

PCDJ Reflex LE Manual

For use with the Denon DN-HC4500



Basic Edition

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Manual
Written
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System Requirements:

- **CPU (Processor) Minimum Requirements:** Any Intel®, AMD®, Pentium II 800 MHZ, or Mac PowerMac G4, G5, Intel, and above.
- **Recommended:** 1GHz and above Intel Core Duo.
- **Memory Minimum:** 512 MB (Mega Bytes of RAM) **Recommended:** 1024 MB (1Gig) Ram.
- **Sound Card:** Multichannel is built in to Denon's DN-HC4500
- **CD ROM DRIVE:** 30X CD ROM or faster, will be able to support digital audio extraction on a hardware level.
- **Hard Drive:** Size of HD varies depending on the amount of music you would like to store on your PC. 300 Music CD's use about 20 Gig's of HD space in MP3 format at 192Kbits. **Recommended** HD Speed is 7200 RPM.
- **Operating System:** Windows XP, Vista, MAC OSX
- **Video Card:** Minimum 32MB, with 1024x768 screen resolution.
- **Recommended Video Card:** 64MB and above.
- **USB Ports:** At least one available USB port, for the Denon DN-HC4500 Hardware controller



IMPORTANT

NOTE

Please check for the current manual online at www.pcdj.com/support/manuals as software and documentation is updated frequently!

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Introduction

Congratulations on your NEW Denon DN-HC4500 Controller! This Professional DJ Controller is bundled with a 30 day Demo of PCDJ Reflex LE (Light Edition), a limited version of our premium professional DJ Software package. You've joined the ever growing worldwide list of DJ's who use this state-of-the-art Reflex LE. PCDJ has set a new standard for developing stable products that professionals can rely on.

This manual is broken down into parts, beginning with a basic walk-through of the player. Then, step-by-step instructions and advanced procedures. Also included are the Keyboard/Controller shortcuts.

NOTE

PCDJ REFLEX LE included with this package is a 30 day limited version. You will notice many features are grayed out and not accessible. You will not be able to use this software without the Denon DN-HC4500. For access to all of Reflex features, you must upgrade to the full version.

Before You Start:

PCDJ Reflex and the Denon DN-HC4500

Some things you should know about the “PCDJ Reflex LE” before starting:

The PCDJ Reflex LE Software

To keep repetition minimal, PCDJ Reflex LE (Light Edition) will be referred to as “Reflex LE”.

The Players

The features in all three Players “1”, “2”, and “3” are exactly the same.

Close all other applications

It is strongly recommended that you close all applications on your computer when using the Software. We do not support any problems that can occur or interfere with performance of Reflex LE.

Chapter I Installation

Preparing your Computer for PCDJ Reflex LE

Installing PCDJ Reflex LE

Chapter II Updating and Configuration

Updating PCDJ Reflex LE

Configuring PCDJ Reflex LE for use with Denon DN-HC4500

Chapter III Getting Started with PCDJ Reflex LE

About the PCDJ Reflex LE Library

Adding tracks into the PCDJ Reflex LE Library

About the Players and How to Control Them

About The Mixer Module and How to Control it

Controlling REFLEX LE with DN-HC4500

Reflex LE and DN-HC4500 Master Function List

Chapter I Installation

Preparing your Computer for PCDJ Reflex LE

Making sure your Computer is Up to Date: In order to avoid any problems running Reflex LE, you should update your OS (operating System) and configure your computer for best Performance. Updating and Configuring your computer is something you should do on a regular basis. This is not only for Reflex LE, but for any other programs that are important to you.

Configuring Windows for Reflex LE: Disabling Screen saver: Right click on any blank space of your desktop, then click properties from the drop down list. Display Properties window should appear. Click on the Screen Saver tab, then click on the arrow to the right of screen saver drop down list and select none. Below the settings you just changed, click on the Power button. You should now see Power Options Properties. Click on the arrow to the right of Power Schemes, and change to Full Power, or Always On, then click apply then Ok. Display properties should still be open. At this point, click the Appearance tab and click the Effects button. Then uncheck the box to the left of "Use the following transition effect for menus and tool tips", "FADE". Now click Ok, then Apply. If you have a laptop, click on the Hibernate Tab and uncheck Enable Hibernation. Now click Apply then Ok on the Display Properties window to close. Turning off Fade effects should resolve any problems with possible skipping when minimizing Reflex LE.

