Numark iDJ²

REFERENCE MANUAL

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INTRODUCTION

The iDJ² is a dual-deck console designed for the needs of the modern DJ. With a ground-breaking and easily accessible user interface, the plug and play design empowers the DJ to quickly find, organize and perform tracks from connected USB storage devices or docked Apple iPod® players. Songs can be directed manually to decks or automatically played, jukebox-style.

Powerful tools such as the Crate and Profile View offer a digital slant on traditional DJ methods. The Crate can be used to prepare and arrange your set in advance, during your performance or a mixture of both. The Profile View offers a fast visual cueing aid, much like looking at the grooves on a record, but better!

iDJ² boasts two USB connections and an iPod dock for a wide variety of storage options. These include the Apple iPod, thumb drives and external hard drives. Searching for artists, albums or tracks is made super fast with a USB keyboard (not included).

iDJ² can play MP3, WAV and AAC* music formats stored on FAT16, FAT32, NTFS and HFS+ file systems.

In addition to its impressive playback capabilities, the iDJ² functions as a complete DJ mixer workstation and is outfitted with all the familiar DJ controls, such as a crossfader, comprehensive EQ/gain section for each channel, headphone cueing, and analog inputs for connecting additional sound sources, such as turntables and CD players.

FEATURES

- 2 channel mixer with EQ and gain controls
- Crossfader with adjustable curve setting
- 2 analog stereo inputs for connecting additional sound sources, such as turntables and CD players
- 2 stereo Master Out channels (balanced and unbalanced)
- Stereo Record Out channel (unbalanced)
- Microphone input with gain and tone controls
- 2 headphone outputs (1/4" and 1/8") with gain and tone controls
- Support for iPod, Flash keys, thumb drives, and external USB hard drives
- Scratching and Pitch-Bending
- Seamless looping, stuttering
- Pitch control
- Key Lock
- Large color display with revolutionary easy-to-use interface
- Search quickly through songs
- Track Profile visualizations
- iPod docking station for mixing directly from your iPod
- S-Video output for displaying content from a video iPod (in iPod Direct Mode only)
- 2 USB ports for connecting USB thumb drives, hard drives or a keyboard
- Formats supported: MP3, WAV and AAC*
- Beatkeeper technology with TAP override function
- Fader Start
- USB computer keyboard support for fast searching - on USB drives or iPods
- Computer playlist support including many popular formats
- Safe Software Updates for future enhancements. Go to www.numark.com for support.

Numark iDJ²

IMPORTANT MESSAGES

The iDJ² works best with the latest software installed. We strongly recommend that you check for software updates right away, and continue to check regularly so you don't miss out on any of the good stuff! See "iDJ² Software Upgrades" section for details.

Don't Force It
USB devices fit into the USB socket one way around only. If the device does not push in easily, don't force it – check that you have it the right way around!

Eject Before Pulling
When you're finished with a storage device, always properly eject it before unplugging, just like with your home computer! Unplugging without ejecting can damage your data. See "Ejecting a Library" section for details.

USB Hubs
You can plug a hub into each of your iDJ²'s USB ports, but you must not plug a hub into a hub! We recommend you use only powered hubs for maximum reliability.

USB Gizmos
Mice, trackpads and other input devices will do nothing for your iDJ². Most USB keyboards are supported.

CONNECTION DIAGRAM

1. Make sure the following items were in the box:

   - iDJ²
   - Power adapter
   - USB key drive
   - 2 stereo RCA cables
   - Quickstart Guide
   - Safety Instruction Booklet

2. **READ SAFETY INSTRUCTION BOOKLET BEFORE USING THE PRODUCT.**

3. Study this connection diagram.

4. Place the iDJ² in an appropriate position for operation.

5. Make sure all devices are turned off and all faders and gain knobs are set to their lowest level.

6. Connect the stereo outputs to mixer and/or other audio devices.

7. Plug all devices into AC power.

8. Switch everything on in the following order:

   - iDJ²
   - amplifiers or output devices

9. Always reverse this operation by turning off devices in the following order:

   - amplifiers or output devices
   - iDJ²

More information about this product may be found at http://www.numark.com/iDJ2

Please study the connection diagram below:

