not connect
Is the voltage of V+3R3_BTM at 3.3V ?
NO
L1002 failure, L1002 replace
YES
(Reference: 10.9 VOLTAGES)
Is BTM_RBT signal become "L" ?
NO
IC501 failure, IC501 replace
YES
(Reference: 10.9 WAVEFORMS ⑩)
Is there output from IC1001(32.768kHz) ?
NO
IC1001 or X1001 failure, IC1001 or X1001 replace
YES
(Reference: 10.9 WAVEFORMS ⑨)
Is Pin19 of U1001 become “H” ?
NO
U1001 failure, replace MAIN ASSY
YES
(Reference: 10.9 WAVEFORMS ⑪)
Is there a problem conducting serial communication line ? Is it shorted to GND ?
NO
U1001 failure, replace MAIN ASSY
YES
IC501 failure, IC501 replace


PC can not connect via USB
Is there a problem connecting USB communication line ? Check conduction between USB JACK (JA101) and MAIN CPU(IC501)
NO
Replace abnormal location(L101/R546/R547)
YES
Is output of IC504(Pin4)/ IC505(Pin4) become "H" ?
NO
Replace abnormal location(IC504/IC505)
YES
(Reference: 10.9 WAVEFORMS ⑯/⑰)
Replace MAIN CPU(IC501)

OPERATION PARTS AND LED ERROR

Button does not operation

Identify abnormal locations in service mode

Is there more than one button does not operation ? — NO → Replace Tact SW of abnormal location

YES

Parts connected to same GRID signal or operating same KEY signal are all abnormal ? — NO → Replace Tact SW of abnormal location

YES

(Reference: 4.4 MATRIX LIST)

KEY signal of operation abnormal location is abnormal ? — NO → Replace MAIN CPU(IC501)

YES

(Reference: 10.9 WAVEFORMS ㉑)

Replace Transistor of KEY signal abnormal location

Turing of Jog Dial not controllable

Identify abnormal locations in service mode

Jog Dial Rotation Detection Signal (JOGR_L0/L1 • JOGR_R0/R1) is abnormal ? — NO → Replace MAIN CPU(IC501)

YES

(Reference: 10.9 WAVEFORMS ㉔/㉕)

Replace Photo Interrupter

Touch of Jog Dial not controllable

Identify abnormal locations in service mode

Jog Dial Touch Signal (JOGT_L/R) is abnormal ? — NO → Replace MAIN CPU(IC501)

YES

(Reference: 10.9 WAVEFORMS ㉖)

Replace PIC UCOM(IC5501/IC6101)

VR does not operation

Identify abnormal locations in service mode

Is abnormal operation location other than Cross Fader ? — NO → Replace parts of Cross Fader

YES

All VRs input to same Switching IC (IC1002/IC1003) are abnormal ? — NO → Replace MAIN CPU(IC501)

YES

(Reference: 4.4 MATRIX LIST)

Replace corresponding VR. If it does not improve, replace Switching IC which corresponding IC is input.

LED does not light

Identify abnormal locations in service mode
-----LED control method-----
TRANSITION FX LED is MAIN CPU(IC501) : Direct control
Other than above : Matrix control

Is there more than one abnormal LED ? — NO → Abnormal LED is LED of "TRANSITION FX" button ? — NO → Replace corresponding LED

YES

YES

Check connection between MAIN CPU(IC501) and LED. If there are no problems, replace LED(D6011). If it still does not improve, replace MAIN CPU(IC501).

Same GRID signal or LED controlled by LED signal are all abnormal ? — NO → Replace corresponding LED

YES

(Reference: 4.4 MATRIX LIST)

Corresponding GRID signal or corresponding LED signal are abnormal ? — NO → Corresponding GRID signal or Transistor controlled by LED signal failure. Replace corresponding Transistor.

YES

(Reference: 10.9 WAVEFORMS ㉒/㉓)

Replace MAIN CPU(IC501)

5.3 ABOUT POWER SUPPLY VOLTAGE ABNORMALITY DETECTION

■ Voltage Monitoring

Because this unit supplies power using USB power adapter owned by user, monitoring input power supply voltage (V+BUS_SW).
VBUS_DET signal is generated based on input power supply voltage (V+BUS_SW), voltage is monitored by analog port of the MAIN CPU (IC501).

■ Voltage Abnormal Condition

Voltage Monitoring Condition		Monitoring Target Power Supply	Monitoring Signal
		V+BUS_SW	VBUS_DET
Abnormal Voltage	Increase in Voltage	More than 6.00V	More than 3.00V
Normal Range	Maximum Value	5.25V	2.63V
	Center Value	5.00V	2.50V
	Minimum Value	4.75V	2.38V
Abnormal Voltage	Decrease in Voltage	4.20V or less	2.10V or less

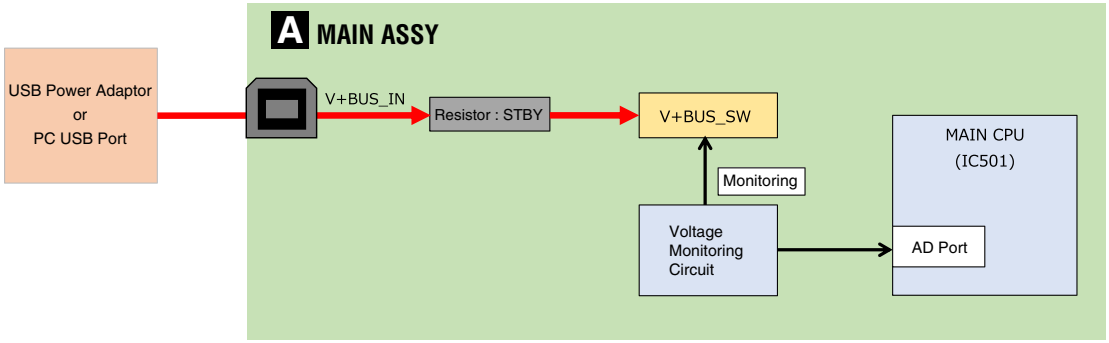
■ Symptom of Abnormal Condition

When power supply abnormality is determined by VBUS_DET signal (While VBUS_DET signal is over 50 ms, becomes abnormal voltage range above), MAIN CPU (IC 501) turns off LED and blinks LED of "TRANSITION FX" button.
When abnormal detection condition is detected, operation Button/Knob becomes invalid.

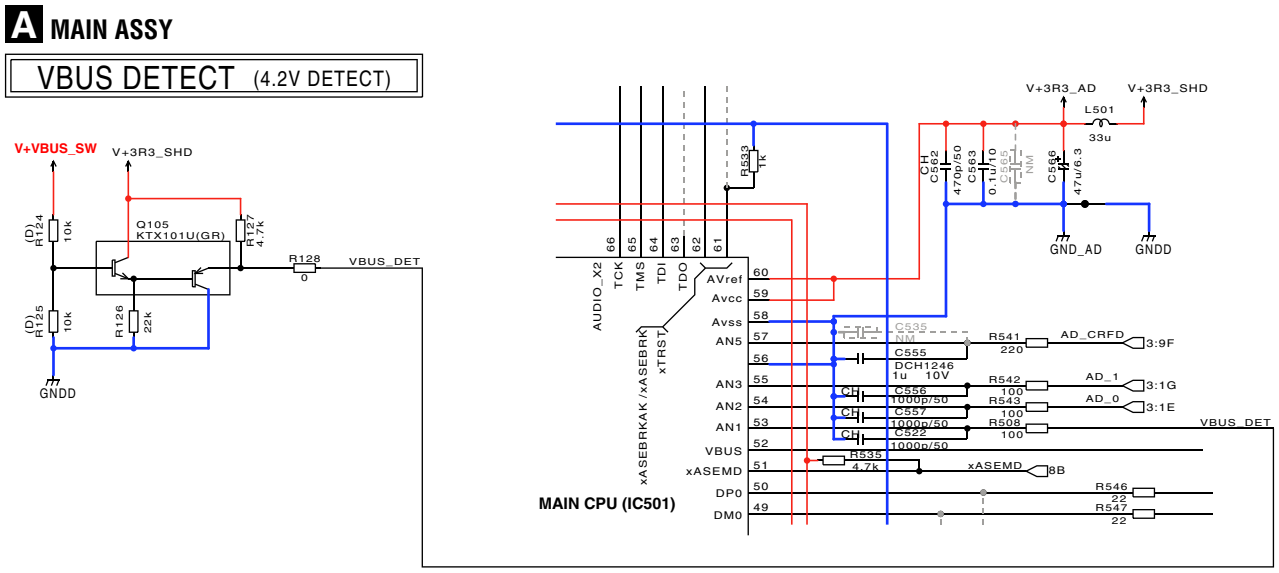
■ Coping Method

Change USB port of USB power adaptor or PC that is using.

■ Monitoring Circuit Block Diagram



■ Voltage Monitoring Part Circuit Diagram



5.4 OPERATION CHECK WITH rekordbox

For the latest information including download and rekordbox Operating Instructions, see the rekordbox website.
rekordbox.com

Minimum computer requirements

Supported operating systems	CPU and memory required
Mac: macOS Mojave 10.14 / macOS High Sierra 10.13 / macOS Sierra 10.12 (updated to the latest version)	Intel® processor Core™ i7, i5, i3 4 GB or more of RAM
Windows: Windows® 10 / Windows® 8.1 / Windows® 7 (latest service pack)	Intel® processor Core™ i7, i5, i3 4 GB or more of RAM

- Check the latest information on system requirements and compatibility in **[System requirements]** under **[Support]** at rekordbox.com.

Installing rekordbox

Getting started with rekordbox

Installing rekordbox
Procedures may differ depending on the operating system (OS) of your PC/Mac.

Installing (Mac)

Do not connect the unit to your Mac using the USB cable until the installation is complete.

1 Unzip the downloaded rekordbox software file.

2 Double-click the unzipped software file and start the installer.

3 Read the terms of the License Agreement carefully, then click **[Agree]** to continue.

4 When the screen for completing the installation appears, click **[Close]** to end the installation.

Installing (Windows)

Do not connect the unit to your PC using the USB cable until the installation is complete.

1 Unzip the downloaded rekordbox software file.

2 Double-click the unzipped software file and start the installer.

3 Read the terms of the License Agreement carefully and if you agree, select **[Agree]**, then click **[Next].**

4 Click **[Finish]** to complete the installation.

----------Operation check with rekordbox ----------

[Connecting your PC/Mac to the unit]

1 Connect your PC/Mac to the unit via the USB cable.

2 Turn on your PC/Mac.

3 Turn on the device(s) (speakers with built-in amplifier, etc.) connected to your PC/Mac.

[Starting rekordbox]

For details about each operation, click **[Manual]** under **[Support]** on the rekordbox website, then read: rekordbox Introduction.
https://rekordbox.com

For Mac
In Finder, open the **[Applications]** folder, then double-click the **[rekordbox 5]** > **[rekordbox app.]** icon.

For Windows 10
In the **[Start]** menu, click the **[rekordbox]** icon under **[Pioneer]**.

For Windows 8.1
In **[Apps view]**, click the **[rekordbox]** icon.

For Windows 7
In the Windows **[Start]** menu, click the **[rekordbox]** icon under **[All Programs]** > **[Pioneer]** > **[rekordbox X.X.X]**.

[Adding music files into your Collection]

1 Click **[Collection]** on the tree view of rekordbox and display a list of tracks in your **[Collection]**.

2 Open Finder (Mac) or Explorer (Windows) and drag music files, or folders containing music files, into the track list.
Music files are added into **[Collection]** and analysis of waveform information for music files begins.

[Loading an audio track onto a deck]

Select a track in **[Collection]** of rekordbox and drag it into the track information panel of a deck to play.

[Playing a track]

This section explains how to play sound from Deck 1 (Left) as an example.

1 Set the positions of the controls as follows:

- **[EQ (HI/MID/LOW)]** knobs: Center position (12 o'clock)
- **[CFX]** knob: Center position
- Channel fader: Bottom position
- Crossfader: Center position

2 Press the **[PLAY/PAUSE]** button to play the track.

3 Move the channel fader to the top.

4 Adjust the volume on your PC/Mac.
Turn **[Master Volume]** in rekordbox dj and adjust the volume of your PC/Mac's built-in speakers, or your connected speaker with a built-in amplifier, until you find a volume level you're happy with.

• If the volume doesn't increase when you turn **[Master Volume]**, adjust the volume of your PC/Mac's built-in speaker.

5.5 CONNECTION CHECK WITH BLUETOOTH

Starting WeDJ for iPhone and connecting it to the unit.

1 Tap on your iOS device to start WeDJ for iPhone.
The tutorial screen may show.

The following steps may be different if you run the tutorial.

2 Tap on the main screen of WeDJ for iPhone.
The **[Settings]** screen is displayed

3 Tap **[Connect the DDJ-200].**

4 Tap **[DDJ-200]**
The unit connects to your iOS device via Bluetooth.
When the connection is complete, the WeDJ logo and the unit's logo are displayed and the light of the Bluetooth MIDI indicator changes from being lit to flashing.

• On the **[Connect the DDJ-200]** screen, **[DDJ-200_X**] may be displayed (X is a number from1 to 16).

5.6 EROOR INDICATION

TRANSITION FX LED blinks when detecting a decrease in power supply voltage.

