

AlphaTheta

Service Manual

ORDER NO.
DRT2022

DJ Controller

DDJ-FLX4-N

This manual is applicable to the following model(s) and type(s).

Model	Type	Power Requirement	Remarks
DDJ-FLX4-N	PXJ	DC 9V (USB power adapter), DC 5 V (USB bus power)	

This service manual should be used together with the following manual(s).

Model No.	Order No.	Remarks
DDJ-FLX4	RRV4731	BLOCK DIAGRAM, DIAGNOSIS, EXPLODED VIEWS etc.
	RRV4732	SCHEMATIC DIAGRAM, PCB CONNECTION DIAGRAM etc.

SAFETY INFORMATION



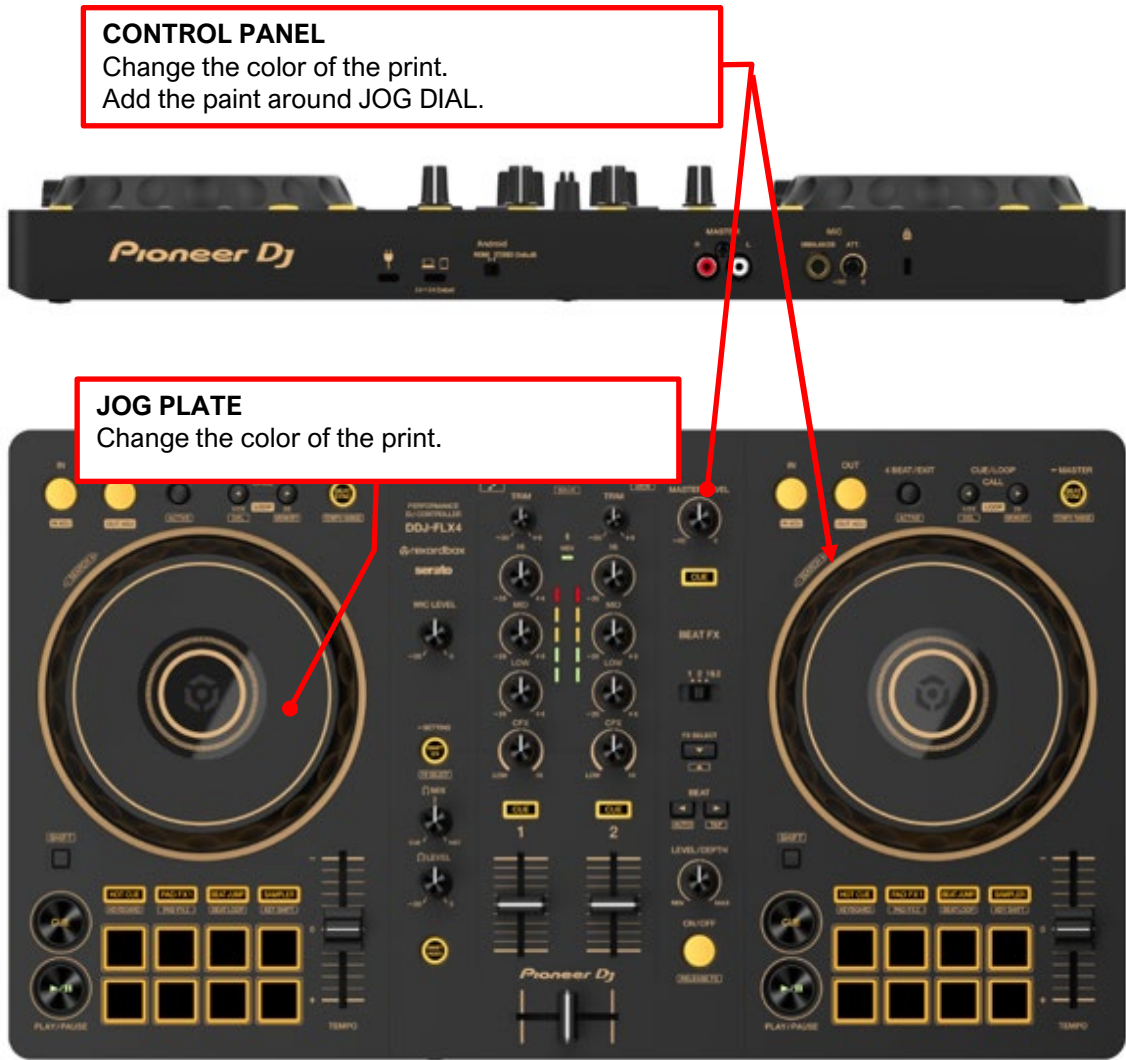
This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly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