Disable Windows Sounds: Click Windows Start Menu and go to Settings. Next, click Control Panel and open Sounds and Audio Devices by double clicking. Click on the Sounds Tab and then click on the drop down arrow for Sound Schemes. Select No Sounds than click Apply - OK.

Configuring For Mac Users: Click Apple Icon on the top Left corner of Mac OS, then click System Preferences. On newer Mac Operating System you can find System Preferences on the Doc at the bottom of the screen. The System Preferences window should be open now. Click Desktop & Screen Saver. In the bottom of this window is a "Start Screen Saver:" Slider. Move this slider to the far right (Never). Click the back arrow button on the top left corner of this window to go back to System Preferences. Next click, "Energy Saver" Icon. In this window, there are two slider, put the computer to sleep...., and Put the display to sleep.... Move these two sliders to the far right (Never). Now click the back arrow button on the top left corner. In the System Preferences Click Software Update, now uncheck check for updates. As you do not want Updates to download during or just before a Gig!

Installing PCDJ Reflex LE Software

PC INSTALLATION:

- 1) Place PCDJ Reflex LE installation CD into your CD-ROM drive.
- 2) The PCDJ Reflex LE disc will auto-run and launch the startup screen.
- 3) Click on option #1) Install Reflex.
- 4) This will launch the installer. You must agree to the licensing Agreement first before installing, then continue with the installation by hitting Next.
- 5) Once the installation is finalized, PCDJ Reflex LE will automatically open.
- 6) You can also click install manual from the installation screen, which will allow you to copy the operations manual to your hard drive. This guide will step you through all the options PCDJ Reflex LE has to offer.

NOTE: If the flash installer doesn't automatically open once you place the Reflex LE installation CD into your CD-ROM drive, you must manually install Reflex. Double click your MY COMPUTER Icon and proceed to double-click to open the drive where the PCDJ Reflex LE Install CD is located. For Example: Drive (D:) Once the directory is open and displaying the contents of the disc, double-click the PCDJReflex.exe file to start the installation process. Refer to step 4 above to finalize the install.

MAC INSTALLATION:

- 1) Place PCDJ Reflex installation CD into your CD-ROM drive
- 2) Double-click on the CD on your desktop to open a finder window.
- 3) Double-click the ReflexLE.dmg file to run the installer. After agreeing to the terms, a Window with the PCDJ Reflex icon will appear. Just drag and drop the Reflex icon to your Desktop for ease of opening, or you can copy to Applications folder.
- 4) You should also Drag the ReflexManual.pdf to your desktop for ease of reference later.

Chapter II Updating and Configuring

Updating PCDJ Reflex LE

Now that you have successfully installed the Reflex LE, let's make sure you are running the latest version. Click on the PCDJ Reflex icon on your desktop to open Reflex LE. Reflex LE should automatically check for updates when opened. If not, open Reflex, click help, and click check for updates. Reflex LE update web page should appear. Click on the PCDJ Reflex download link. On Windows click save then save to desktop. Download the updated Reflex.exe. Now refer back to installing chapter to complete installation.

Configuring PCDJ Reflex with Denon DN-HC4500

At this point, please make sure your Denon DN-HC4500 is connected to your computer by the USB cable and the power is turned ON. The HC-4500 does not require a driver CD. Both Windows and MAC OS will automatically install drivers. To configure PCDJ Reflex for use with DN-HC4500, open PCDJ Reflex and click Edit on the top left corner. Then click preferences. Ignore the general tab as PCDJ Reflex Demo automatically calculates your music's BPM during importing of music for the first time. Assuming you have followed the Denon instructions and installed the Denon DJ Asio driver supplied on the Denon driver CD, click the Audio Tab on the Sound card drop down menu and click Denon DJ Asio Driver.