5.7 PIN ASSIGNMENT LIST

MAIN CPU PIN ASSIGNMENT LIST

Parts No. : R5S726A0D216FP

Mounting Position : DWX4218 (MAIN ASSY : IC501)

Pin NO.	Pin Name	Signal Name	I/O	Function
1	PD14	DEBUG_LED	O	DEBUG_LED(No Mount)
2	PD15	DEBUG_TP1	O	POINTER for DEBUG
3	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
4	PB1	DEBUG_TP2	O	POINTER for DEBUG
5	Vss	GNDD	G	GND
6	PB2	DEBUG_TP3	O	POINTER for DEBUG
7	PB3	DEBUG_TP4	O	POINTER for DEBUG
8	xCTS0	SH_BTM_xCTS	O	BT MODULE COMMUNICATION (UART)
9	xRTS0	SH_BTM_xRTS	I	BT MODULE COMMUNICATION (UART)
10	Vss	GNDD	G	GND
11	PB6	No USE (OPEN)	O	No USE (OPEN)
12	Vcc	V+1R25_SHD	V	POWER SUPPLY (+1.25V for CORE)
13	RxD0	SH_BTM_RXD	I	BT MODULE COMMUNICATION (UART)
14	TxD0	SH_BTM_TXD	O	BT MODULE COMMUNICATION (UART)
15	PB9	No USE (OPEN)	O	No USE (OPEN)
16	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
17	PB10	PWR_ON	O	LED POWER SUPPLY BOOT CONTROL
18	Vss	GNDD	G	GND
19	PB11	BTM_RBT	O	BT MODULE RE-BOOT CONTROL
20	Vcc	V+1R25_SHD	V	POWER SUPPLY (+1.25V for CORE)
21	PB12	No USE (OPEN)	O	No USE (OPEN)
22	PB13	No USE (OPEN)	O	No USE (OPEN)
23	PB14	No USE (OPEN)	O	No USE (OPEN)
24	TIOC0B	LED3	O	MATRIX LED SEGMENT SIGNAL (PWM)
25	TIOC1B	LED4	O	MATRIX LED SEGMENT SIGNAL (PWM)
26	TIOC2B	LED5	O	MATRIX LED SEGMENT SIGNAL (PWM)
27	PB18	No USE (OPEN)	O	No USE (OPEN)
28	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
29	TIOC0C	LED6	O	MATRIX LED SEGMENT SIGNAL (PWM)
30	Vss	GNDD	G	GND
31	PB20	ADSEL_A	O	MULTIPLEX SWITCHING SIGNAL
32	PB21	ADSEL_B	O	MULTIPLEX SWITCHING SIGNAL
33	PB22	ADSEL_C	O	MULTIPLEX SWITCHING SIGNAL
34	PF6	No USE (OPEN)	O	No USE (OPEN)
35	PF7	USB_SEL	O	USB SPEED SWITCHING
36	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
37	CKIO	No USE (OPEN)	O	No USE (OPEN)
38	Vss	GND_PLL	G	GND
39	xRES	RESET	I	uCOM RESET TERMINAL
40	Vss	GND_PLL	G	GND
41	PLLVcc	V+1R25_PLL	V	ANALOG POWER SUPPLY for PLL (1.25V)
42	NMI	Hi FIXATION	I	NON-MASKABLE INTERRUPT TERMINAL
43	Vcc	V+1R25_SHD	V	POWER SUPPLY (+1.25V for CORE)
44	EXTAL	48 MHz IN	I	48 MHz INPUT
45	XTAL	48 MHz OUT	O	48 MHz OUTPUT
46	Vss	GNDD	G	GND
47	Vss	GNDD	G	GND
48	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
49	DM0	USB DM	I/O	USB DM
50	DP0	USB DP	I/O	USB DP
51	xASEMD	xASEMD	I	DEBUG TERMINAL
52	VBUS	VBUS	I	USB CABLE CONNECTION MONITOR TERMINAL
53	AN1	GND_AD	I	GND_AD CONNECTION
54	AN2	AD0	I	AD MULTIPLEXER
55	AN3	AD1	I	AD MULTIPLEXER
56	AN4	GND_AD	I	GND_AD CONNECTION
57	AN5	AD_CRFD	I	CRFD DIRECT
58	Avss	GND_AD	G	GND for AD
59	Avcc	V+3R3_AD	V	POWER SUPPLY for AD
60	AVref	V+3R3_AD	V	POWER SUPPLY for AD

Pin NO.	Pin Name	Signal Name	I/O	Function
61	xTRST	DEBUG_xTRST	I	DEBUG TERMINAL
62	xASEBRKAK/xASEBRK	DEBUG_xASEBRKAK/xASEBRK	I/O	DEBUG TERMINAL
63	TDO	DEBUG_TDO	O	DEBUG TERMINAL
64	TDI	DEBUG_TDI	I	DEBUG TERMINAL
65	TMS	DEBUG_TMS	I	DEBUG TERMINAL
66	TCK	DEBUG_TCK	I	DEBUG TERMINAL
67	AUDIO_X2	No USE (OPEN)	O	No USE (OPEN)
68	AUDIO_X1	GNDD	I	GND CONNECTION
69	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
70	RSPCK0	FLASH_SCLK	O	SERIAL FLASH CONNECTION
71	Vss	GNDD	G	GND
72	SSL00	FLASH_CS	O	SERIAL FLASH CONNECTION
73	MOSI0	FLASH_MOSI	O	SERIAL FLASH CONNECTION
74	MISO0	FLASH_MISO	I	SERIAL FLASH CONNECTION
75	PF4	FLASH_WP	O	SERIAL FLASH CONNECTION
76	Vss	GNDD	G	GND
77	PF5	No USE (OPEN)	O	No USE (OPEN)
78	Vcc	V+1R25_SHD	V	POWER SUPPLY (+1.25V for CORE)
79	MD_CLK	HI FIXATION	I	MODE SETTING
80	MD_BOOT	HI FIXATION	I	MODE SETTING
81	PC0	No USE (OPEN)	O	L OUTPUT
82	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
83	PC1	No USE (OPEN)	O	L OUTPUT
84	Vss	GNDD	G	GND
85	TIOC4C	TRFX_LED	O	BEAT INDICATOR PWM OUTPUT for TRFX
86	Vcc	V+1R25_SHD	V	POWER SUPPLY (+1.25V for CORE)
87	PC3	No USE (OPEN)	O	No USE (OPEN)
88	PC4	No USE (OPEN)	O	No USE (OPEN)
89	IRQ4	JOGR_L0	I	JOG ROTATION DETECTAION (For PRODUCTION)
90	IRQ5	JOGR_L1	I	JOG ROTATION DETECTAION (For PRODUCTION)
91	IRQ0	JOGR_R0	I	JOG ROTATION DETECTAION (For PRODUCTION)
92	IRQ1	JOGR_R1	I	JOG ROTATION DETECTAION (For PRODUCTION)
93	PE2	No USE (OPEN)	O	No USE (OPEN)
94	PE3	No USE (OPEN)	O	No USE (OPEN)
95	TCLKA	JOGR_L0	I	JOG ROTATION DETECTAION
96	TCLKB	JOGR_L1	I	JOG ROTATION DETECTAION
97	TCLKC	JOGR_R0	I	JOG ROTATION DETECTAION
98	TCLKD	JOGR_R1	I	JOG ROTATION DETECTAION
99	IRQ6	JOGT_L	I	JOG TOUCH DETECTION
100	Vss	GNDD	G	GND
101	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
102	IRQ7	JOGT_R	I	JOG TOUCH DETECTION
103	PD0	GRID0	O	MATRIX GRID SIGNAL
104	PD1	GRID1	O	MATRIX GRID SIGNAL
105	PD2	GRID2	O	MATRIX GRID SIGNAL
106	PD3	GRID3	O	MATRIX GRID SIGNAL
107	Vss	GNDD	G	GND
108	PD4	KEY0	I	KEY INPUT SIGNAL
109	Vcc	V+1R25_SHD	V	POWER SUPPLY (+1.25V for CORE)
110	PD5	KEY1	I	KEY INPUT SIGNAL
111	PD6	KEY2	I	KEY INPUT SIGNAL
112	PVcc	V+3R3_SHD	V	POWER SUPPLY (+3.3V for IO)
113	PD7	KEY3	I	KEY INPUT SIGNAL
114	Vss	GNDD	G	GND
115	PD8	KEY4	I	KEY INPUT SIGNAL
116	TIOC1A	LED0	O	MATRIX LED SEGMENT SIGNAL
117	TIOC2A	LED1	O	MATRIX LED SEGMENT SIGNAL
118	TIOC3A	LED2	O	MATRIX LED SEGMENT SIGNAL
119	PD12	KEY5	I	KEY INPUT SIGNAL
120	PD13	KEY6	I	KEY INPUT SIGNAL

6. SERVICE MODE
6.1 SERVICE MODE

Outline of Service Mode

There are three service mode for this unit.
Bluetooth function is always disabled during Service Mode 1 and Service Mode 2.

Service Mode ①
①－1 Firmware version check mode
①－2 All LEDs lighting and check mode for buttons
①－3 All LEDs dim lighting
①－4 All LEDs lighting off
①－5 Check mode for Knobs, Faders, and JOG dials
①－6 A/D conversion value fluctuation range check mode
①－7 Factory reset mode
①－8 Crossfader calibration mode

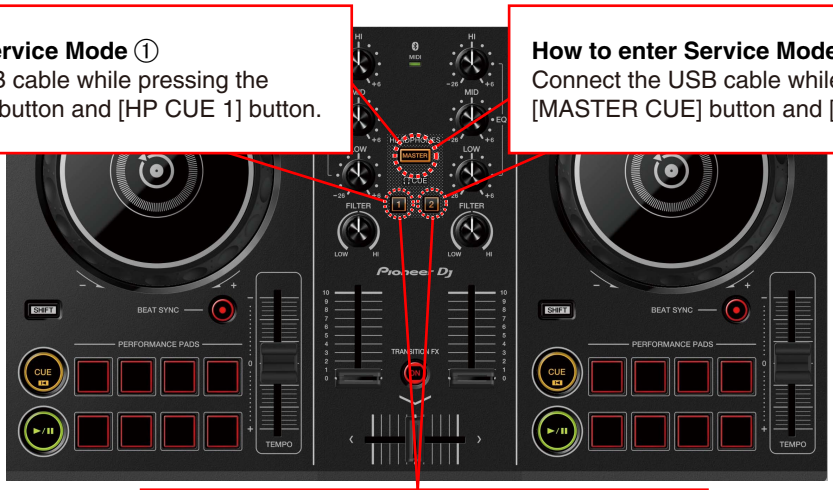
Service Mode ②
②－1 Firmware version check mode
②－2 Measurement mode of the load of JOG dial
②－3 Photo interrupter check mode

Service Mode ③
③－1 Firmware version check mode
③－2 Check mode for Bluetooth connection

Startup Method in Service Mode

How to enter Service Mode ①
Connect the USB cable while pressing the [MASTER CUE] button and [HP CUE 1] button.

How to enter Service Mode ②
Connect the USB cable while pressing the [MASTER CUE] button and [HP CUE 2] button.



How to enter Service Mode ③
Connect the USB cable while pressing the [HP CUE 1] button and [HP CUE 2] button.

Method for Quitting the Service Mode

Please disconnect the USB cable connected to this unit.

How to mode changing and Page changing

USB cable is not connected.

Service Mode ①

Press the [MASTER CUE] button + [HP CUE 1] button + Connect a USB cable.

Check the PIC microcomputer. *1

Service Mode (Page 1)
① – 1 Firmware version check mode

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 2)
① – 2 All LEDs lighting and check mode for buttons

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 3)
① – 3 All LEDs dim lighting

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 4)
① – 4 All LEDs lighting off

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 5)
① – 5 Check mode for Knobs, Faders, and JOG dials

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 6)
① – 6 A/D conversion value fluctuation range check mode

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 7)
① – 7 Factory reset mode

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 8)
① – 8 Crossfader calibration mode

Press the [SHIFT] button on the (Right) DECK.

Service Mode ②

Press the [MASTER CUE] button + [HP CUE 2] button + Connect a USB cable.

Check the PIC microcomputer. *1

Service Mode (Page 1)
② – 1 Firmware version check mode

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 2)
② – 2 Measurement mode of the load of JOG dial

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

Service Mode (Page 3)
② – 3 Photo interrupter check mode

Press the [SHIFT] button on the (Right) DECK.

Service Mode ③

Press the [HP CUE 1] button + [HP CUE 2] button + Connect a USB cable.

Check the PIC microcomputer. *1

Service Mode (Page 1)
③ – 1 Firmware version check mode

Press the [SHIFT] button on the (Left) DECK. / Press the [SHIFT] button on the (Right) DECK.