Numark iDJ²
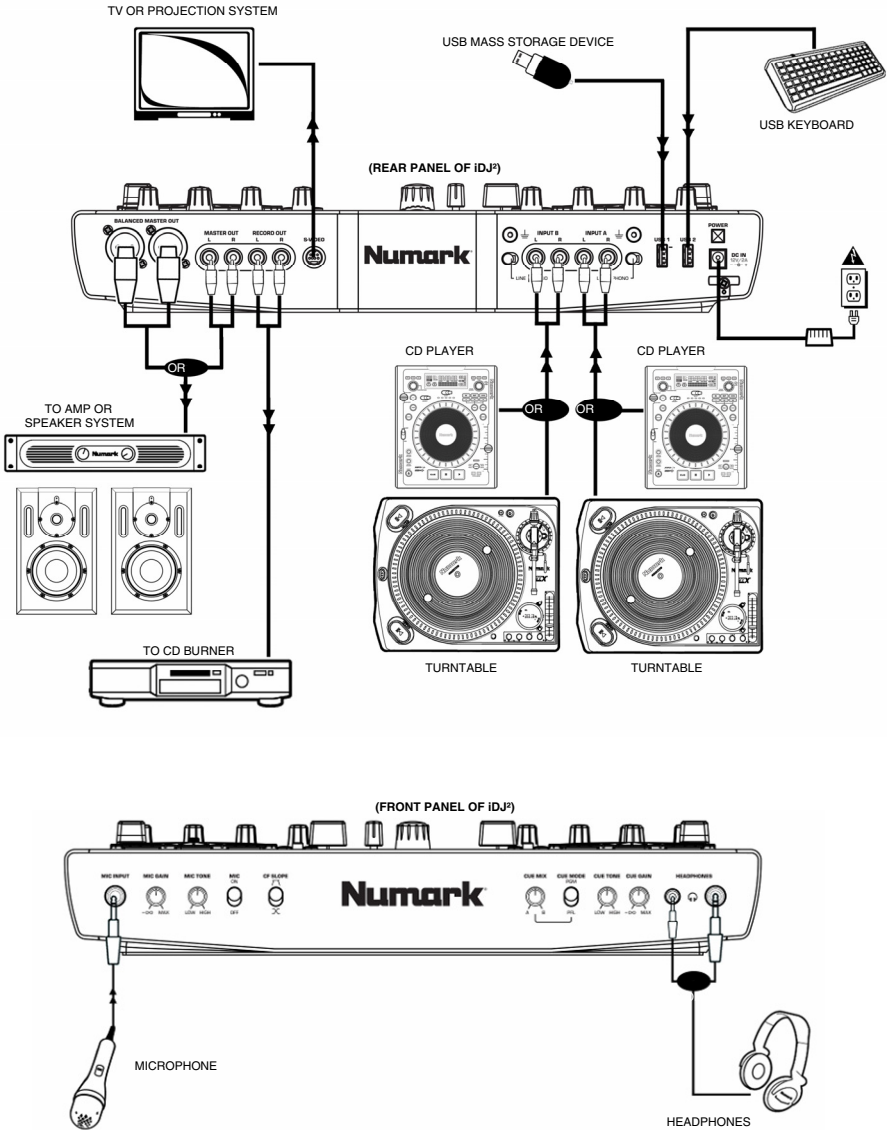
REAR PANEL OVERVIEW
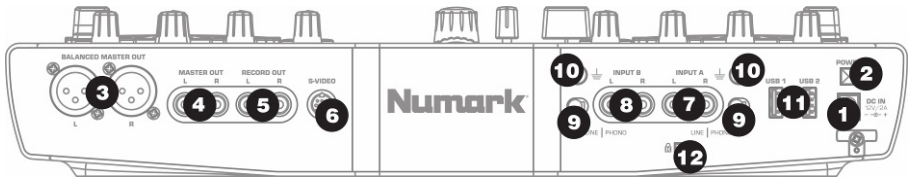
1. **DC IN** – Please connect the supplied power adapter (DC 12V 2A) to this power input and connect it o a power source. Please *only* use the supplied power adapter – using an alternate power adapter may result in damage to the iDJ². You may secure the adapter cable to the restraint directly below to prevent from accidental unplugging.

2. **POWER** – Use this switch to turn the iDJ² on and off. To turn on, press the button momentarily. To turn off, press and hold down the button until the unit has powered down completely.

3. **MASTER BALANCED OUT –** These line-level balanced XLR connections output the stereo mix and should be connected to an amplifier or speaker system. Please use balanced XLR (TRS) to connect to your speakers or amplifier.

4. **MASTER OUT –** This line-level stereo RCA connection outputs the stereo mix. Please use a stereo RCA cable to connect to a stereo system or amplifier.

5. **RECORD OUT –** This is an additional line-level stereo RCA connection which outputs the stereo mix. If you would like to record your mix as you are performing or output to additional speakers, please use a stereo RCA cable to connect to your recording device or speaker system.

6. **S-VIDEO –** If using a video iPod, the iDJ² can output the video signal through this S-video port. Please use a standard S-video cable to connect to a TV, monitor, or projection device. This will enable you to display videos from your iPod.

    Note: Video from your iPod can only be output when Deck A is in iPod Direct Mode. See "iPod Direct Mode" for details.

7. **INPUT 1 –** Use a stereo RCA cable to connect a line or phono-level audio source to this input.

8. **INPUT 2 –** Use a stereo RCA cable to connect a line or phono-level audio source to this input.

9. **LINE | PHONO –** Each input features a Line | Phono switch. This switch should be set to either Line or Phono, depending on the input signal. If using phono-level turntables, set this switch to Phono. If using line-level sources, such as digital turntables and CD-players, set this switch to Line.

10. **GROUND CONNECTORS –** If you are using phono-level turntables, please make sure that you attach the grounding wires of the turntables to these ground connectors. This will ensure that there is no ground hum while you perform.

11. **USB INPUTS** – Please attach your mass storage media to these two available USB ports – a hub can be used to expand to more USB inputs. You may also connect a USB keyboard to one of these ports for quick navigation of the iDJ². (See "Keyboard Navigation and Shortcuts" section to learn about keyboard shortcuts).

    Note: The iDJ² supports the FAT and HFS+ file systems. Please make sure that the media you are attempting to play is formatted in one of these file system formats.

12. **KENSINGTON LOCK –** Use this lock to attach and secure the iDJ² to a table or surface.

FRONT PANEL OVERVIEW

1. **MIC INPUT** – Connect a 1/4" inch microphone to this input.

2. **MIC GAIN** – This knob adjusts the level of the microphone signal.

3. **MIC TONE** – This knob can be used to adjust the tone of the microphone signal. Turning the knob toward "High" will accentuate the high frequencies of the microphone signal and produce a brighter sound. Turning the knob toward "Low" will accentuate the low frequencies of the microphone signal and result in a sound with more bass frequencies.

4. **MIC** – This switch turns the microphone signal on and off.

5. **CF SLOPE** – This switch can be used to adjust the slope of the crossfader's transition curve. Flipping the switch up results in a sharper curve, allowing you to use the crossfader for quick transitions and scratching. Flipping the switch down will result in a smoother curve, allowing you to use the fader for slower transitions. Experiment with the two different settings to find out which one works best for you.