To configure the Denon's internal sound card, click the Outputs tab. Check "use external mixer". Select Channel 1-2 Stereo for Player A, select Channel 3-4 Stereo for player B, for Player C you can either choose Channel's 1-2 or 3-4.

To select the DN-HC4500 as the control surface for PCDJ Reflex. Click the MIDI tab, click "New" and select (0-9) USB Audio Device, click OK.

Click "close" to save your changes.

Chapter III Getting Started with PCDJ Reflex LE

The PCDJ Reflex LE Library

The Library is where your “virtual” collection of tracks is kept. Library displays your track’s tag information such as: BPM, Artist, Title, Year, Album, Genre, and File Path only (not file names). Clicking any of these heading will sort by that heading alphabetically or numerically in ascending or descending order. The full version of PCDJ Reflex has multiple Playlist, Smart List, Export Song List, ability to correct tag information, and much more.

NOTE:

This Library has limited functionality as it is a Demo. For access to all of Reflex features, you must upgrade to the full version.

Adding Tracks Into PCDJ Reflex LE Library

Open Reflex and click File on the top left corner. At this point you have two options available. Add File to Library, or Add Folder to Library.

Select add file to library if you would like to add 1 or a couple songs from a specific folder. If you choose this option, a file browser window will open. Locate the folder that contains your music and either select one song, or hold down CTRL (Windows) or APPLE (MAC) key on your keyboard and click on each song you would like to import. Now click open. Files will automatically be BPM scanned and imported into library.

Select Add folder if you would like to add an entire folder of music to library. Note: Only music in the folder selected will be imported, not the music within subfolders of that parent folder. If you choose this option a Folder browser window will open. Locate the folder that contains your music and click Ok. Files will automatically be BPM scanned, and imported into library.

About the Players and How to Control Them

The Player's consist of 5 components: Wave, Effects, Plugins, Filter, and VU. The features in all three Players "A", "B", and "C" from top to bottom are exactly the same. To best explain these components, we will first learn how to select and load tracks into player's.

LOADING TRACKS INTO THE PLAYER'S: To load tracks into players, use the parameter rotary knob on the DN-HC4500. Once you've highlighted the track in your library, press the Parameter Knob to load into the player. The Left Parameter Knob loads a track into Player A, where the Right Parameter knob loads a track into Player B. Track information should now appear on the controller screen (assuming your metadata tags are in order). If you would like to see the entire track information press Title button on the controller. To load Player C, hold down the Flip button and press the PLAY LIST button. This will switch Player A or B to control Player C. Pressing Flip button and PLAY LIST button again returns to previous player. Repeat steps above to load Player C. Note: Only one side of the controller can be in Player C mode at a time.

PITCH BENDING: While Playing a track you can Pitch bend three different ways with the controller. One is using the Jog wheel, second is using the - / + buttons under PITCH BEND and last is using the PITCH Slider. To adjust the Range, hold down Pitch/KEY/RANGE button till display on controller changes to PITCH then use PARAMETERS Know to adjust Range.

MASTER TEMPO (KEY ADJ): Reflex LE has an amazing and powerful MT feature. To enable during Play press FLIP and PITCH KEY button. While player is stopped you can enable this feature by just pressing PITCH KEY button. With master tempo on, you retain the key and can adjust the tempo. With key off, you effect the key and tempo, with only Key on, you do not effect the tempo, only the key. To turn KEY Control ON or OFF. KEY ADJUST must be on. Now hold FLIP and EFFECT button 3. Notice LED turns green which means you are in Key Mode. While in this mode turning the PARAMETER Knob clockwise Increases KEY, notice LED changes to ORANGE. Turning PARAMETER Knob counterclockwise decreases Key, notice LED will turn back to Green indicating Center, then to RED. To resets parameter back to zero press EFFECT button 3.

Wave Module: This module consist of BPM (Beats Per Minute), Progress Bar, and Wave form.