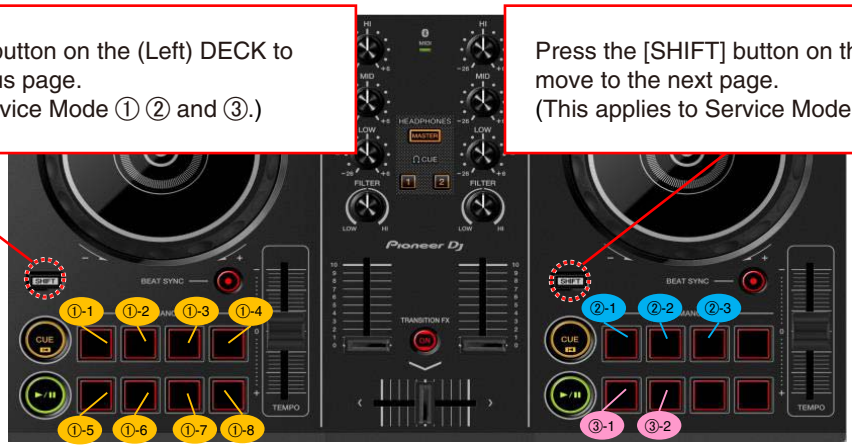
Service Mode (Page 2)
③ – 2 Check mode for Bluetooth connection

Press the [SHIFT] button on the (Right) DECK.

*1 : A caution will appear if the firmware of the built-in PIC microcomputer is not for DDJ-200.
The caution will appear right after the Service Mode ① ② or ③ started.
LED of the [TRANSITION FX] button will light on.
The caution will be cleared if you press and hold the [TRANSITION FX] button more than 5 seconds.
Then you can move on to the Service Mode.

Press the [SHIFT] button on the (Left) DECK to move to the previous page.
(This applies to Service Mode ① ② and ③.)

Press the [SHIFT] button on the (Right) DECK to move to the next page.
(This applies to Service Mode ① ② and ③.)



When you press the [SHIFT] button to enter the new test page, LED corresponding to each page will blink Red for a moment (For 1 to 2 seconds). After "Red-blinking" is over and light is off, testing of each page will start.

Service Mode ① – 1 Firmware version check mode

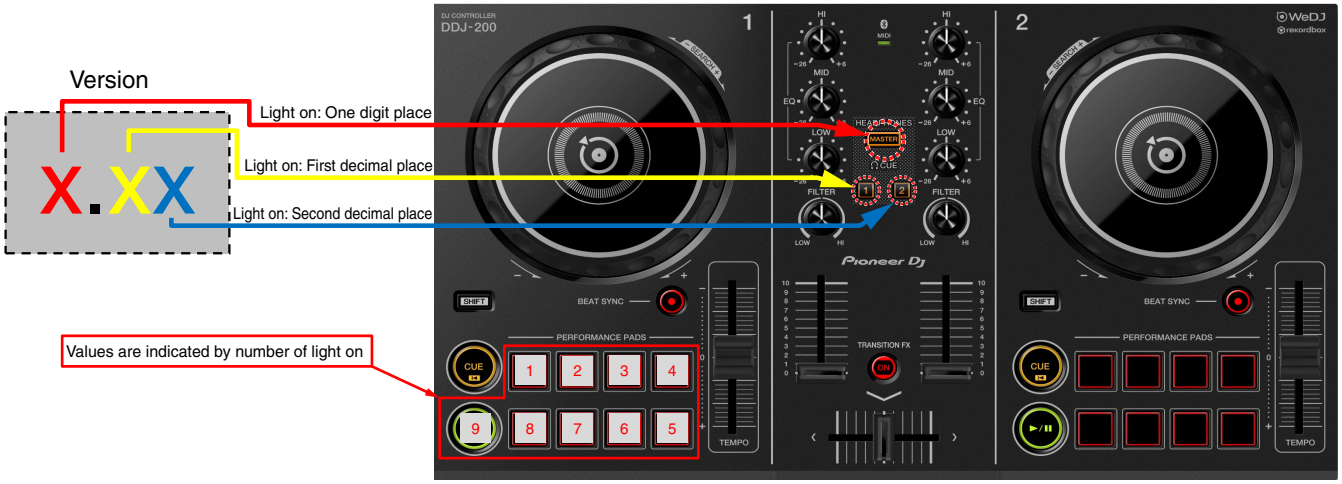
Mode outline

This mode is to check the version of firmware. Version is displayed using the deck LEDs.

Advanced Setting

Lighting of PAD 1 through PAD 8 and [PLAY/PAUSE] button on the Left DECK displays version number. (Common to each digits)
Number of one digit piece is displayed right after entering the Firmware version check mode. Number of first decimal place is displayed after 1 second. Number of second decimal place is displayed after another 1 second.
(Digit to be displayed returns to ones place from then on. And same sequence is repeated.)

LED of [MASTER CUE] button is lights on while one digit place is indicated.
LED of [HP CUE 1] button is lights on while first decimal place is indicated.
LED of [HP CUE 2] button is lights on while second decimal place is indicated.



• If digit is zero, PAD 1 through PAD 8 and [PLAY/PAUSE] button will light off.

Service Mode ① – 2 All LEDs lighting and check mode for buttons

Mode outline

This mode is all LEDs light on. This mode is also used for check the button operation.

Advanced Setting

When entering this mode, all LEDs will light on.
When a lighting button is pressed, LED of button turns light off. When a button is pressed again, LED turns light on.
[WIRELESS MIDI] LED turns light off while any button is pressed and held. When a button is released, LED turns light on.
When the unit confirms press of all buttons except for [SHIFT] button, LED of all buttons will blink.
Once [TRANSITION FX] button is pressed and held more than 1 second, blinking is cancelled. Then all LEDs turns light on.

[Buttons to be Tested]
The target of test is buttons indicated by blue in the figure below.
Check of [SHIFT] button excludes from check target. Because it can be checked by moving of page in Service Mode.



Service Mode ① – 3 All LEDs dim lighting

This mode is all LEDs light dimly.

Service Mode ① – 4 All LEDs lighting off

This mode is all LEDs light off.

Service Mode ① – 5 Check mode for Knobs, Faders, and JOG dials

Mode outline

This mode is for check the Knobs, Faders, and JOG dials.

[Test Target]
Target of test is Knobs, Faders and JOG dials indicated by green in figure below.

Advanced Setting

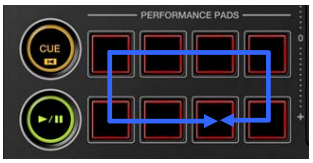


①. When entering this mode, LEDs indicated by red in above figure will light on.
LEDs indicated by red relate with each Knobs, Faders and JOG dials.

②. Turn a Knob clockwise or counterclockwise. When a Knob is turned clockwise or counterclockwise, LEDs indicated by blue in above figure will light on. Total number of LEDs will light on depends on the Knob's position.
Once built-in microcomputer detects that the Knob has been turned fully clockwise and fully counterclockwise[*1], related LED is turned light off.
(*1: If built-in microcomputer has read the value less than 51 and the value more than 972 from A/D converter, it judges OK.)

③. Slide a Fader. When a Fader is slid, LEDs indicated by blue in above figure will light on. Total number of LEDs will light on depends on the Fader's position.
Once built-in microcomputer detects that the Fader has been slid to bottom position and top position[*2], related LED is turned light off.
(*2: If built-in microcomputer has read the value less than 51 and the value more than 972 from A/D converter, it judges OK.)

④. Rotate top surface of JOG dial. When a JOG dial is rotated, lighting position of LEDs indicated by blue in above figure is moved.
Once built-in microcomputer detects that the JOG dial has been rotated one revolution clockwise[*3], related LED is turned light off.
(*3: If JOG dial is rotated counterclockwise or rotated many times, built-in microcomputer can not judge properly.)



⑤. Touch top surface of JOG dial. [MASTER CUE] button is lights on while top surface of JOG dial is touched.
Even if you touch top surface of either left or right JOG dial, [MASTER CUE] button will light on.

⑥. When confirmation of all Knobs, Faders, and JOG dials are completed, LEDs indicated by red in above figure will blink.
When [TRANSITION FX] button is pressed and held more than 1 second, blinking is cancelled. Then LEDs indicated by red in above figure will light on.

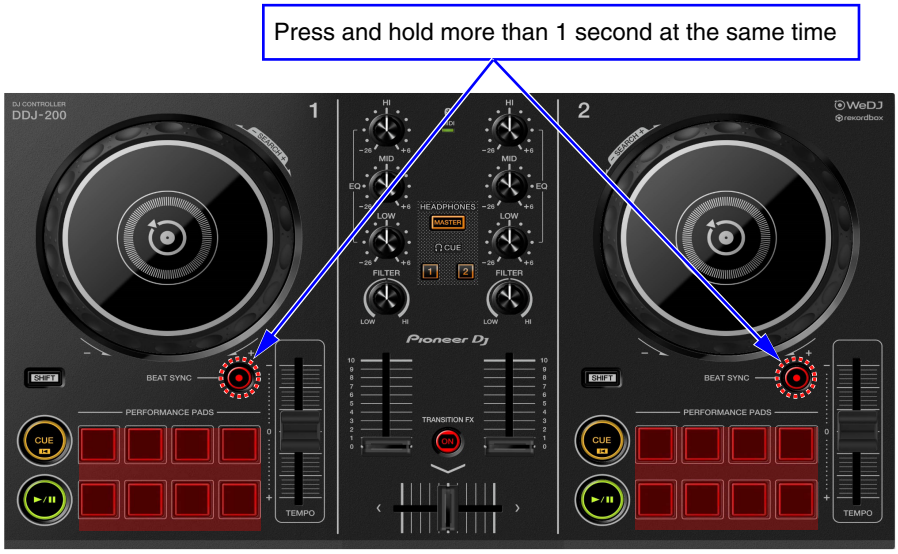
Service Mode ① – 6 A/D conversion value fluctuation range check mode

This mode is not used in service.

Service Mode ① – 7 Factory reset mode

Mode outline

Following settings will be reset back to the factory default by pressing and holding both of left and right [BEAT SYNC] buttons more than 1 second.
Even if factory reset is executed, crossfader calibration data is not reset.



Advanced Setting

	Setting item	Setting value (Factory default setting = Bold)
1	Demo illumination setting	Demo illumination is disabled. Demo illumination starts when there is no operation for 1 minute. Demo illumination starts when there is no operation for 5 minutes. **Demo illumination starts when there is no operation for 10 minutes.**

When both of left and right [BEAT SYNC] buttons are pressed and held at the same time, LEDs of these buttons will light on.
After factory reset is completed, all PADs will light on.
When factory reset fails, left and right [BEAT SYNC] buttons will blink.

Service Mode ① – 8 Cross fader calibration mode

Mode outline

This mode adjusts the cross fader.

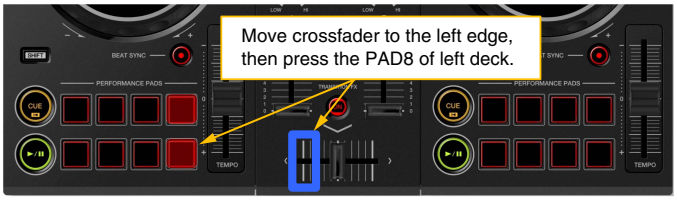
Advanced Setting

When entering this mode, PAD8 of left deck and PAD5 of right deck will light on. And [HP CUE 1] button and [HP CUE 2] button of both deck will light on.

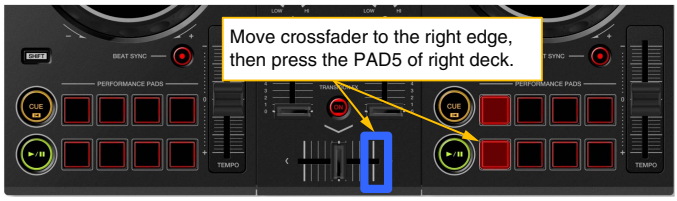


[Operation procedures of cross fader calibration]

① Move crossfader to the left edge, then press the PAD8 of left deck.
-> PAD4 and PAD8 of left deck will light on.
(Minimum value of crossfader is memorized at this time.)

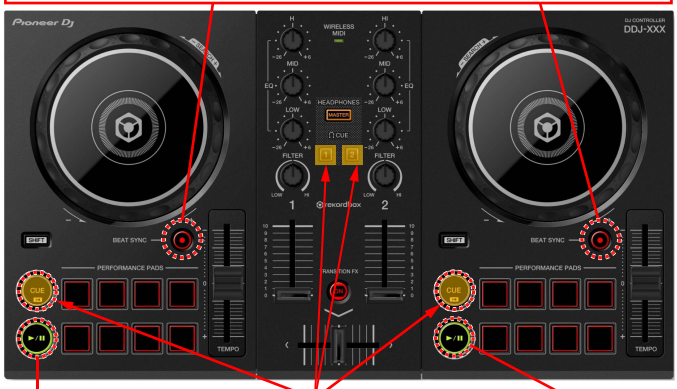


② Move crossfader to the right edge, then press the PAD5 of right deck.
-> PAD1 and PAD5 of right deck will light on.
(Maximum value of crossfader is memorized at this time.)



③ Press the [HP CUE 1] button and [HP CUE 2] button of both deck at the same time.
-> [CUE] button of left deck and [CUE] button of right deck will light on, too.
(End of memorizing crossfader calibration values.)

[Display when calibration procedure is not gone through]
When calibration procedure is not gone through, [BEAT SYNC] buttons of both deck will blink.



[Error]
When an error occurs, [PLAY/PAUSE] button of left deck and [PLAY/PAUSE] button of right deck blink.

[Estimated errors]

- It occurs when [HP CUE 1] button and [HP CUE 2] button of both deck are pressed without going through the operation procedure 1 and 2.
- It occurs when the magnitude relationship between MAX. value and MIN. value is wrong.