6. **CUE MIX** – Controls the relative loudness of each deck in the Cue channel. If the knob is all the way down (A), you will only hear the audio playing on deck A, while if the knob is all the way up (B) you will only hear the audio playing on deck B. If the knob is in the middle position, you will hear the audio from both decks A and B.

7. **CUE MODE** – This switch is used to alternate between auditioning the Pre Fader Levels (PFL) of decks A and B, or the Program (PGM) in the Cue channel.

8. **CUE TONE** – This knob adjusts the tone of the headphone output without affecting any other output.

9. **CUE GAIN** – You can use this knob to adjust the level of the audio signal in the headphones.

10. **HEADPHONES (1/8")** – Connect your 1/8" headphones to this output to hear the Cue channel.

11. **HEADPHONES (1/4")** – Connect your 1/4" headphones to this output to hear the Cue channel.

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TOP PANEL OVERVIEW

iDJ²'s top panel can be generally split into three categories of controls:

**GLOBAL CONTROLS, MIXER CONTROLS, DECK CONTROLS**.

Please read the next three sections of this manual to learn about the function of these controls. If you need help identifying where the controls are located on the panel, refer to the following illustration:
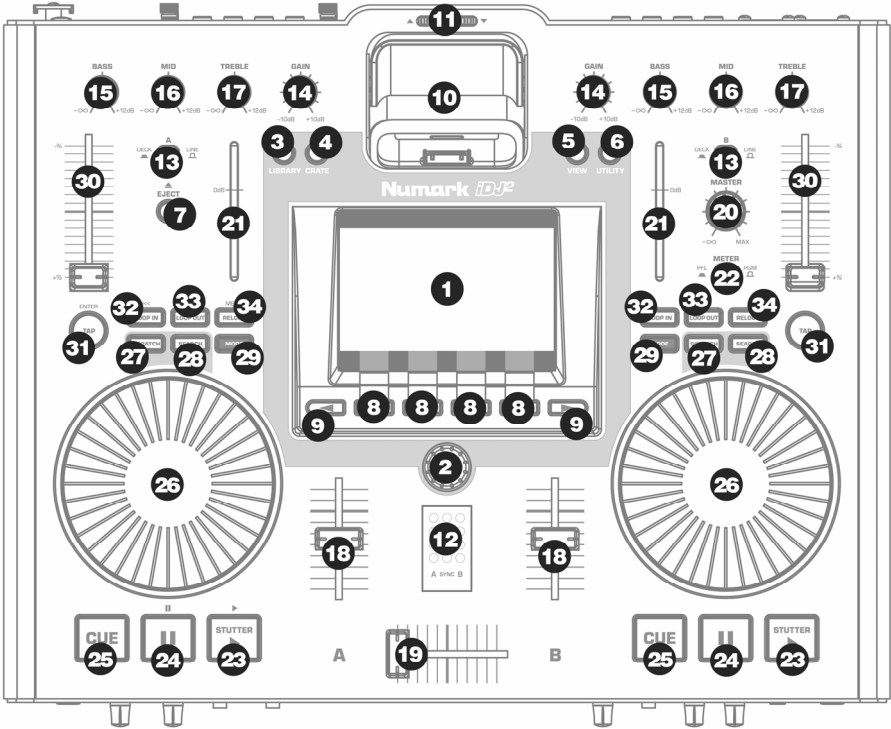
TOP PANEL - GLOBAL CONTROLS

The global controls on the iDJ² allow you to access and navigate many of the unit's features, such as the Library, the Crate, and various other options.

1. **LCD** – The large color screen displays information about the iDJ², the decks, your attached removable media and different menu options.

2. **PUSH TO ENTER** – This knob is used to navigate lists, change settings, and operate various parts of the User Interface. It can be pressed to select or change the highlighted item, when appropriate.

3. **LIBRARY** – This button allows you to access the library of music stored on the removable media connected to the iDJ². Please refer to the "Navigating the Library" section of this manual for more information on how to browse and load music from your removable media.
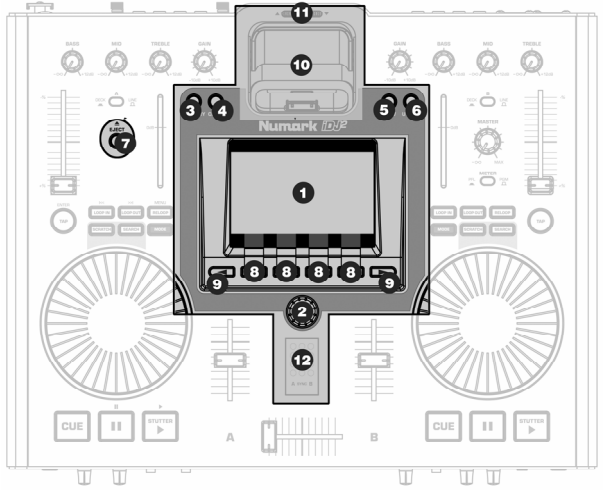
4. **CRATE –** This button allows you to view the "Crate". Any tracks that you send to the Crate will appear in this list. While you are viewing the Crate, you can use the FUNCTION buttons below the screen to send tracks to either deck for mixing, pull them back into the Crate for later use if they are already playing, or remove them from the Crate altogether. You may also switch the track order in the Crate, if you would like, by pressing and releasing the PUSH TO ENTER knob on a track and then rotating the knob– this will move the selected track up or down in the list. Then push and release ENTER again to accept the new position. Please see "The Crate" section of this manual for more information on the Crate feature.

5. **VIEW –** You may use this button to access different information about the music playing on the decks. The VIEW button will toggle between Track View and Profile View. Please see "Views" section for more information.