BPM is the 5 digit number located at the top and to the far right of the word “Wave”. The BPM is automatically calculated during import of tracks. This is the same value that is displayed in the Library. This BPM value will only appear in Reflex LE as these values are stored in Reflex’s Database.

NOTE

The Reflex LE Database is located in MyDocuments\ MyMusic\ called Reflex_Library.gll. If you want to delete your Library or any tracks in your Library, you will have to delete the Reflex Library.gll file only in this limited Demo version of Reflex LE.

Reflex LE can also send this BPM info to the controller. To display BPM on the controller hold TIME and + (plus) button below the word PITCH BEND on the controller. To display Pitch back on the controller hold TIME and – (minus) button.

Progress bar is located below the word Wave, and BPM, is the Progress bar. The Progress Bar is a visual representation of the track and it’s total length. You can click any where in this bar to jump forward or backwards within the song. You can also Fast Forward or Rewind by pressing the arrow buttons below the words FAST SEARCH on the controller. Holding FLIP while pressing these same buttons searches in Hyper (Fast) mode.

Wave form is located below the progress bar. It is a magnified scrolling view of the Progress Bar. The vertical Teal Line is a visual indicator. It represents what part of the track (wave) is actually being played and heard as the Wave passes it.

CUE has two different meanings. The first is to CUE up or pre-listen to your track in your headphones. Which enables you to practice finding and setting the second type of CUE. CUE position or CUE point. Together they allow you the ability to listen, and mark the proper beat to mix into. All of this before your audience ever hears it.

NOTE

You must connect your HC-4500 to an external DJ Mixer in order to CUE up a track in your headphones. The Software CUE feature is not available in the Demo version of Reflex LE.

CUE Markers are displays on the Wave module as a yellow bar with a square on the top left and one at the bottom right of the bar. This indicates exactly where you want the track to start from.

Setting CUE's with the DN-HC4500: There are several ways to CUE your tracks with the controller, here are a few. The first way is to enter ~~Stutter~~ Frame Search mode. To do this, press PLAY then PLAY again to PAUSE, now use the JOG wheel to move forward or back to find your CUE Point and press CUE button. During this fine edit mode you should hear the track stuttering. Second way is to set a CUE on the Fly. While playing press the MEMO button. A Third way is to press FLIP & turn the Jog Wheel in Cue mode for "SILENT" Cueing. Press the MEMO button to set a new Cue point. To PLAY from this CUE, hold FLIP and press PLAY. HOT CUE's are defined as CUE's that can be set on the Fly, up to 5 of them. To really understand try it for your self. While playing a track hold the FLIP button and press one of the 5 Function keys on the top of the controller. Do this with all five buttons at different positions in the track. Now you can press anyone of these F buttons to jump back. These hot cues snap back to play extremely fast. So fast that you can use them like a sampler or drum machine.

NOTE

You can not save CUE points, or HOT CUE's in the Demo version of Reflex LE

SCRATCHING Mode: To Cut up and Scratch your track like a turntable. You must enable Scratch mode by pressing the JOG MODE button once. Notice the button will change colors from Orange to Green indicating you can use the JOG Wheel for Scratching or Pitch Bend mode.

LOOPING: Automatic looping is as easy as pressing the A1 button on the controller. Notice the highlighted 4 beat loop in the Wave form. To double or half the loop, just turn PARAMATERS knob clockwise to make longer or counterclockwise to make shorter. You can also push the "B" loop button to shorten your loop for great effect. To manually create a LOOP press A2 to set loop start point,

then press B to set loop end point. To EXIT a loop or jump back into your last LOOP press EXIT/RELOOP Button.

Effects Module: Contains three options. Power On/off which has the same effect as turning the power on or off on a turntable. It makes the track sound as if it were winding down, or up. You can control this effect by pressing the number 1 button under EFFECT on the controller. To adjust the Brake speed, which controls how fast the track slows down, hold down the FLIP Button and number 1 while turning the Parameters knob. It's kind of tricky you might need a friend! Lol To adjust the Drag speed, which controls how fast the track starts back up, hold down the FLIP Button, number 1, and press the Parameter knob.