When error occurred and re-calibration operation is needed, press the [SHIFT] buttons to re-entry this mode.

[Display when calibration procedure is not gone through]
When calibration procedure is not gone through, [BEAT SYNC] buttons of both deck will blink.

Timing [BEAT SYNC] buttons is blink :
At normal start up, cross fader calibration mode of Service Mode or Utility Mode.

Caution
Even if factory reset is execution, crossfader calibration data is not reset.

Service Mode ② – 1　Firmware version check mode

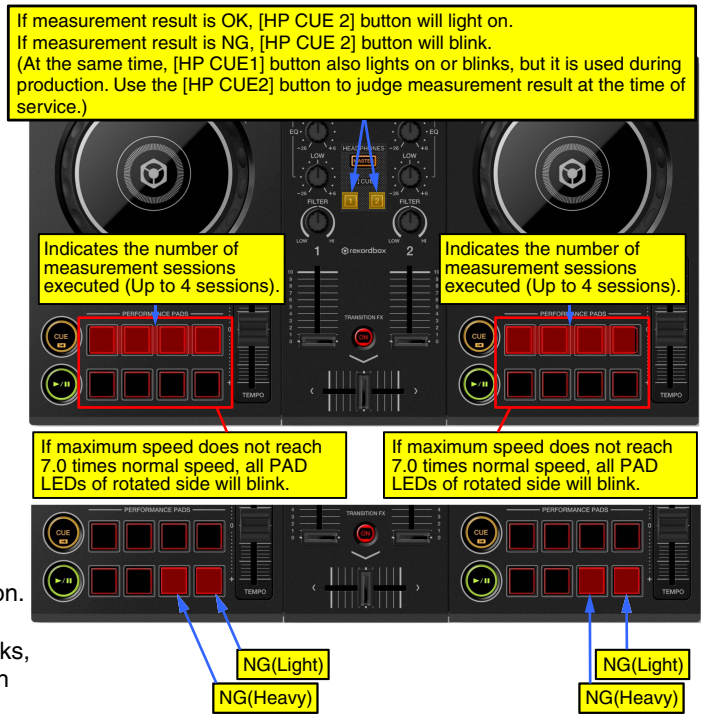
Mode outline

This mode is to check the version of firmware. Version is displayed using the deck LEDs.　Same as Service Mode ① - 1.

Service Mode ② – 2　Measurement mode of the load of JOG dial

Mode outline

This is measurement mode of the load of Jog dial.
When entering measurement mode, [BEAT SYNC] button of left DECK will light on.



Advanced Setting

① Spin the Jog dial swiftly.
To start measurement, maximum Jog dial rotation speed must be 7 times normal speed or higher.
If maximum speed does not reach 7 times normal speed, PAD LEDs (8 PADs) will blink several times.

② Number of sessions will be displayed up to four sessions on the LED as follows.

End of 1st session	PAD 1 lights on
End of 2nd session	PAD 2 lights on
End of 3rd session	PAD 3 lights on
End of 4th session	PAD 4 lights on

(After end of 4th session remain unchanged)

③ If measurement result is OK, [HP CUE 2] button will light on.
If measurement result is NG, [HP CUE 2] button will blink.
(At the same time, [HP CUE1] button also lights on or blinks, but it is used during production. Use the [HP CUE2] button to judge measurement result at the time of service.)

④ When measurement is NG, PAD LED indicates as follows.

Heavy	PAD 7 lights on
Light	PAD 8 lights on

(PAD 5 or PAD 6 may light on, but it is used during production.
At the time of service, check "Heavy / Light" by lighting of PAD 7 and PAD 8.)

When Jog dial is rotated swiftly, measurement for the top speed and the time required for slowdown.
When rotation speed of Jog dial exceeds 7 times normal speed, time required for slowdown will be evaluated whether it is in the range or not.　Result will be displayed on the LED.

Top speed :　Top speed　(When normal speed is defined as one rotation in 1.8 sec)
Time required for slowdown : Time required for Jog dial to decrease its rotation speed from 3 times to 1.5 times normal speed
OK [HP CUE 2] button lights on
NG [HP CUE 2] button blinks • • •　Heavy PAD 7 lights on
Light PAD 8 lights on

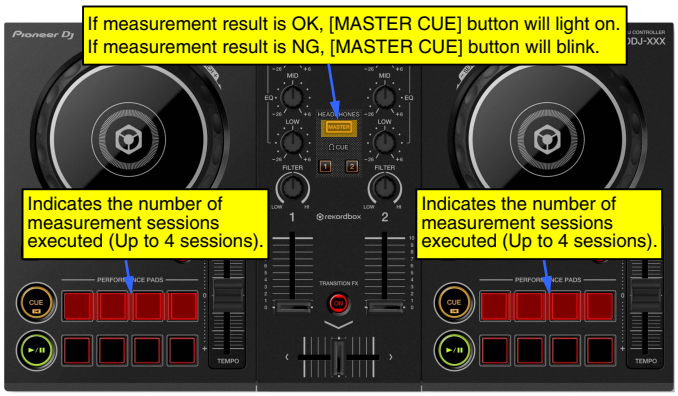
Number of measurement sessions executed is displayed up to 4 sessions.
Measurement can be continued 5 sessions and more, however number of sessions will not be displayed.
When session completed, result will be displayed on the LED.
Regulation value is as follows.
[20ms~80ms]

If measurement result is NG (Heavy), turn the Jog dial by manually again (Running-in rotation).
If measurement result is NG (Light), remove the Jog dial once and wipe off the grease tentatively, then apply the grease again and turn the Jog dial by manually (Running-in rotation).
(For details, refer to “7. DISASSEMBLY [4-1] Procedure for applying grease during reassembly of the Jog dial”.)

Service Mode ② – 3 Photo interrupter check mode

Mode outline

This mode is for check the status of photo interrupter.
When entering this mode, [BEAT SYNC] button of right DECK will light on.



Advanced Setting

① Spin the Jog dial swiftly.
To start measurement, maximum Jog dial rotation speed must be 10 times normal speed or higher.
If maximum speed does not reach 10 times normal speed, no result will be displayed.

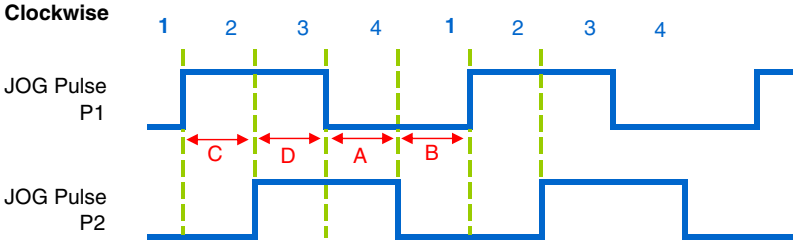
② Number of sessions will be displayed up to four sessions on the LED as follows.

End of 1st session	PAD 1 lights on
End of 2nd session	PAD 2 lights on
End of 3rd session	PAD3 lights on
End of 4th session	PAD4 lights on

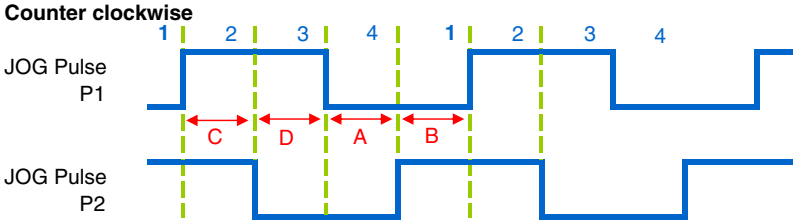
(After end of 4th session remain unchanged)

③ If measurement result is OK, [MASTER CUE] button will light on, If measurement is NG, [MASTER CUE] button will blink.

Clockwise



Counter clockwise



Time A - D will be memorized in each range of speed: x16 – x14 / x11 – x9 / x6 – x4.

OK	When phase relation is normal, and minimum value of all A - D is 10 usec or greater, ... [MASTER CUE] button is lights on and time of [x11 – x9] (clockwise: "B"; counterclockwise: "A") is 200 usec or greater.
NG	When none of these conditions described above is not satisfied. .....[MASTER CUE] button is blinks

If measurement result is NG, re-attach the photo interrupter so as not inclination again.

Service Mode ③ – 1 Firmware version check mode

Mode outline

This mode is to check the version of firmware. Version is displayed using the deck LEDs. Same as Service Mode ① - 1.

Service Mode ③ – 2 Check mode for Bluetooth connection

This mode is not used in service.

6.2 ABOUT THE DEVICE

■ Device Information List (Other than General-Purpose Logic IC, Op-Amp IC)

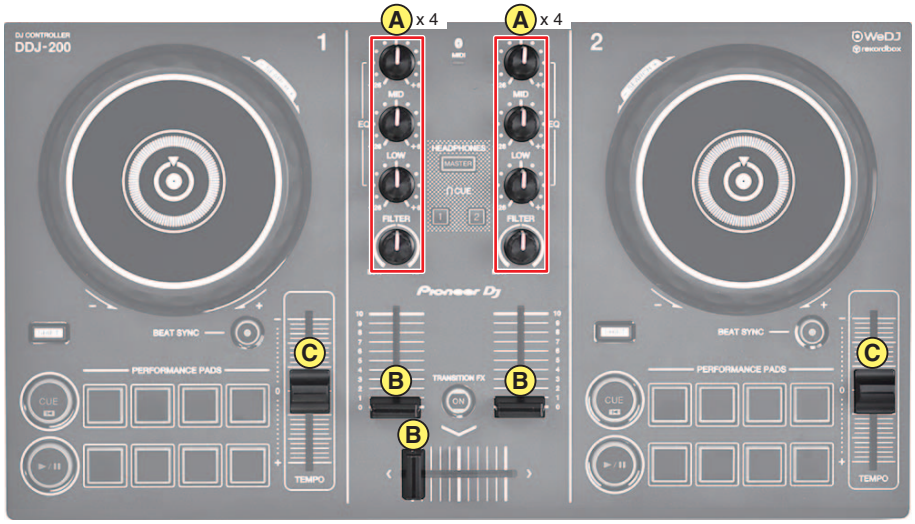
ASSY	Reference No.	Device Name (Standard)	Device Name (OBL3 Registered Name)	Part No.	Function
MAIN ASSY	IC101	REGULATOR	REGULATOR IC	MM3411A33N	REGULATOR for V+3R3D
	IC102	REGULATOR	REGULATOR IC	MM3411A33N	REGULATOR for V+3R3_SH
	IC103	REGULATOR	REGULATOR IC	S-1172B1C-U5	REGULATOR for V+1R25_SH
	IC501	SH UCOM	FLASH BLANK UC IC	R5S726A0D216FP	MAIN CPU LED, KEY, USB, BLUETOOTH CONTROL UCOM
	IC502	FLASH ROM	FLASH ROM	DYW****	FLASH MEMORY for MAIN CPU (FIRMWARE)
	IC503	RESET IC	IC	S-80927CNMC-G8X	RESET IC for MAIN CPU
	U1001	BLUETOOTH MODULE	BT MODULE	CWX4751-	BLUETOOTH MODULE
PNL1 ASSY / PNL2 ASSY	IC5501 / IC6101	JOG PIC UCOM	FLASH WRITTEN UC IC	DYW****	JOG TOUCH DETECTION
	PC5501 / PC5502 PC6101 / PC6102	PHOTO INTERRUPTER	PHOTO INTERRUPTER	SG206S	JOG ROTATION DETECTION

Note : About DYW ****
Part number of " **** " changes every 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] Knobs and Volumes Location



• Top view

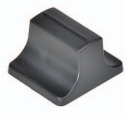
A DAA1324 x 8



B DAC3440 x 3



C DNK6839 x 2



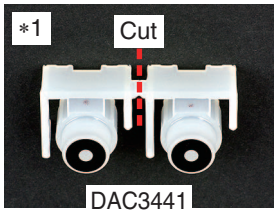
Note: Shipment position of each knob follows the upper photo.

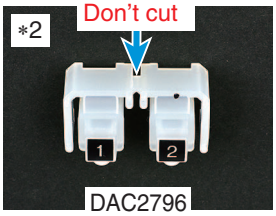
[2] Notes on Replacing Buttons

Notes

∗1: Button/BEAT SYNC (DAC3441) is supplied two buttons connected. Cut it by nipper before use.

∗2: Button/FX (DAC2796) is also supplied two buttons connected, but don't cut and use it as it is.





[3] Disassembly

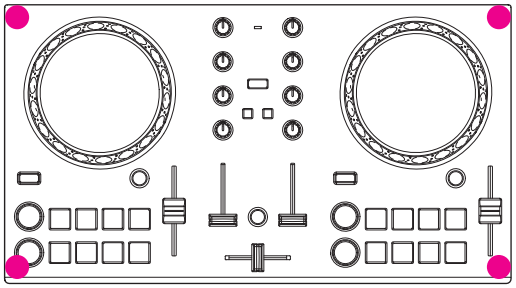
[3-1] Diagnosis

① Remove the 14 screws. (BPZ30P100FTB)
② Remove the Chassis.