6. **UTILITY –** Pressing this button will take you to the Utility menu where you can adjust display preferences, restore settings to their factory default state and calibrate the pitch sliders. Please see the "Utility" section for details.

7. **EJECT –** Press this button to select which mass storage device you would like to eject. When you press this button, you will see a list of the devices currently attached to the iDJ². Select which device you would like to eject by rotating the PUSH TO ENTER knob and pressing the appropriate FUNCTION button below the display to eject the highlighted device.

⚠ *Please note: Always eject your devices before physically removing them from the iDJ². If you fail to eject a device before removing it, the data on the device may become corrupt and unusable.*

8. **FUNCTION BUTTONS –** These four buttons are used to select from available menu items displayed on the screen. Depending on the menu that you are viewing, the functionality of these buttons will change. The screen will display the function of the button directly above it.

9. **< / > BUTTONS** – These two buttons are used to scroll through available pages of selections, when available. If there are additional pages to be viewed, the arrow segments above the buttons will be highlighted. These buttons are also used to move the cursor when entering text.

10. **iPOD DOCK** – This docking station can be used to dock iPod players. When docked, you can browse the contents of your iPod using iDJ²'s browser and load tracks to each deck or organize them in the Crate. The iDJ² allows you to simultaneously play 2 tracks from your iPod on decks A and B. In addition, the dock will also charge your iPod while the iDJ² is powered on.

11. **DOCK ADJUSTMENT** – Depending on the kind of iPod you are using, you can adjust this control so the player fits snuggly into the dock.

12. **THE BEATKEEPER™** - The Beatkeeper™ automatically tracks beats based upon a combination of frequencies and rhythm patterns in the music. It shows BPM in the display and outputs 4-count (a.k.a. one measure) information about the music in a marching bar graph. The left bar represents the beat of the music playing on the left channel, while the right bar represents the beat of the music playing on the right channel. The middle bar will light up blue when the downbeats of the music playing on both channels occur at the same time. However, please note that in order for the two songs to mix well together, the downbeats should not only line up now and then, but should occur simultaneously over a continuous period of time.

The Bar Graph: Most dance music and rock is set up in 4 beat increments called measures. The bottom LED represents the 1st beat or "Down Beat". Occasionally this may not be correct or you may wish to reset it. To reset the downbeat on either channel simply tap the TAP button at the new downbeat location as the music is playing or while paused.

TOP PANEL - MIXER CONTROLS

iDJ² sports a full-featured DJ mixer which can be used to mix audio from USB mass storage devices and iPod players, as well as any additional input devices, such as CD players and turntables connected to the RCA inputs on the rear of the unit.

Each mixer channel features an input selector. The input selector switch (DECK/LINE) will select which signal is being routed to the mixer panel:

- In **Deck** position (in), the mixer channel will output the audio from an attached iPod or USB mass storage devices. Tracks can be "sent" to the virtual deck via the menus on the screen.

- In **Line** position (out), the mixer channel will output the audio signal from the RCA inputs on the rear of the unit (CD player, turntable, etc.)

Whichever option you choose, you will be able to use familiar DJ controls (gain, EQ, metering, volume and crossfader) to create your mixes.
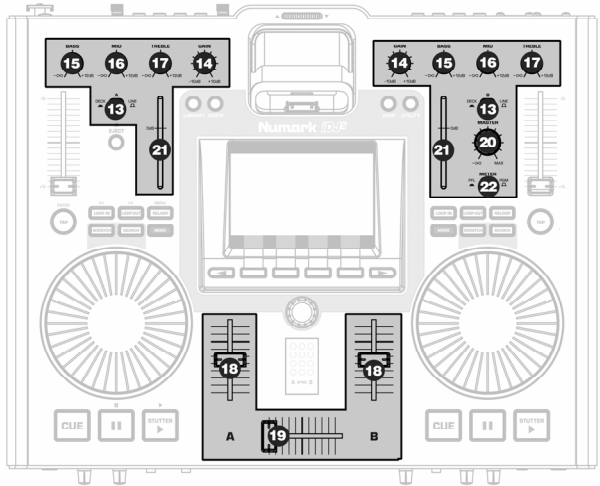
Each mixer channel features:

13. **INPUT SELECTOR (DECK/LINE)** – Selects the input of the channel (DECK = USB device or iPod, LINE = external source through RCA input).
14. **GAIN** – Adjust the overall gain of the audio signal on the channel.
15. **BASS** – Adjusts the low (bass) frequencies of the audio signal on the channel.
16. **MID** – Adjusts the mid frequencies of the audio signal on the channel.
17. **TREBLE** – Adjusts the high (treble) frequencies of the audio signal on the channel.
18. **VOLUME FADER** – Adjusts the volume of the audio signal on the channel.

Also on the top panel you will see:

19. **CROSSFADER** – Fades the audio signal between channels A and B.
20. **MASTER LEVEL KNOB** – Controls the output level of the master mix.
21. **LEVEL METERS** – Represent the Pre Fader or Program audio levels.
22. **METER BUTTON** – Toggles the level meters between displaying Pre Fader (PFL) or Program (PGM).

TOP PANEL - DECK CONTROLS

The deck controls become available when a channel's input selector has been set to Deck. Using these controls you can play,, cue, scratch, pitch bend and loop music from attached USB mass storage devices, such as hard drives, thumb drives and iPod players.