The second and third options, Fwd or Back Beat Step, simply jumps the track forward or back a beat when playing a track. You can manipulate these Effects with the controller by: playing the track and holding FLIP and pressing – or + under PITCH BEND.

Another effect that is capable with Reflex LE but is not displayed as a button on the Reflex interface is BLEEP mode. To BLEEP out or make part of a track play in reverse. While playing the track press and hold the number 2 button under the EFFECT section of the controller. You can also play this EFFECT in true Reverse mode by holding FLIP and pressing number 2 button.

Plugins Module: Supports up to two VST plugins. You must have purchased or already own plugins which are sold separately. Simply Select the VST plugin from the drop down menu and the chosen effect will be applied. To adjust the parameters of the plugin, click the edit button. Bypass button will override or turn off the effect.

NOTE : This feature is not active in Reflex LE Demo.

Filter Module: Consist of a drop down menu with 6 preset filters, and Wet/Dry slider. You can turn this module on by pressing the number 3 button from the controller. The led will flash yellow letting you know the filter module is on. Turning the PARAMETERS knob will scroll through the various presets. Pressing the PARAMETERS knob will select that preset. Spinning the Jog Wheel will control the Wet/Dry slider. Spin clockwise to add (Wet), counterclockwise to subtract (Dry) filter. By pressing Flip & turning the Jog Wheel will sweep through the entire frequency spectrum. By pushing down on

the PARAMETERS knob the outer ring will turn blue allowing you to change the frequency modulation/gain/width depending on the Filter selected.

VU Module: Displays the track's signal level in volume units. Green is good, Yellow is ok, constant Red means track's signal is too hot/clipping/distorting.

About The Mixer Module and How to Control it

The PCDJ Reflex Software mixer module contains a cross fader with player select buttons and volume controls for each player.

Player Volume Sliders: Contains 3 volume controls from left to right Player, A, B, and C. You can set the HC-4500 into Mixer mode by holding down the flip button and pressing Title button on the controller. Repeat this step for each side of the controller and or to switch out of mixer mode.

NOTE

You can not use Mixer Mode on the controller for Player C.

Cross Fade: This slide cross fades between Player "A" and "B" and "C" and works in conjunction with the separate volume sliders. To move the slide, hold the mouse button down on top of it and move the mouse pointer horizontally left or right. The slide will move with the pointer. You can also click where you want the slide to be in the slide's track area, and it will instantly move to that position.

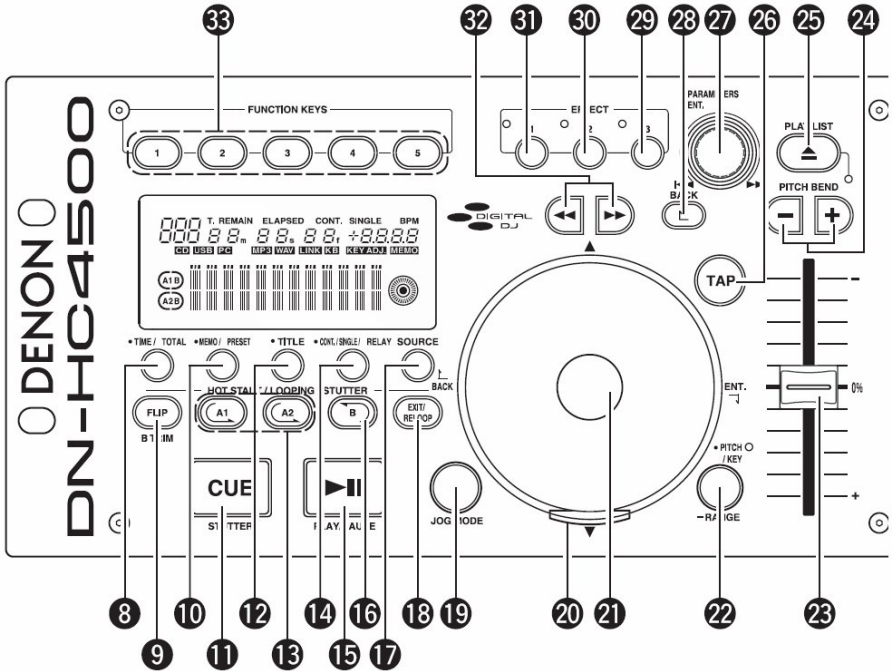
NOTE

The Crossfade will automatically default back to center when switching from A,B, or C.