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1. SERVICE PRECAUTIONS

■Change points from base model (DDJ-FLX4)



DDJ-FLX4-N

■Changing the specification of the test mode and the precaution after replacing MAIN ASSY

This model has firmware Ver.1.05 or later installed.

Since firmware Ver.1.05, the test modes have been changed as follows.

- PHOTO INTERRUPTER INSTALLATION CHECK

New Criterion has been added.

- ROTARY KNOBS CALIBRATION MODE

The mode in which the rotary knobs is calibrated at the center is added.

Due to this specification change, rotary knobs calibration must be performed in addition to crossfader calibration after replacing MAIN ASSY.

Note: The contents are same as SQH24005.

2. TEST MODE

The pages of the test mode are changed as follows (described as red).

Test mode 1

1-1: Firmware version check mode

1-2: All LEDs lighting and Check mode for self-illuminating buttons

1-3: Check mode for buttons, switches, rotary encoder

1-4: Check mode for knobs, faders, Jog dials

1-5: Factory reset mode

1-6: A/D conversion value fluctuation range check mode → This mode is no used in the service.

1-7: Crossfader calibration mode

1-8: Jog dial load measurement mode

1-9: Photo interrupter check mode

1-10: Rotary knobs calibration mode

Test mode Contents

1.9: Photo interrupter check mode

This is mode to check the status of Photo interrupter.

When switch for this mode, right [IN] button lights ON.

A change point is described as red.

[Procedure of operations]

1. Spin the Jog dial swiftly.

To start measurement, the Jog dial must be set to at least 10x speed.

If the speed is less than 10x, no result will be indicated.

2. The number of sessions will be indicated up to four sessions on LED as follows.

The end of 1st session ➡ [HOT CUE] lights ON

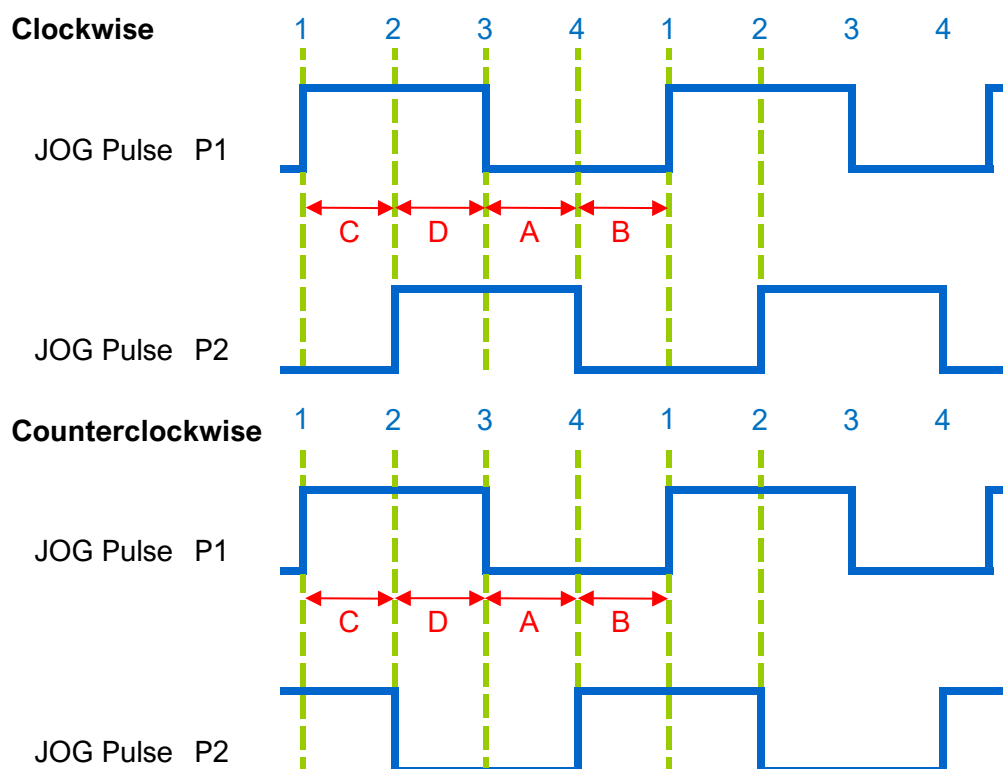
The end of 2nd session ➡ [PAD FX] lights ON