Please note: If the channel has been set to Line, the deck controls will have no effect on the audio playing on the channel.
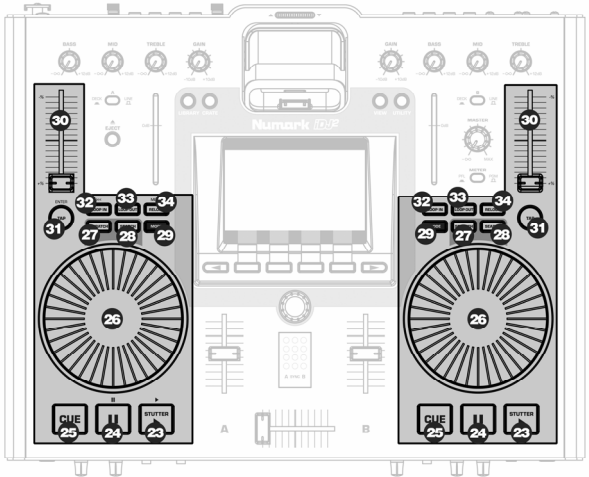
23. **PLAY/STUTTER** – Pressing this button starts the music loaded on the corresponding deck. A cue point is set at the current position and the music begins playing. Pressing this button while the unit is playing will restart the song from the cue point, which can be used to create a "stutter" effect.

24. **PAUSE** – Stops the music playing on the corresponding deck. If you press and hold the PAUSE button down for 1 second while paused, you will go back to the beginning of the track.

25. **CUE** – Returns and pauses the music at the last set Cue Point. The Cue Point is the last place where PLAY/STUTTER was pressed or the start of the track, if it has not yet been pressed. You can audition the music, starting at the Cue Point, by pressing and holding down the CUE button again – the music will play for as long as the button is held down and once the button is released, will jump back and pause at the Cue Point. You can also easily edit the cue point by spinning the jog wheel to a new position while paused. As you spin the jog wheel, the music will sound. By stopping the jog wheel and pressing PLAY, a new Cue Point is set.
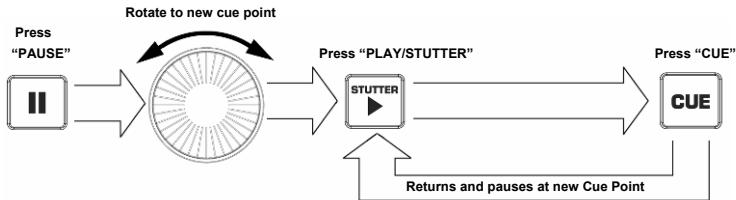
26. **JOG WHEEL** – This wheel can be used for pitch bending, scratching and searching through the music playing on the deck. The functionality of the wheel is determined by the two accompanying buttons – SCRATCH and SEARCH. While a track is playing on the deck and Scratch and Search modes are disabled, the jog wheel functions as a pitch bend. Pitch bending temporarily speeds up (turn clockwise) or slows down (turn counter-clockwise) the music. This technique is used when you are mixing two tempo-matched tracks which may not be completely synchronized. Hence, with pitch bending you can temporarily slow down or speed up the track you are mixing so its beats "lock" with the beats of the track that is already playing. While a track is paused, you can use the jog wheel to seek through the music to a new cue point location. Pressing PLAY/STUTTER following this will set the cue point at this location.

27. **SCRATCH** – Use this button to engage Scratch Mode. Scratch Mode allows you to "scratch" the music on the deck by moving the jog wheel forward and backward. When you stop the wheel, normal playback will resume. To resume with no gap in the audio, "push off" by scratching forward at approximately normal playback speed before releasing the wheel.

28. **SEARCH** – Use this button to engage Search Mode. Search Mode allows you to use the jog wheel to quickly scan through the current track. When Search Mode is enabled, turning the jog wheel will quickly fast forward and rewind. If you do not touch the wheel for 8 seconds you will automatically exit Search Mode.

29. **MODE** – Pressing this button will bring up deck options, such as Pitch Range, Key Lock, Track Loading, Time Display, Fader Start and iPod Mode. These options are split into two different pages (Pitch, Settings) which can be accessed via the function buttons below the display. You can use the PUSH TO ENTER knob to dial in the desired values and pressing down on the knob will move on to the next option of the selected page. Pressing MODE button again will exit the deck options dialog.

> PITCH PAGE:
> Pitch Shift – shows the value of the pitch shift applied to the deck.
> Key Lock Shift – shows the amount of tempo shift applied to the deck while Key Lock is engaged.
> Pitch Range – selects the desired pitch range (0%, ±6%, ±12%, ±25%, +25/-100%).
> Key Lock – engages and disengages the Key Lock feature.
> SETTINGS PAGE:
> Track Loading – specifies how tracks in the crate will be loaded and played (Manual, Automatic, Continuous, Cyclic)
> Time Display – toggles between the different time display modes (Elapsed, Remaining)
> Fader Start – specifies how fader start will be used on the deck (Off, Cue, Pause)
> iPod Mode – specifies the function of the deck (Direct, USB). See "iPod Direct Mode" for information on iPod Direct Mode – this mode allows you to control your iPod directly from the deck A controls, as well as display video content from your iPod through the S-Video connection on the rear of the iDJ².

30. **PITCH SLIDER** – Each channel features a pitch slider which is used to control the speed of the music. Moving the slider toward "-" results in a lower pitch (and slower tempo) of the music, while moving the slider toward "+" results in a higher pitch (and faster tempo) of the music.

31. **TAP** – Pressing this button in time with the beat will help the Beatkeeper detect the proper tempo. Holding the button for 1 second will cause the BPM counter to reset and recalculate.

LOOPING CONTROLS

As part of the Deck controls, you will see the looping controls – LOOP IN, LOOP OUT, RELOOP buttons. The iDJ² features seamless looping, which means that if you define a loop, there is no delay when the music loops back to the beginning.

Please note: When Deck A is in iPod Direct Mode, the deck's looping controls will control your iPod's navigation and menu buttons.