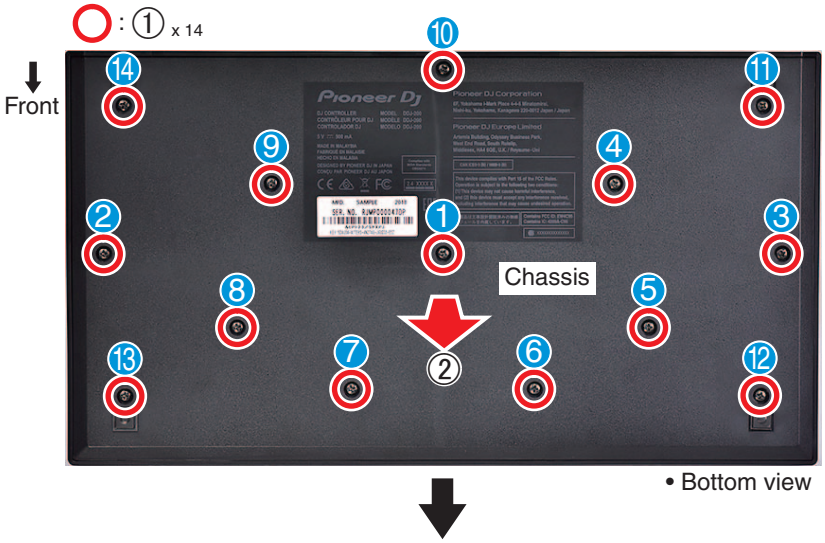
Notes on assembling:

Attach the screws in the order as shown by blue numbers.

After the attachment, push the four corners of upper-panel to confirm it doesn't rattle.



If product rattles, refer to **"1.3 SERVICE NOTICE How to modify when rattling of product is occurred"**.



• Bottom view

③ Remove the 10 screws. (BPZ30P080FNI)

Note on assembling:

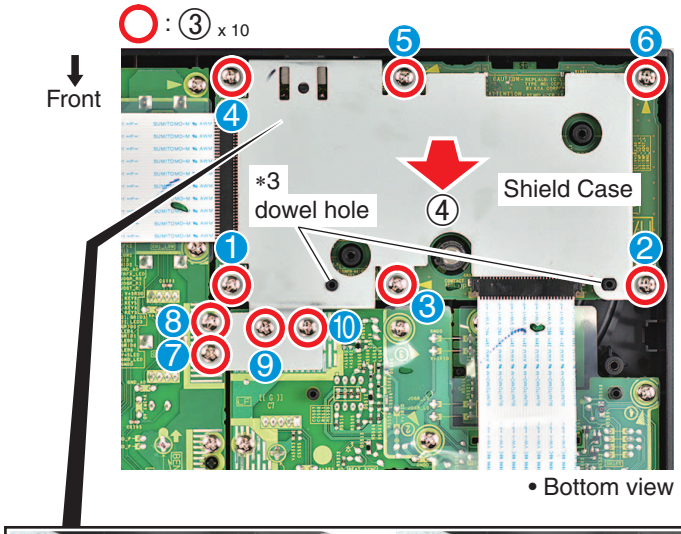
Attach the screws in the order as shown by blue numbers.

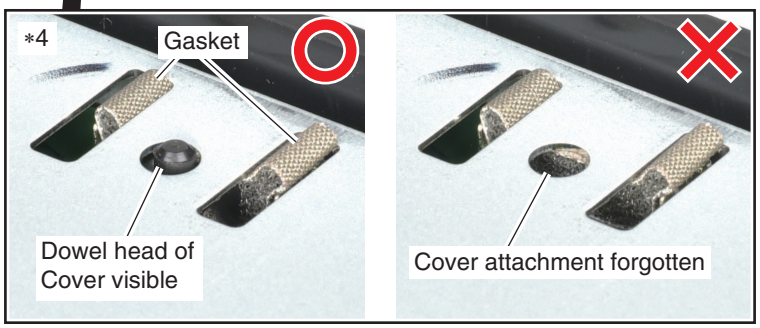
④ Remove the Shield Case.

Notes on assembling:

∗3: Insert the dowels of Control Panel into two dowel holes.

∗4: Confirm that the Gasket and dowel of Cover are visible in the hole of Shield Case (to prevent forgetting the attachment).





⑤ Remove the Cover.

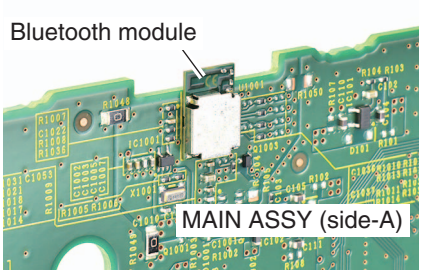
Note on assembling:

Make sure not to forget attaching the Cover.

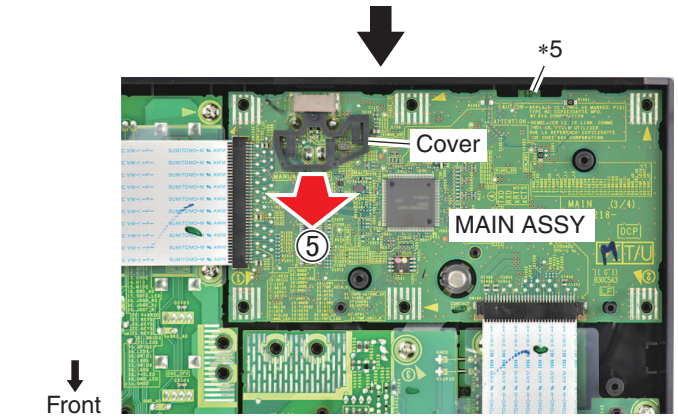
⑥ Reverse the MAIN ASSY.

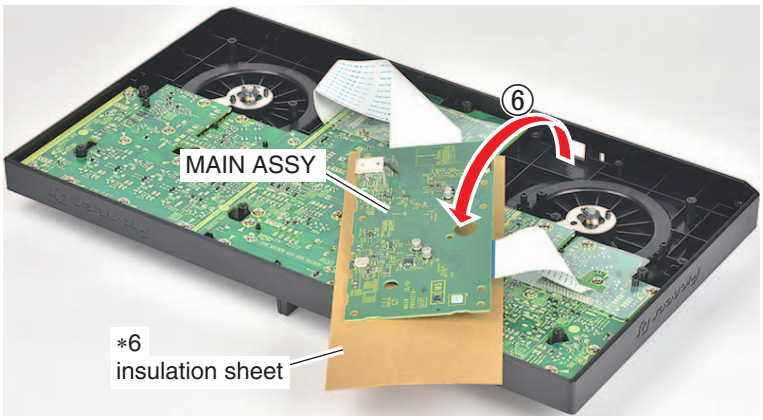
Notes

∗5: Pay attention to the protruding Bluetooth module.



∗6: Before turning the power on, lay the insulation sheet under the MAIN ASSY.





Diagnosis

[3-2] MAIN ASSY

Remove the Chassis, Shield Case and Cover.
(Refer to **"[3-1] Diagnosis"**.)

---

① Disconnect the two connectors.

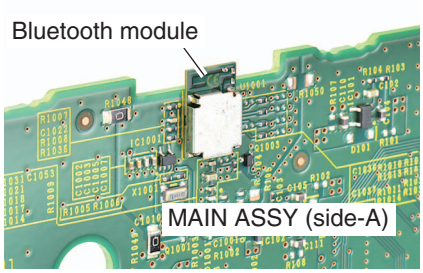
Note

∗7: CN1001 connector has a lock mechanism.

② Remove the MAIN ASSY.

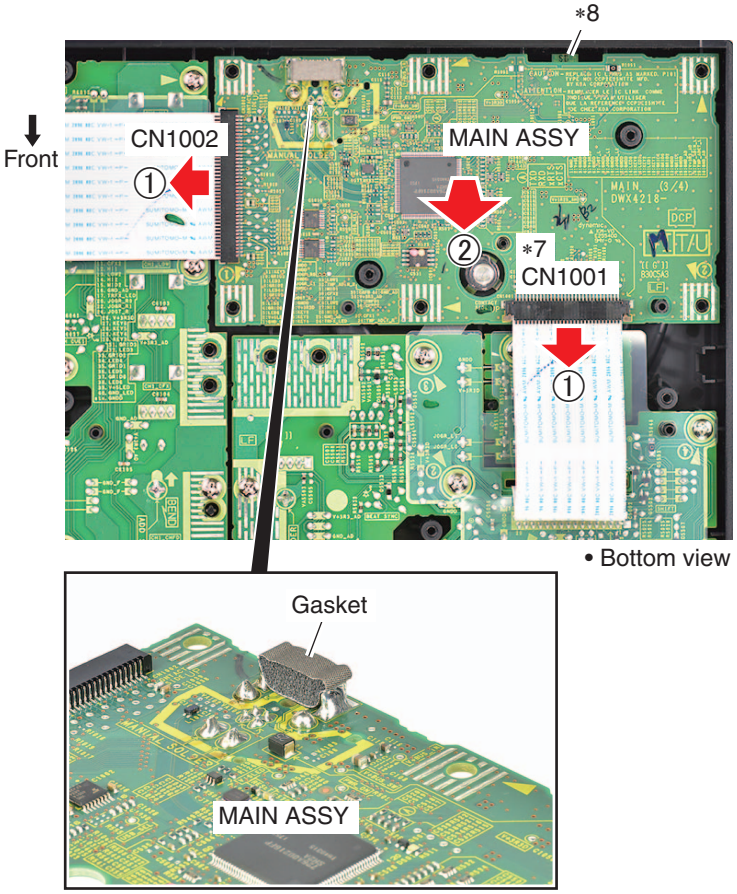
Note

∗8: Pay attention to the protruding Bluetooth module.



Note on assembling:

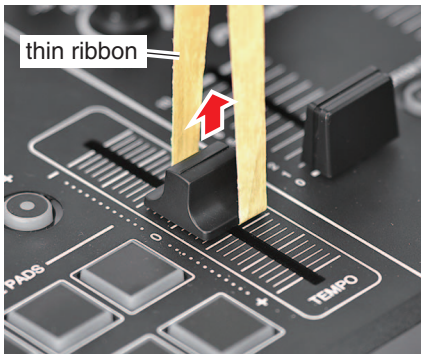
When replacing the MAIN ASSY, If it is difficult to reuse the Gasket, replace it with new one.



[3-3] PNL1 ASSY

① Remove the Knob/TEMPO. (DNK6839)

Note: It is easily removed with a thin ribbon.





Remove the Chassis, Shield Case and Cover.
(Refer to **"[3-1] Diagnosis"** .)
Remove the MAIN ASSY.
(Refer to **"[3-2] MAIN ASSY"** .)

---

② Remove the 14 screws. (BPZ30P080FNI)

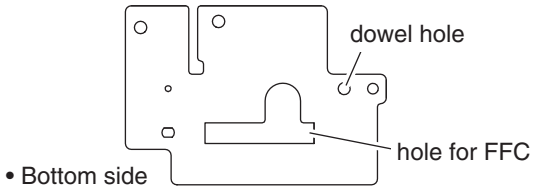
Notes on assembling:

Attach the screws to the Control Panel in a flat state (For details, refer to **"1.3 SERVICE NOTICE ■How to modify when rattling of product is occurred"**) and in the order as shown by blue numbers.
Sheet is jointly fastened with four screws. Make sure not to forget attaching the Sheet.

③ Remove the Sheet. (DEC3823)

Notes on assembling:

Pay attention to the Sheet direction.
FFC (DDD1909) must pass through the hole of Sheet, and dowel of Control Panel must be inserted into the dowel hole.



④ Remove the PNL1 ASSY.

⑤ Pull out the FFC (DDD1909) from the slit of PNL1 ASSY.
⑥ Disconnect the connector, and then remove the FFC (DDD1909).

[3-4] PNL2 ASSY

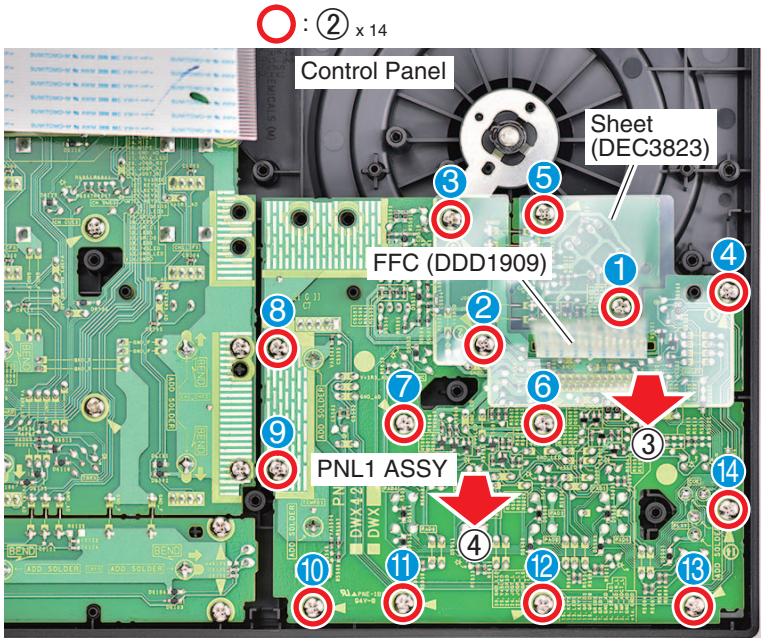
① Remove the eight Knob/PLSs. (DAA1324)

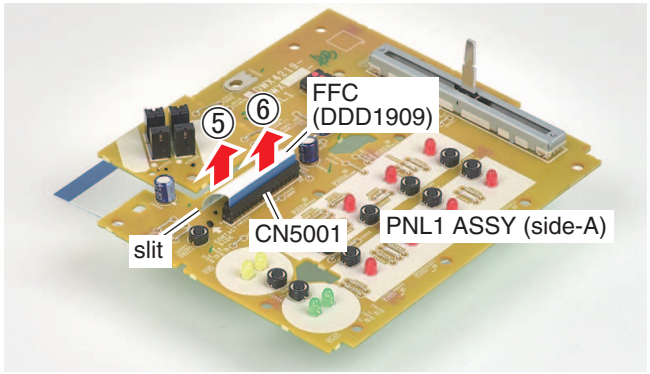
Note: They are easily removed with a dessert spoon.