The end of 3rd session ➡ [BEAT JUMP] lights ON

The end of 4th session ➡ [SAMPLER] lights ON

After the end of 4th session ➡ Remain unchanged

3. [BEAT SYNC] buttons will light ON if the measurement result is OK and will flash if it does not.



Measure the time (A to D) in each range of the speed: x21~x19/ x16~x14/ x11~x9/ x6~x4.

OK → If all of the following conditions are satisfied, [BEAT SYNC] button will light ON.

- Phase relations are normal
- The minimum value of A to D for all ranges is 10 μ s or greater
- The time of [x11~x9] (Clockwise: "B"; Counterclockwise: "A") is 200 μ s or greater
- The sum time of [x11~x9] is within 1000 μ s $\pm$ 200

NG → If even one of the above conditions is not satisfied, [BEAT SYNC] button will flash.

[BEAT SYNC] button will light ON if the measurement result is OK, and will flash if it does not.



The number of sessions will be indicated up to four sessions.

If the result is NG, reinstall the photo interrupter not to tilt.
 If it's still NG after reinstalling, the part may be defective (because of quality variation or out of range).
 Replace it.

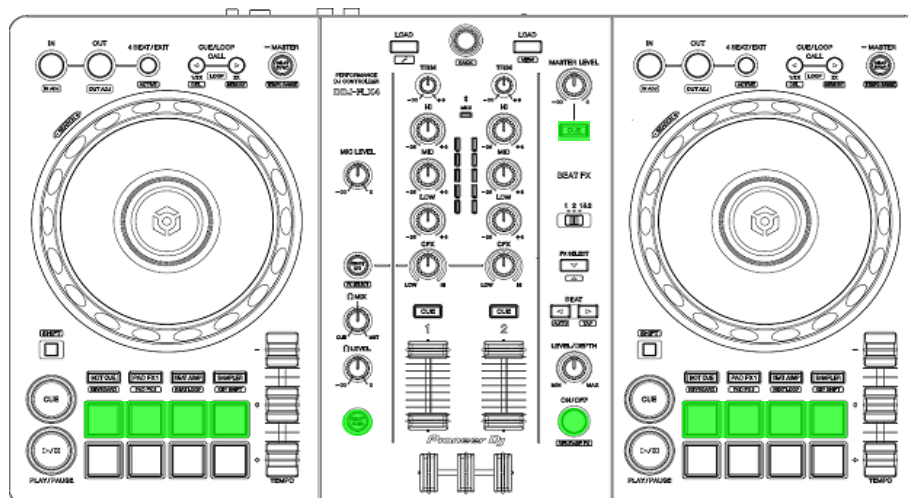
DDJ-FLX4-N

1-10: Rotary knobs calibration mode

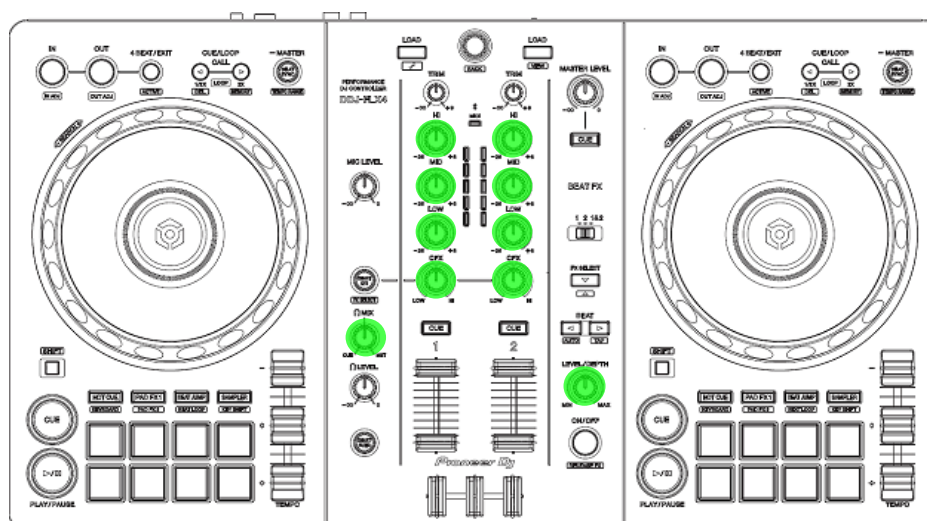
This mode is for performing calibration of the rotary knobs.

[Procedure of operations]

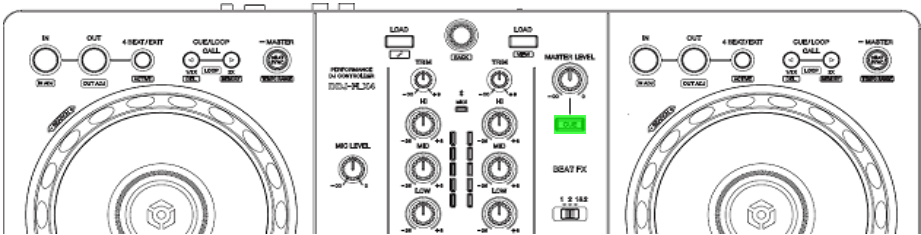
When entering the rotary knobs calibration mode, left PAD 1-4 and right PAD 1-4 lit.
And [MASTER CUE] button, [SMART FADER] button and [FX ON/OFF] button lit.



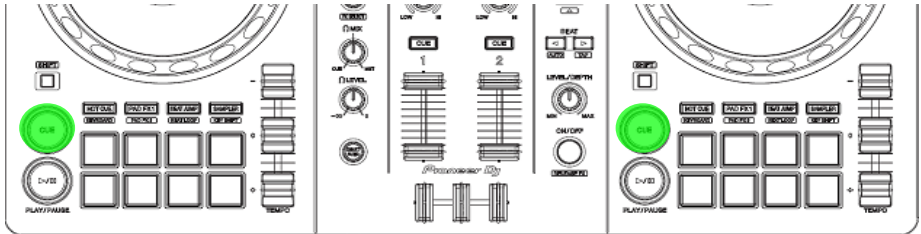
1. Set [EQ] knobs, [CFX] knob, [LEVEL/DEPTH] knob and [MIX] knob at the center.



2. Press [MASTER CUE] button.

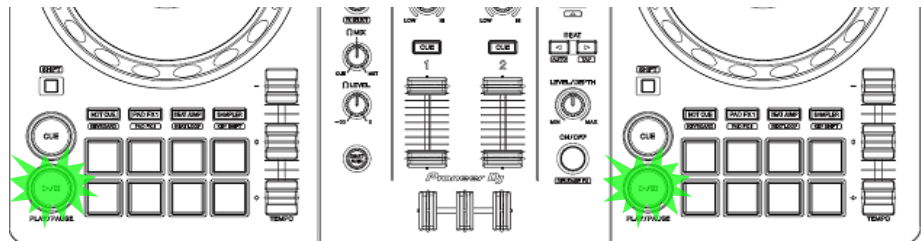


[CUE] buttons will light on if the calibration succeeds.