32. **LOOP IN -** This is the point where you would like a loop to start. By default, a "loop in" point is automatically set to the current cue point (defaulting to the the beginning of the track) unless a new "loop in" point is set. To define a new "loop in" point, press the LOOP IN button when the song reaches the desired point where you would like a loop to begin. The LOOP IN button will light, indicating a new "loop in" point has been set. You can now press the RELOOP button to immediately go back to the "loop in" point and begin playing. If you wish to change the "loop in" point, just press the LOOP IN button again.
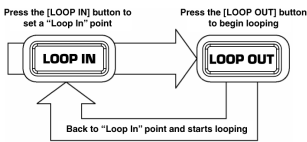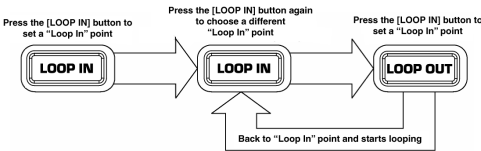
Please note: The LOOP IN button can also be used to create a live cue point. Once you press LOOP IN, a cue point will be set at that location in the music. You can always return to this cue point by holding down CUE and pressing the LOOP IN button – the deck will pause and return to the LOOP IN point. You can resume playback from this point by pressing the PLAY button.

33. **LOOP OUT -** Sets the end point of the loop. The first time you press LOOP OUT while a song is playing, the LOOP OUT button will blink and the song will begin playing in a seamless loop starting from the "loop in" point and ending at the "loop out" point. To release or end the loop, press LOOP OUT a second time and play will continue forward when the song passes the previously set loop out point. The LOOP IN button will then be continuously lit, indicating that the loop is now in memory for re-looping purpose.

   Please note: The LOOP OUT button can also be used to create a live cue point. Once you press LOOP OUT, a cue point will be set at that location in the music. You can always return to this cue point by holding down CUE and pressing the LOOP OUT button – the deck will pause and return to the LOOP OUT point. You can resume playback from this point by pressing the PLAY button.

34. **RELOOP -** Repeats play "stutters" from the "Loop In" point. If a loop has been set, it plays and repeats a previously set loop, until it is released by pressing LOOP OUT a second time.
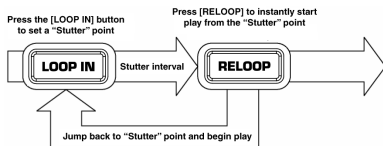
LOOPING EXAMPLES

Press the [LOOP IN] button to set a "Loop In" point

Press the [LOOP OUT] button to begin looping

LOOP IN → **LOOP OUT**

Back to "Loop In" point and starts looping

Press LOOP IN to set the beginning of the loop, then press LOOP OUT to set the end point of the loop. Once you press LOOP OUT, the iDJ² will loop between these two points. If you press LOOP OUT again, the iDJ² will exit the loop and continue playing normally.

Press the [LOOP IN] button to set a "Loop In" point

Press the [LOOP IN] button again to choose a different "Loop In" point

Press the [LOOP IN] button to set a "Loop In" point

LOOP IN → **LOOP IN** → **LOOP OUT**

Back to "Loop In" point and starts looping

If you press LOOP IN but then decide you want to set a different "Loop In" point, just press LOOP IN again. Then press LOOP OUT to start looping between the in and out points.

Press the [LOOP IN] button to set a "Stutter" point

Press [RELOOP] to instantly start play from the "Stutter" point

LOOP IN Stutter interval **RELOOP**

Jump back to "Stutter" point and begin play

The "Loop In" point can also be used as a way to "stutter" play beginning from a certain point in a song. Just press LOOP IN to set the "Stutter" point, then press RELOOP to begin play from the "Stutter" point. Each time you press RELOOP, the iDJ² will jump back to the "Stutter" point and play from that point.

iPod DIRECT MODE CONTROLS

In iPod Direct Mode, some of the controls on Deck A become iPod controls, allowing you to browse and play content from your iPod.

TAP – Functions as "Enter" command on your iPod.

LOOP IN – Functions as "<<" on your iPod.

LOOP OUT – Functions as ">>" on your iPod.

RELOOP – Functions as "Menu" on your iPod.

JOG WHEEL – Functions as your iPod's touchwheel controller.

PAUSE – Functions as "Pause" on your iPod.

PLAY – Functions as "Play" on your iPod.

> *Please note*: iPod Direct Mode can only be used on Deck A. To enable iPod Direct Mode, press the Mode button and change the iPod Mode setting to Direct. See "iPod Direct Mode" for more information on this mode.
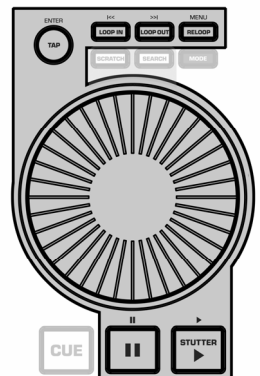
HOW TO WORK WITH iDJ²

iDJ² introduces some revolutionary concepts for the Digital DJ, however working with the product is quick and easy. Many of the digital features reflect traditional DJ techniques that you'll already be familiar with. In fact there is no one correct way to work with iDJ² as you'll discover the more you experiment, but here are the basics...

↗ Get Digital!

Before you can start with iDJ² you need to get your content into one of the supported digital formats. "USB Device Compatibility" section of this manual covers this process in detail, but in brief you should use your PC or Mac to convert your CDs, records and tapes into WAV, MP3 or AAC format. If you already use digital media products such as personal MP3 players or PC DJ packages, then you may already have your tracks in a suitable format. It's worth taking some care at this stage to ensure your content is converted to a high standard. You might find products such as Numark's TTUSB computer-attached turntable useful for getting your traditional media converted.

↗ Get Ready!