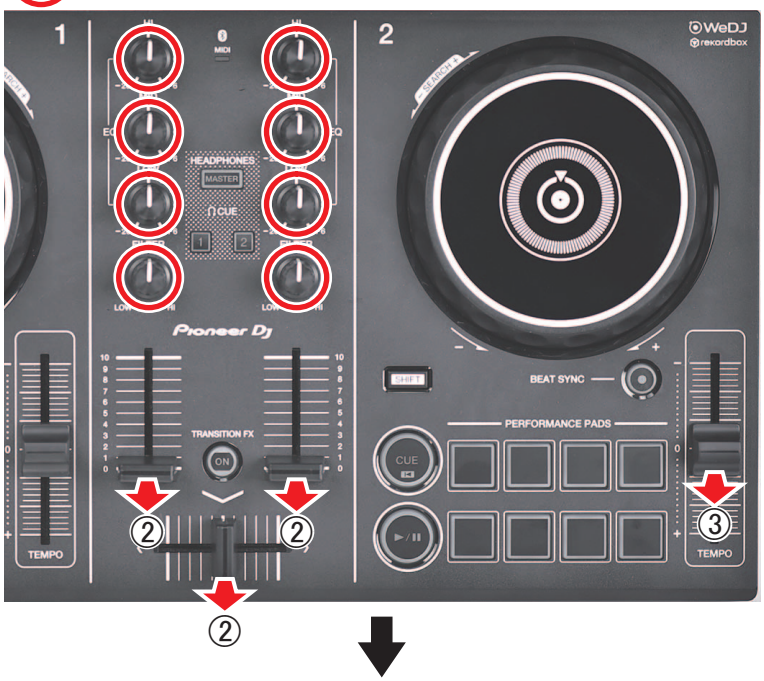


② Remove the three Knobs. (DAC3440)
③ Remove the Knob/TEMPO. (DNK6839)

Note: It is easily removed with a thin ribbon.







Remove the Chassis, Shield Case and Cover.
(Refer to **"[3-1] Diagnosis"** .)
Remove the MAIN ASSY.
(Refer to **"[3-2] MAIN ASSY"** .)

---

④ Remove the 28 screws. (BPZ30P080FNI)

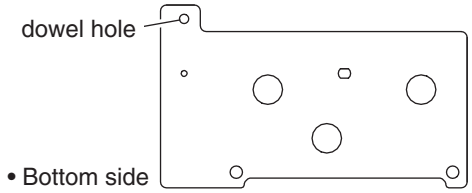
Notes on assembling:

Attach the screws to the Control Panel in a flat state (For details, refer to **"1.3 SERVICE NOTICE ■How to modify when rattling of product is occurred"**) and in the order as shown by blue numbers.
Pay attention to the difference from the order shown by silk.
Sheet is jointly fastened with three screws. Make sure not to forget attaching the Sheet.

⑤ Remove the Sheet. (DEC3822)

Notes on assembling:

Pay attention to the Sheet direction.
Dowel of Control Panel must be inserted into the dowel hole.

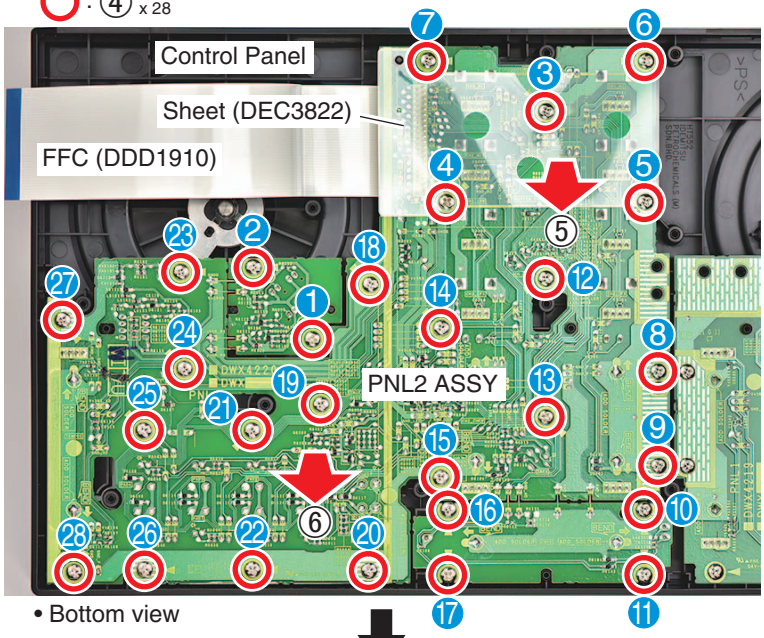


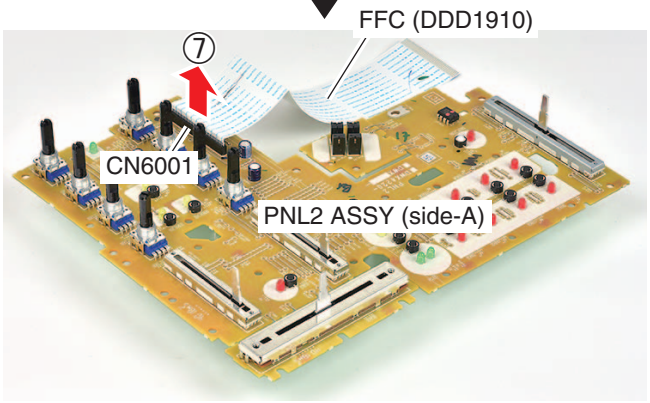
Sheet (DEC3822)

⑥ Remove the PNL2 ASSY.

⑦ Disconnect the connector, and then remove the FFC (DDD1910).

: ④ x 28

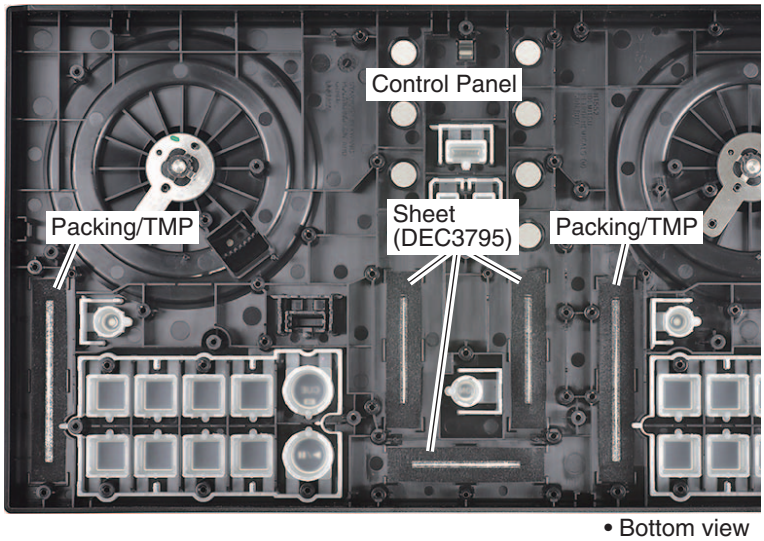




[3-5] Sheet, Packing/TMP

Notes on assembling:

When replacing the Control Panel, or when Sheet (DEC3795) and/or Packing/TMP inside the Control Panel is damaged, apply or replace them with new Sheet and/or Packing/TMP.



[3-6] Jog Dial Section

Remove the Chassis.
(Refer to step ①, ② of **"[3-1] Diagnosis"** .)
When you remove the Jog Dial section, it is not necessary to remove each board ASSY.
Figures show only Right DECK side, but Left DECK side is similar, too.

---

① Remove the Washer on the board side (YC60FAC).
② Remove the Washer. (WA62D095D050)
③ Stand the Main Unit vertically, and then push the shaft of Jog Dial peaking from the bearing.
④ Pull out the Jog Dial from the upper-panel, and then remove it.
⑤ Remove the Washer (WA62D095D050) from the shaft of Jog Dial.

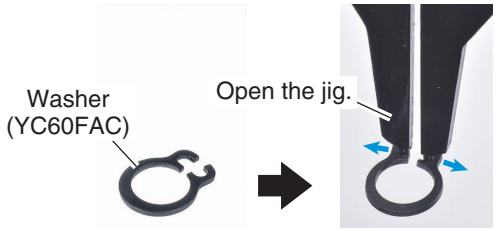
Note on assembling:

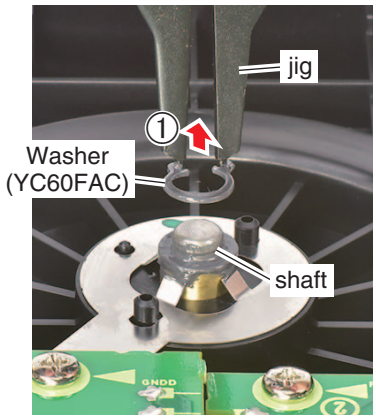
Wipe old grease off, and then apply new grease.
(Refer to **"[4-1] Procedure for applying grease during reassembly of the Jog Dial"**.)

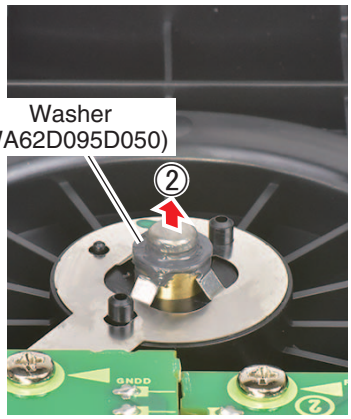
For Disassembly/Assembly of Washer (YC60FAC)

Use the jig. (Tapered snap ring pryor is recommended.)

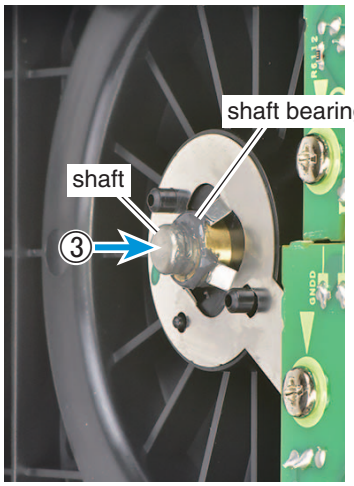


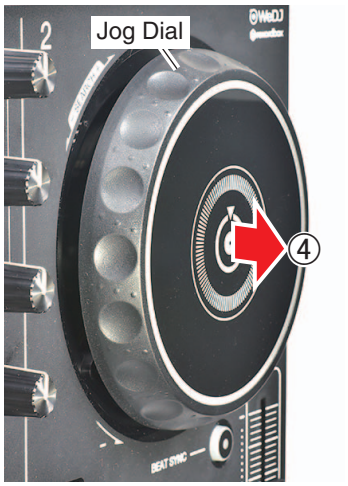


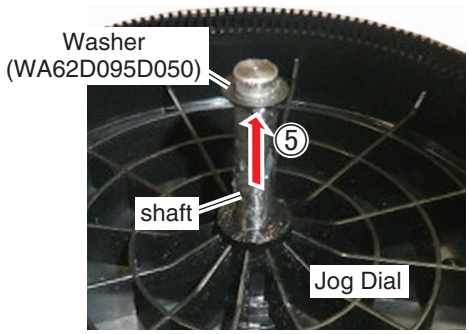




• Bottom view





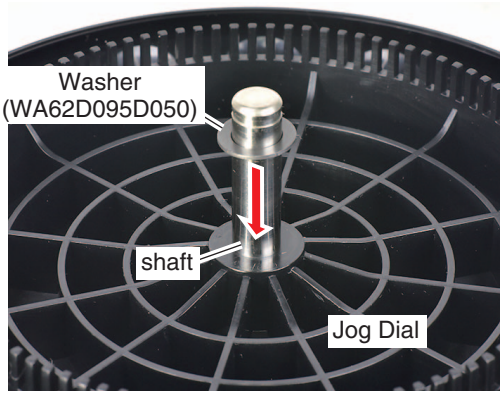


[4] Notes on Assembling

[4-1] Procedure for applying grease during reassembly of the Jog Dial

Note: After the Jog Dial is removed, carefully wipe off the grease from the Jog Dial, as well as from the shaft bearing of Control Panel, then apply new grease, in the following manner:
Grease to be used: GEM1100

(1) Fit the Washer (WA62D095D050) on the shaft and place it at the base of shaft.