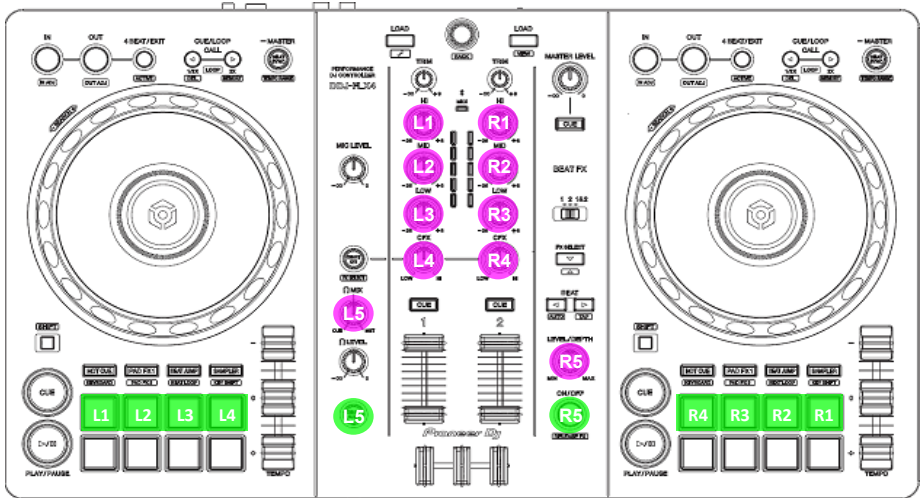


Error indication

When an error occurs, [PLAY/PAUSE] buttons will flash and LED corresponding knobs which occurred error will flash.



Correspondence between the knobs and LEDs is described as below.
The target knob is controls indicated in magenta (■) in the figure below.
The corresponding LED is controls indicated in green(■) in the figure below.



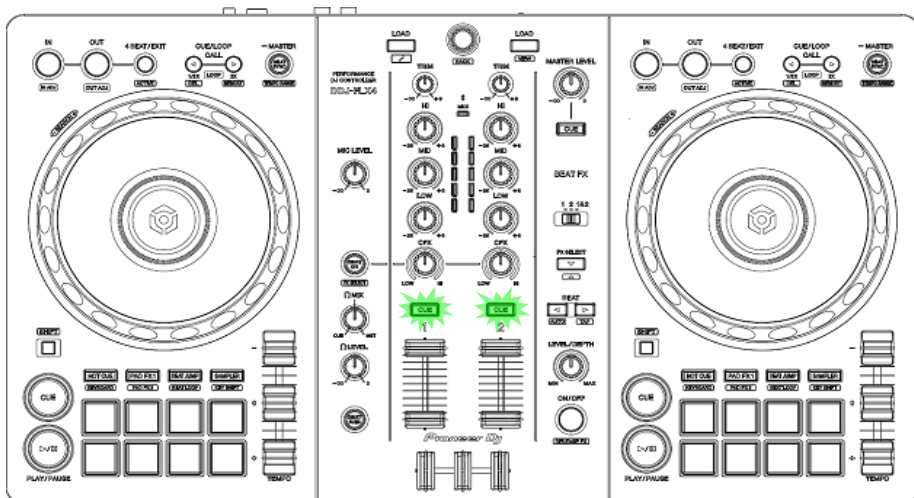
[Estimated errors]

- It occurs when the memorized value is out of range.

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

[Display of when a calibration procedure is not gone through]

If a calibration procedure is not gone through, [HP CUE 1] button and [HP CUE 2] button flash.



The timing of flashing :

At the rotary knobs calibration mode of test mode.