Before the gig, you should check that your portable media device or devices are loaded with the content you need. To save time, you can use the Librarian tool in your PC to prepare a library for each device (see "Creating a Library" section). It's always a good idea to carry a backup copy of your content, a precaution which is really easy in the digital world.

MASTER LIBRARY   WORKING LIBRARY   BACKUP LIBRARY

↗ Gig!

You got your content ready, now it's time to plug and play!

1. Prepare your Crate
   iDJ² contains your virtual record Crate. Send tracks from the Library to the Crate to start building your set, just like pulling and tilting records. Refer to "Using the Library" section of this manual for more details. You can do this (and the next step) well in advance if you want and as long as your media is not write protected your Crate will be automatically saved.

2. Order it how you want
   Refine your set by ordering tracks in the Crate - or if you prefer to pick out the next track on the fly then you can. Use the Crate in any way that suits your style.

3. Cue tracks out of the Crate
   Send tracks from the Crate to decks as needed. If your Crate is carefully ordered then iDJ² can automatically cue the next track when a deck runs out. If you want to leave your set unattended you can use a continuous mode to automatically play each track in turn. Refer to the "Track Loading" section for information on automatic track loading and playback.

4. Change the set any time you need to
   The Crate is dynamic - change your mind at any time, insert requested tracks, re-order your set - use the Crate as a tool to organize your performance.

5. Bypass the Crate for one-offs and last minute cues
   You can send tracks from the Library direct to a deck if you want. This doesn't affect what's in the Crate so you can mix your methods of working any way you like.

6. Perform the way you always did
   Once a track is on a deck, you can cue, beat match, scratch and loop using familiar Numark deck controls. iDJ² is fully multi-tasking, so you can work on your set using the Library and Crate at any time, even while mixing on both decks.

7. Mix it up and get creative
   The iDJ² is a complete mixer, equipped with all the familiar mixing controls – Crossfader, Volume, Gain, EQ and comprehensive metering and cueing controls.

Read on to learn how to get the most from your iDJ²!

THE GRAPHICAL INTERFACE

iDJ² boasts a ground breaking graphical interface, set to revolutionize your DJ experience. The interface provides fast and friendly access to the advanced features of the product, and is designed to fit with how you work. To make this possible, iDJ² is fully multitasking - you can instantly switch between functions, and if one of them is busy for a while (perhaps building a new library) everything else remains accessible.

In this section we'll explore the graphical interface, which takes no more than a few minutes to master, then in later sections we can focus on the DJ features of iDJ².

■ Switching On and Off

Use the power button on the rear panel of the iDJ² to switch on and off.

To switch on, press and release the power button. It will light up red and the iDJ² will start up. Take care not to hold the power button down when switching on, as this will invoke Upgrade Mode (see "iDJ² Software Upgrades" section).

To switch off, press and hold the power button. A timer bar will appear on screen, filling from left to right as long as the power button is held. The iDJ² will power off when the bar reaches the right hand side, which takes about three seconds. This is to prevent accidental power down during a performance.

■ The Display

Central to iDJ² is the large graphical display. Some parts of this are dedicated to certain functions, while others change depending on what you're doing.
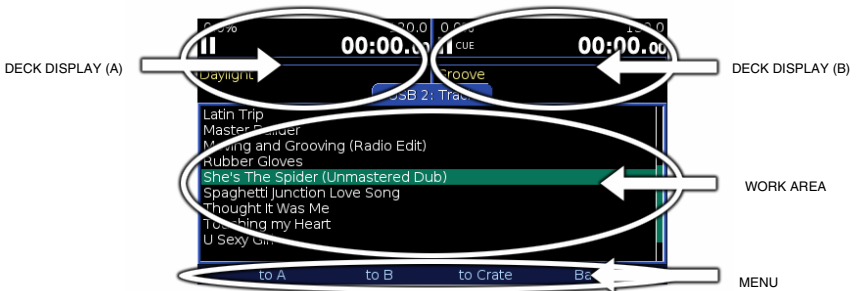

■ Deck Displays

Playback information for each deck is always visible, no matter what you're doing. Here you can check what tracks are cued, time information, pitch adjustment and other important data. See "Views" section for details.

WAIT – this symbol means that the deck is currently busy.

PAUSE – this symbol means that the deck is currently paused.

CUE – this symbol means that the deck is currently paused at the cue point.

PLAY – this symbol means that the deck is currently playing.

AUTOMATIC – indicates that Automatic track loading option is enabled. See "Track Loading" section for more information.

CONTINUOUS – indicates that Continuous track loading option is enabled. See "Track Loading" section for more information.

CYCLIC – indicates that Cyclic track loading option is enabled. See "Track Loading" section for more information.

KEY LOCK – indicates that the Key Lock feature has been engaged. The icon will blink if Key Lock is disengaged but there is still a Key Lock Shift applied.

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■ Menu Bar

At the bottom is the Menu Bar which shows any menu options that are available. Each menu option is displayed above its physical menu button - simply press the button to activate that option. The option will briefly highlight to confirm you have selected it.
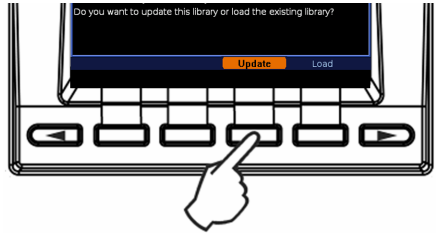

There are four physical menu buttons but a menu is not restricted to just four options. When more options are available an arrow will appear indicating that the next (right) or previous (left) menu buttons may be pressed to move to a different page of options.
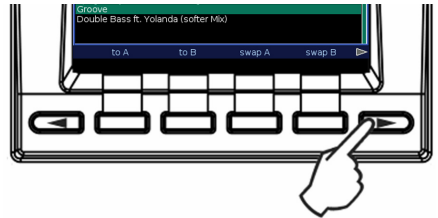
■ Work Area

The largest part of the display is dedicated to the function you are currently using. The four main functions - Library, Crate, View and Utility - each have their own button to select them. The buttons light up bright when their function is selected.