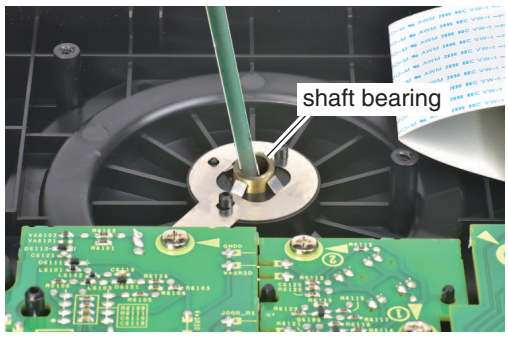
(2) Apply grease to the tip and base of the shaft of Jog Dial one round each.



(3) Apply grease lightly to the shaft bearing of Control Panel up to the depth of approximately 10 mm from the upper-panel side. Then turn the Control Panel over and apply grease from the opposite side in the same manner.



• Top view



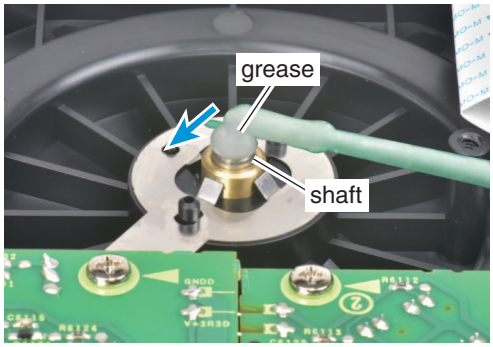
• Bottom view

(4) Insert the Jog Dial in the shaft bearing while turning it.





(5) Turn the Control Panel over, and then wipe off the excess grease.

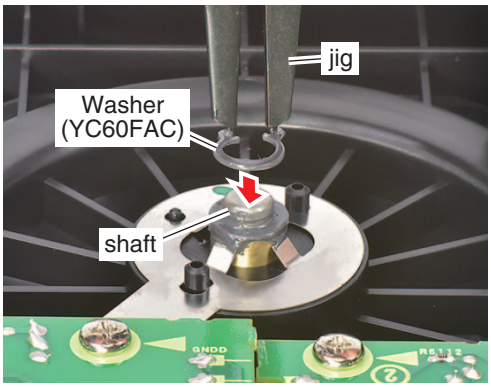


• Bottom view

(6) Fit the Washer (WA62D095D050) on the shaft.

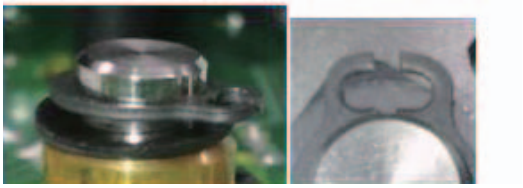


(7) Fit the Washer (YC60FAC) on the groove of shaft.

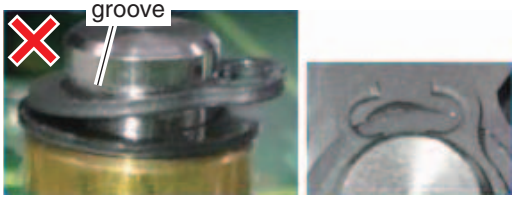


Washer must be fit rightly on the groove of shaft without slanting, etc.

OK



NG



(8) Turn the Control Panel over, and then check if Jog Dial rotates properly.

(9) Perform manual running-in rotations of the Jog Dial, following the procedure below.

① Turn the Jog Dial manually 50 rotations.

② Perform failure judgment of the Jog Dial.
For details of the measurement method, refer to "②**-2: Measurement mode of the load of JOG dial**" in "**6-1. SERVICE MODE.**"

③-1 In the case of failure because of excessive load, repeat the following procedure until a good result is obtained in failure judgment.
Manually turn the Jog Dial 50 rotations then perform failure judgment of the Jog Dial again.

③-2 In the case of failure because of insufficient load, apply grease again.
(Repeat the above procedures from Step (1).)

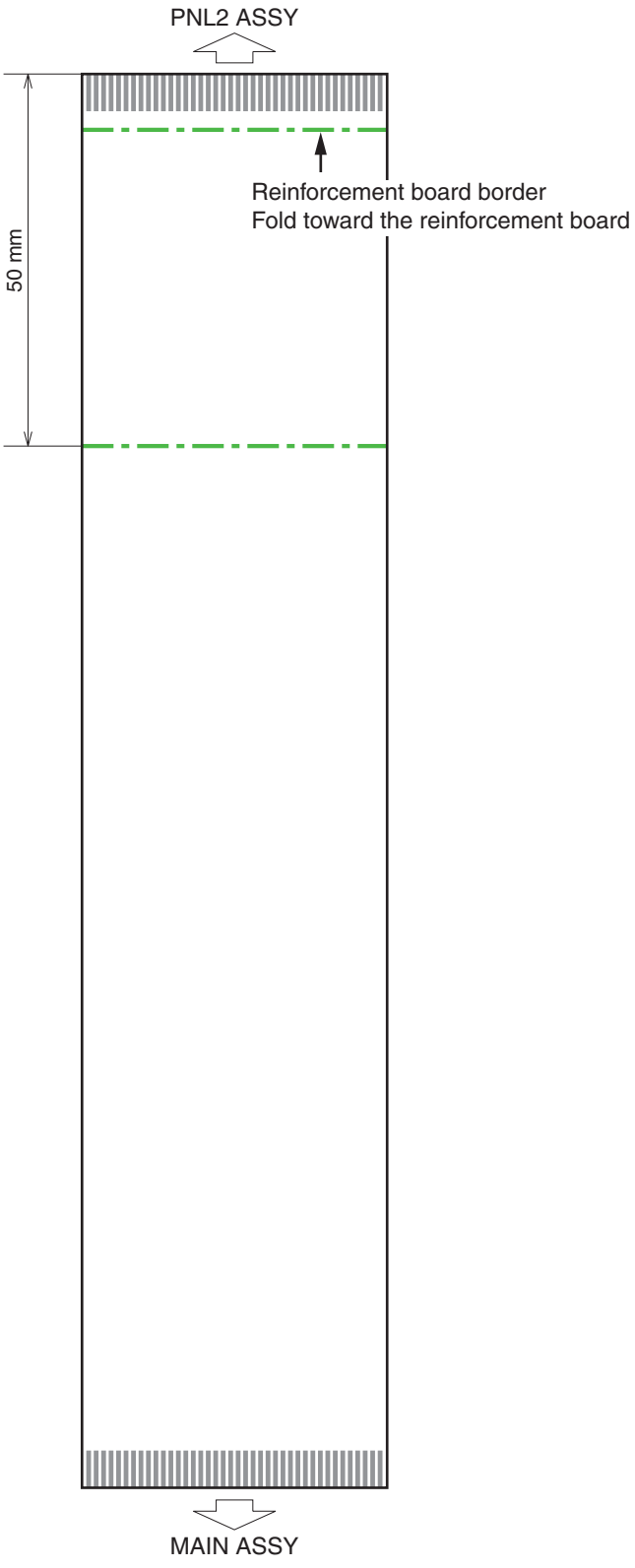
Note:
After removing the Jog Dial, wipe off the grease tentatively.

[4-4] Folding the FFCs

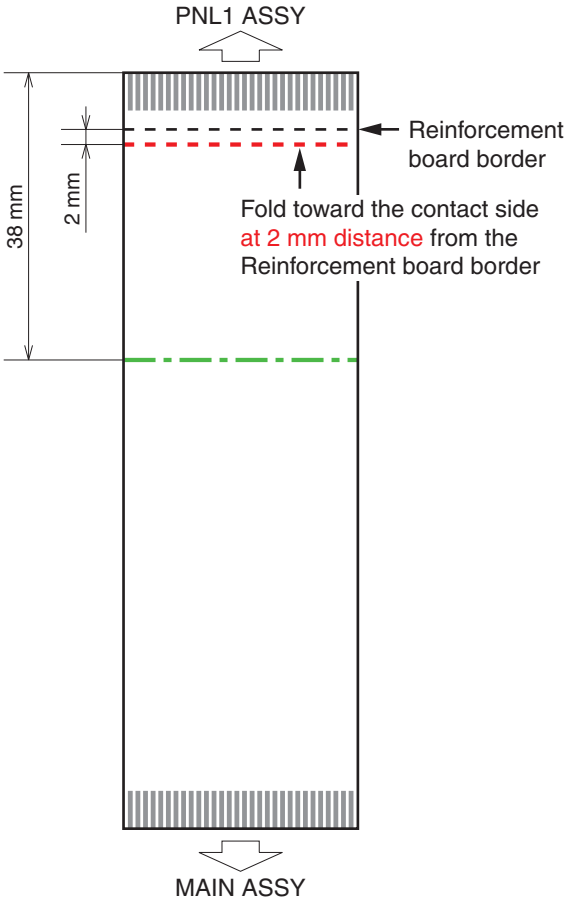
When replacing the FFCs, fold them as shown in the drawings below.
Since the drawing is real size, it can be printed in 100% size and used as the styling guide.

Mountain fold
Valley fold

• DDD1910 40P



• DDD1909 30P



8. EACH SETTING AND ADJUSTMENT

8.1 NECESSARY ITEMS TO BE NOTED

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

• IC and PCB ASSY storing for firmware / user setting value / cross fader calibration value FLASH ROM (IC502) MAIN ASSY	⇨ • Cross fader calibration (6.1 SERVICE MODE : ①-8 Cross fader calibration mode) • Confirmation of the version of the firmware • Updating to the latest version of the firmware • Be changed user setting to condition before the repair (when be possible)
• Jog dial	⇨ • Judging the quality of the Jog dial load (6.1 SERVICE MODE : ②-2 Measurement mode of the load of Jog dial)
• Photo Interrupter : PC5501, PC5502, PC6101, PC6102 (PNL1 ASSY, PNL2 ASSY)	⇨ • Judging the quality of mounting and connection of the photointerrupter (6.1 SERVICE MODE : ②-3 Photo interrupter check mode)
• Cross fader VR : VR6106 (PNL2 ASSY)	⇨ • Cross fader calibration (6.1 SERVICE MODE : ①-8 Cross fader calibration mode)

8.2 UPDATING OF THE FIRMWARE

How to check the Firmware Version

==========

Windows

[For Windows 10 and Windows 8.1]

(1) Right-click the Start button and select [Device Manager] from the displayed menu.

(2) Open Properties of [Sound, video and game controllers] --> [DDJ-200 Properties] and select the Details tab.

(3) Select [Hardware Ids] from the [Property] drop-down menu.

(4) The x part of "USB¥VID_2B73&PID_002A&REV_xxxx" displayed in [Value] is the firmware version.
(For example, USB¥VID_2B73&PID_002A&REV_0101 means the firmware version is 1.01.)

[For Windows 7]

(1) Open Properties of [Start Menu] --> [Control Panel] --> [Device Manager] --> [Sound, video and game controllers] --> [DDJ-200 Properties] and select the Details tab.

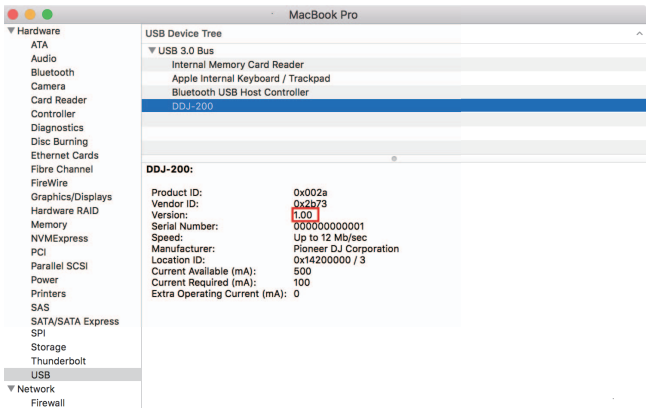
(2) Select [Hardware Ids] from the [Property] drop-down menu.

(3) The x part of "USB¥VID_2B73&PID_002A&REV_xxxx" displayed in [Value] is the firmware version.
(For example, USB¥VID_2B73&PID_002A&REV_0101 means the firmware version is 1.01.)

==========

macOS, OS X

Open Apple icon --> [About This Mac] --> [System Report] --> [Hardware] --> [USB] and check the version displayed for DDJ-200.



Read Before Use (Important)

• Extract the downloaded update file for updating.

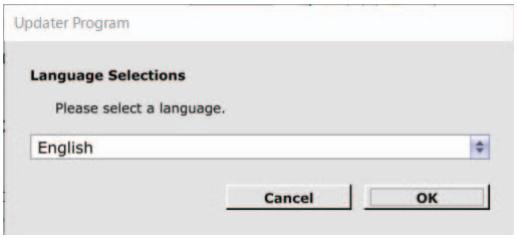
Reference Information
This updater has been verified to operate on the operating systems below;
Windows® 10/ Windows® 8.1/ Windows® 7
macOS Sierra 10.12
macOS High Sierra 10.13
macOS Mojave 10.14

Updating Procedures

Note: Disconnect all the cables from the unit. And close all applications on your PC/Mac before running this updating procedure.

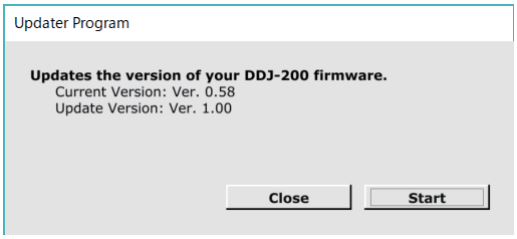
1) Connect your PC/Mac to DDJ-200 via the USB cable included with the product.