3. NECESSARY ITEMS TO BE NOTED

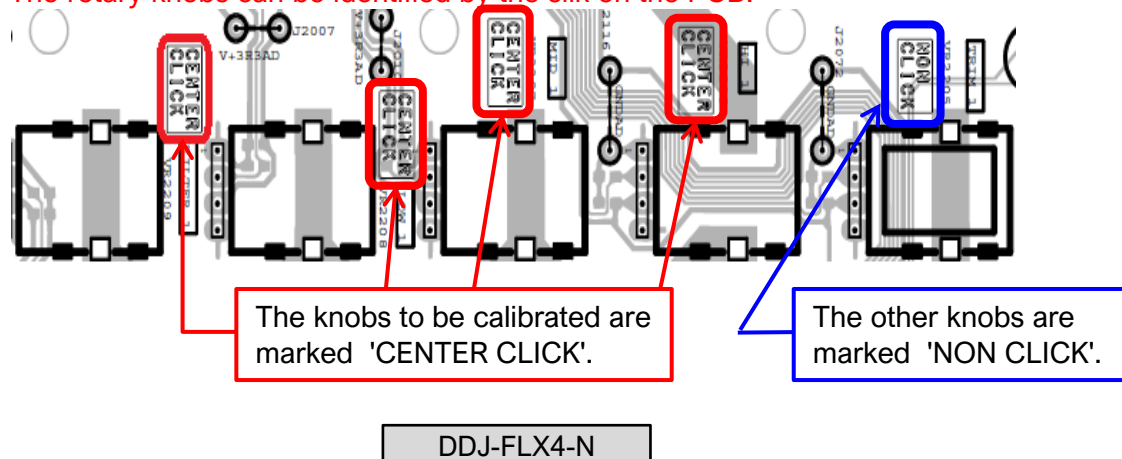
After repairing, be sure to check the version of the firmware, and if it is not the latest one, update to the latest version.

Perform each item when the following parts are replaced.

Added points are described as red.

●IC/PCB Assy storing firmware, Utilities mode setting value, Crossfader calibration value Rotary knobs calibration value Flash memory IC3001 / MAIN Assy	➡	●Crossfader calibration (6.2 CROSSFADER CALIBRATION) ●Confirmation of the version of the firmware Updating to the latest version of the firmware (8.2 UPDATING OF THE FIRMWARE) (8.3 UPDATING OF THE POWER DELIVERY FIRMWARE) ●WRITING THE SERIAL NUMBER OF THE UNIT (8.4 WRITING THE SERIAL NUMBER OF THE UNIT) (8.5 SERIAL NUMBER CHECK METHOD) ●Restore user settings to original user settings if possible (8.6 USER SETABLE ITEMS) ●Rotary knobs calibration
●Jog dial	➡	●Jog dial load measurement (6.3 JOG DIAL LOAD MEASUREMENT)
●Crossfader related parts	➡	●Crossfader calibration (6.2 CROSSFADER CALIBRATION)
●Photo interrupter / PCB Assy PC1401, PC1402 / DECK1 Assy PC2401, PC2402 / PNL2 Assy	➡	●Photo interrupter installation check (6.4 PHOTO INTERRUPTER INSTALLATION CHECK)
●Potentiometer with center click / PCB Assy VR2202, VR2206, VR2207, VR2208, VR2209, VR2211, VR2214, VR2215, VR2216, VR2217 / PNL2 Assy	➡	●Rotary knobs calibration

The rotary knobs can be identified by the silk on the PCB.



4. CONTRAST OF MISCELLANEOUS PARTS

NOTES: • Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
• Nos. indicate the pages and Nos. in the service manual for the base model.

CONTRAST TABLE PACKING SECTION

DDJ-FLX4/SXJ and DDJ-FLX4-N/PXJ are constructed the same except for the following:

Mark	No.	Description	DDJ-FLX4/SXJ	DDJ-FLX4-N/PXJ
	P61-3	SUB MANUAL	DRH1718	DRH1819
	P61-12	PACKING CASE	DHG3880	DHG3959
	P61-4	Warranty Card (Europe)	DRY1274	_____

EXTERIOR SECTION

DDJ-FLX4/SXJ and DDJ-FLX4-N/PXJ are constructed the same except for the following:

Mark	No.	Description	DDJ-FLX4/SXJ	DDJ-FLX4-N/PXJ
NSP		EXTERIOR SECTION		
	P63-4	PLATE	DAH3400	DAH3458
	P63-19	LABEL	DAL1389	DAL1408
		CONTROL PANEL SECTION		
	P65-31	CONTROL PANEL	DNK7117	DNK7258