PCDJ Reflex LE and DN-X500 or DN-X900

Reflex LE is compatible with Denon DN-X500 or DN-X900 Mixers through the DN-HC4500. If the one of these mixer's are connected to the HC4500 using X-Control, Fader start 1, and 2 cables, you can control Reflex Crossfade and Cue Play of players.

Master Function List



Feature/ Function Deck 1/2 Operation	DN-HC4500 Button Operation	Button #	Note / Condition

Display Frames / Seconds	[Flip] + [Time]	9/8	"f" appears in the display during frame mode
	[Flip] + [MEMO]	9/10	---- not used ----
Mixer Mode on/off	[Flip] + [Title]	9/12	On > Mixer Mode appears in the display
	" " [pitch slider]	23	On > move pitch slider up/down for volume control
	" " [PM]	25	On > turn [PM] to adjust the pitch range
	" " [pitch slider]	23	Off > actual pitch value connects once reached by slider position, however mixer volume remains at last setting
Quantization on/off	[Flip] + [Cont/Single]	9/14	
	[Flip] + [Source]	9/17	---- not used ----
	[Flip]	9	---- not used ----
Brake Force / Drag Force	[Flip] + [Effect 1]	9/31	
Reverse Play on/off	[Flip] + [Effect 2]	9/30	only during PLAY mode
Key Control on/off	[Flip] + [Effect 3]	9/29	*Only when Key Adjust is ON On > turn [PM] clockwise, LED changes to orange, /counterclockwise LED changes to RED Off > resets parameter back to zero
Key Control off	[Effect 3]	29	Off > resets parameter back to zero
Set Hot Start 1	[Flip] + [F1]	9/33 [1]	during PLAY mode
Set Hot Start 2	[Flip] + [F2]	9/33 [2]	during PLAY mode
Set Hot Start 3	[Flip] + [F3]	9/33 [3]	during PLAY mode
Set Hot Start 4	[Flip] + [F4]	9/33 [4]	during PLAY mode
Set Hot Start 5	[Flip] + [F5]	9/33 [5]	during PLAY mode
Hyper Scratch Fast Forward	[Flip] + [Jog]	9/21	during PLAY mode, light touch (no dot)
Hyper Scratch Fast Backwards	[Flip] + [Jog]	9/21	during PLAY mode, light touch (no dot)
Silent Wav Cueing Forward/Backward	[Flip] + [Jog]	9/21	during Cue mode, light touch (no dot)

s			
Pitch / Key mode	[Flip] + [Pitch/Key]	9/22 [+]	during Cue/Play mode
Beat Grid Jump Forward	[Flip] + [+Pitch Bend]	9/24 [+]	during Cue/Play mode (while holding Flip, tap "+" each time)
Beat Grid Jump Backwards	[Flip] + [-Pitch Bend]	9/24 [-]	during Cue/Play mode (while holding Flip, tap "-" each time)
Load 3rd Reflex player on/off	[Flip] + [Playlist]	9/25	3rd player can only load once on either deck (layered) *note mixer mode is not available
Instant Jump to head on file	[Flip] + [Cue]	9/11	during Cue/Play mode
Instant Restart from last Cue point	[Flip] + [Play]	9/15	during PLAY mode
Cue/Stutter	[Cue/Stutter]	11	during CUE mode
Play/Pause	[Play/Pause]	15	during PLAY mode
Stutter to Play	hold [Cue] + press [Play] then release Cue	11/15	during Stutter mode
	[Flip]	9	--- not used ---
4-Bar Auto Looping	[A1]	13 [A1]	during Cue/Play mode. after set, turn [PM] to make long/shorter loop. Each click represents a multiple or division of "2"
	" " push [B]	16	If you continue to push the B button, division of "2" will occur until min setting of XX?
Manual Looping	[A2], then [B]	13 [A2] / 16	during PLAY mode
Exit/Reloop	[Exit/Reloop]	18	during PLAY mode
Elapsed/Remain time	[Time]	8	during Cue/Play mode
BPM / Pitch Display	[Time] + [+]	8/24 [+]	changes display to BPM mode
	[Time] + [-]	8/24 [-]	changes display to Pitch Range mode
Set new Cue point	[MEMO]	10	during Cue/Play mode
Display/Scroll File Name	[Title]	12	during Cue/Play mode