2) Double-click the update file.
Once the update program is launched, select the language to be used and click [OK].

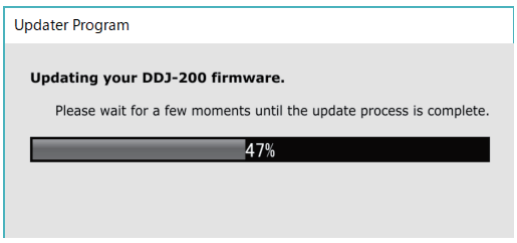


After selecting the language, some buttons of DDJ-200 lights. (This means DDJ-200 is in the Update mode.)

3) When the version information confirmation screen appears, check the contents, then click [Start].
If the current version and update version are the same, there is no need to update. Click [Close].



4) Updating starts. Do not disconnect the USB cable during updating.
Approximately two minutes is required for updating.



5) When the firmware update process is complete, click the [OK] button. After this process is complete, DDJ-200 reboots automatically.

Note: If you fail to update, once disconnect the USB cable and start from Step 1) of the Updating Procedures.

8.3 ITEMS FOR WHICH USER SETTING ARE AVAILABLE

This unit is provided with user settable items, as shown below.
Although no serious operational problems occur even if data for such user settable items are cleared during repair, it is recommended that you take note of those settings before starting repair.
Use the Check Sheet, to which you can transcribe the settings.
If the corresponding part or board ASSY is replaced for repair, change the user resettable settings to those noted on the Check Sheet before starting repair. If resetting is not possible, when returning the repaired product, be sure to tell the customer that the Utility settings have been cleared and will have to be reset, as required.

Item for Which User's Setting is Available	Operation Button Deck (Left)	Lighting LED	Setting Value (Factory default setting = Bold)	Part Name
Demo illumi setting	PAD 1	PAD 1	Demo illumi OFF	IC502 (MAIN ASSY)
	PAD 2	PAD 2	1 minute	
	PAD 3	PAD 3	5 minutes	
	PAD 4	PAD 4	**10 minutes**	

Each of the above items can be set in Utilities modes.
To enter Utilities mode,
while pressing both SHIFT and PLAY/PAUSE buttons on the left deck, connect the USB cable to the main unit (to turn on the unit).
For changing the settings, refer to the operating instructions of the unit.

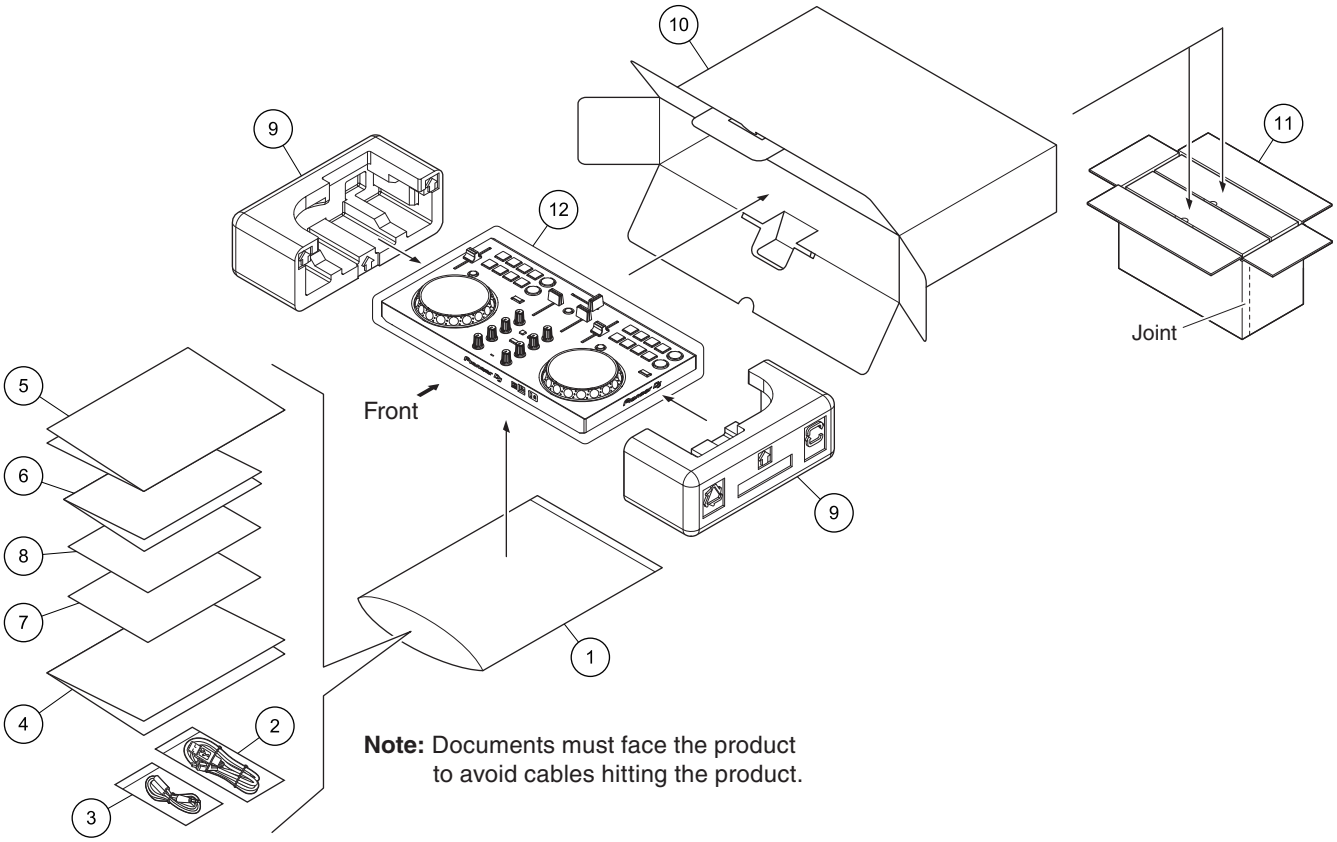
Sheet for confirmation of the user setting

Demo illumi setting			
Demo illumi OFF	1 minute	5 minutes	10 minutes

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



Note: Documents must face the product to avoid cables hitting the product.

(1) PACKING SECTION PARTS LIST

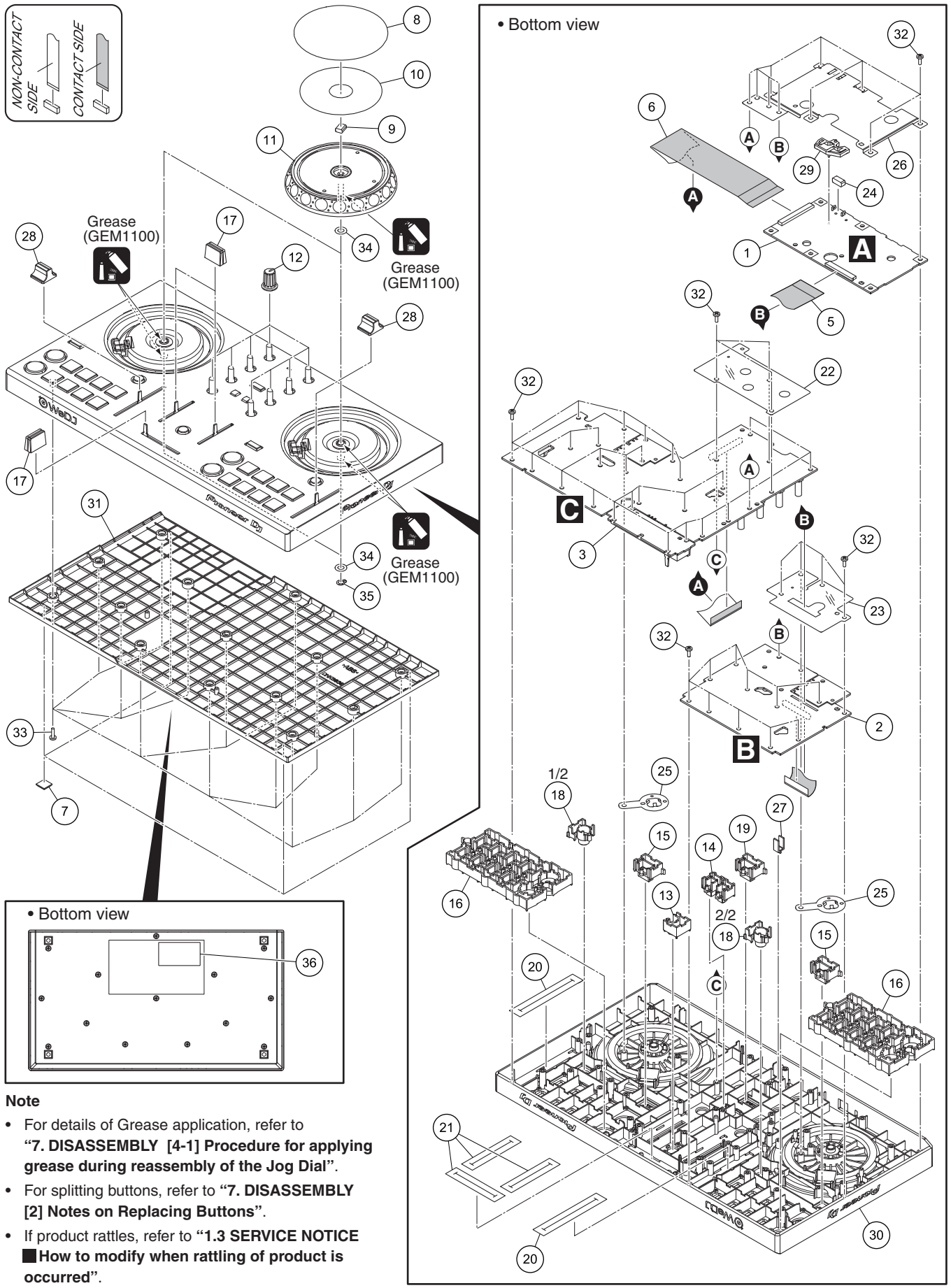
Mark	No.	Description	Part No.
NSP	1	Polyethylene Bag	AHG7117
	2	USB Cable	DDE1150
	3	Split Cable	DDE1151
	4	Quick Start Guide	See Contrast table (2)
	5	Precautions For Use	See Contrast table (2)
NSP	6	Warranty	See Contrast table (2)
NSP	7	Leaflet	See Contrast table (2)
NSP	8	Leaflet	See Contrast table (2)
	9	Pad	DHA1994
	10	Packing Case	See Contrast table (2)
	11	Master Carton	See Contrast table (2)
	12	Mirror Mat	DHL1204

(2) CONTRAST TABLE

SYXJ and XJCN are constructed the same except for the following:

Mark	No.	Symbol and Description	SYXJ	XJCN
	4	Quick Start Guide	DRH1543	DRH1545
	5	Precautions For Use	DRH1544	DRH1546
NSP	6	Warranty	DRY1270	Not used
NSP	7	Leaflet	DRH1564	DRH1566
NSP	8	Leaflet	DRH1565	DRH1567
	10	Packing Case	DHG3678	DHG3680
	11	Master Carton	DHG3679	DHG3681

9.2 EXTERIOR SECTION



Note

- For details of Grease application, refer to **"7. DISASSEMBLY [4-1] Procedure for applying grease during reassembly of the Jog Dial"**.
- For splitting buttons, refer to **"7. DISASSEMBLY [2] Notes on Replacing Buttons"**.
- If product rattles, refer to **"1.3 SERVICE NOTICE ■How to modify when rattling of product is occurred"**.

(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	MAIN ASSY	DWX4218
	2	PNL1 ASSY	DWX4219
	3	PNL2 ASSY	DWX4220
	4	•••••	
	5	FFC	DDD1909
	6	FFC	DDD1910
	7	Rubber Foot	VEB1349
	8	Plate	DAH3244
	9	Gasket/JOG	DEC3539
	10	DS Tape	DEH1097
	11	Jog Dial	DNK6841
	12	Knob/PLS	DAA1324
	13	Button/MIX	DAC2951
	14	Button/FX	DAC2796
	15	Button/SHIFT	DAC3206
	16	Button/PAD	DAC3439
	17	Knob	DAC3440
	18	Button/BEAT SYNC	DAC3441
	19	Button/MASTER	DAC3442
	20	Packing/TMP	DEC3392
	21	Sheet	DEC3795
	22	Sheet	DEC3822
	23	Sheet	DEC3823
	24	Gasket	DEC3824
	25	Plate	DNH3401
	26	Shield Case	DNH3402
	27	Lens	DNK5862
	28	Knob/TEMPO	DNK6839
	29	Cover	DNK6840
	30	Control Panel	DNK6837
	31	Chassis	DNK6838
	32	Screw	BPZ30P080FNI
	33	Screw	BPZ30P100FTB
	34	Washer	WA62D095D050
	35	Washer	YC60FAC
NSP	36	Name Label	See Contrast table (2)

(2) CONTRAST TABLE

SYXJ and XJCN are constructed the same except for the following:

Mark	No.	Symbol and Description	SYXJ	XJCN
NSP	36	Name Label	Not used	DRW2792