One Shot Looping/Sampler	[Cont/Single]	14	during Single mode
Seamless Looping	[Cont/Single]	14	during Cont. mode
PC/CD Mode	[Source]	17	switches between PC/*CD modes *only if Denon CD player is found
	[F1]	33	---- not used if not set ----
	[F2]	33	---- not used if not set ----
	[F3]	33	---- not used if not set ----
	[F4]	33	---- not used if not set ----
	[F5]	33	---- not used if not set ----
Brake Mode	[Effect 1]	31	during PLAY mode (one shot)
Drag Mode	[Effect 1]	31	during CUE/PAUSE mode (one shot)
Bleep Mode on/off	[Effect 2]	30	during PLAY mode
Bleep Mode temporary	[Effect 2] -long push	30	during PLAY mode
Filters on/off	[Effect 3]	29	On > turn [PM] to select > Low Shelf > High Shelf > Low Pass > High Pass > EQ Band
	" " " " push [PM], then turn	27	adjusts: Gain > Width > Freq (ring is blue)
	" " " " turn [Jog]	21	adjusts: Dry/Wet
	" " " " [Flip] + [Jog]	9/21	adjusts: freq sweeps right/left
Search Fast Forward	[>>]	32 [>>]	during PLAY mode
Hyper Search Fast Forward	[Flip] + [>>]	9/32 [>>]	during PLAY mode
Search Fast Backwards	[<<]	32 [<<]	during PLAY mode
Hyper Search Fast Backwards	[Flip] + [<<]	9/32 [<<]	during PLAY mode
Temporary Pitch Bend +	[+]	24 [+]	during PLAY mode
Temporary Pitch Bend -	[-]	24 [-]	during PLAY mode

Temporary Pitch Bend +/-	[Jog]	21	during PLAY & Jog Bend mode button is green
Hyper Temporary Pitch Bend +/-	[Flip] + [Jog]	9/21	during PLAY & Jog Bend mode button is green
Jog Modes	[Jog Mode]	19	selects: Scratch/Bend mode during CUE/PAUSE mode (cyclic)
Scratch	[Jog]	21	during PLAY & Jog Bend mode button is orange
Scratch Spinbacks	[Jog]	21	during PLAY spin Jog Disc and release
Scratch Parameters	[Jog Mode] -long push & hold	19	during PLAY/CUE & Jog Bend mode button is orange
	" " " " push [PM]	27	to select > Scratch Balance > Scratch Stroke > Scratch Key Lock
	" " " " turn [PM]	27	Scratch Balance (± 1 range) > Scratch Stroke (-.5~+2.5) > Scratch Key Lock on/off
Bend Parameters	[Jog Mode] -long push & hold	19	during PLAY/CUE & Jog Bend mode button is green
	" " " " turn [PM]	27	to select > Bend Strength (1~10)
Sync on/off	[TAP/Sync]	26	used to synchronize beats to the grid. Will blink yellow/green to the half beat
Sync BPM	[Playlist LED]	-	when both decks have the same BPM value, the lower Playlist RED led will illuminate on both decks
Record Case	[Back]	28	
Record Case	[Playlist]	25	