You can always identify what you see in the Work Area from its title bar.
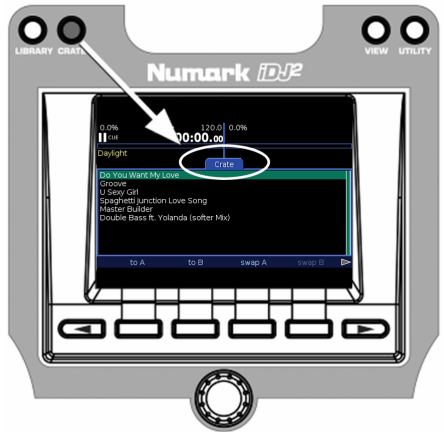

■ Progress Bar

When a large library is being created or updated (see "The Library" section) a Progress Bar will appear just above the Menu Bar. The indicator fills from left to right to indicate how much work remains to be done.

Most functions of your iDJ² are instantaneous, but some intensive actions such as sending a large list of tracks to the Crate can take a few seconds. If a function is expected to take more than a couple of seconds a spinning work indicator is shown so you know work is in progress.

■ Using Lists

iDJ² makes extensive use of lists to give you fast access to your tracks. Lists are displayed within the Work Area and are navigated using the rotary PUSH TO ENTER knob and the Menu Bar.

To move up and down through a list simply rotate the PUSH TO ENTER knob. A highlight on screen indicates which item is currently selected, and if the list is too long to fit on screen all at once it will move up and down as you rotate at the top or bottom of the Work Area. For long lists a bar at the right of the Work Area shows how much of the list you can see, and how far through the list you are.
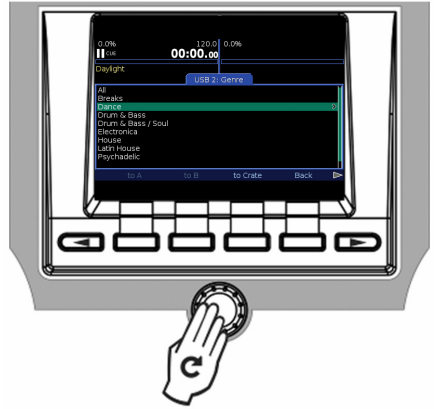
If the currently highlighted item is something that can be selected simply push the PUSH TO ENTER knob. Other options relating to the list or to the currently highlighted item may appear in the Menu Bar.

The best way to get familiar with lists is to build and experiment with a Library. See "The Library" section for details.
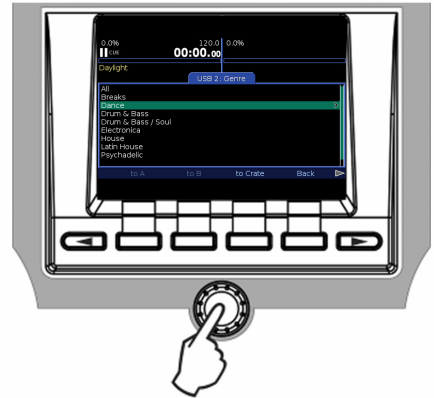
■ Using Dialogs

A Dialog can appear in part or all of the Work Area and is used to provide information, to get a response, to allow you to enter information or to change settings. Sometimes a Dialog may have its own Menu Bar, other times not. There will always be a title so you know to what the Dialog refers.

■ Responding to Questions

When iDJ² needs to send you a message or ask you a question it will do so with a Dialog. If a response is required the options will appear in the Menu Bar. Select the desired option to answer the question and the Dialog will close, returning you to whatever you were doing.

In this example, iDJ² is responding to the DJ's command to clear all tracks from the Crate by checking if he is really sure.

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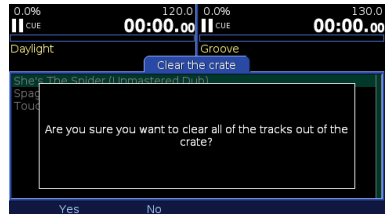
■ Changing Settings

A Dialog can be used to change settings, in which case each setting is shown with the active setting highlighted. Its value can be changed simply by rotating the PUSH TO ENTER knob - some settings have a textual description for each value, others have a sliding bar. To change a different setting, press the PUSH TO ENTER knob. Keep pressing to cycle through all the settings in turn. Settings usually take effect immediately.

In this example the DJ is changing the mode settings for Deck B.
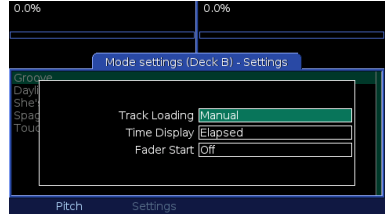
■ Entering Text

A text entry box is used whenever you need to get some text into iDJ², for example while searching for a track or naming a playlist. Unlike other kinds of settings the text entry box has its own menu which works along with the PUSH TO ENTER knob to make it easy to enter text with or without a keyboard. A highlighted box on the right shows the character which you are about to enter and the menu can be used to delete the previous character (Delete), insert a space (Space), switch between lower and upper case (Caps), and finish entering text (Done).

If you have a USB keyboard connected to your iDJ² you can simply type text directly into a text entry box. This is the fastest way to enter text. Use the left and right cursor keys to move around within the text you have entered. The Enter and Tab keys complete text entry the same as the Done menu option.

If you do not have a keyboard connected you can enter characters using the PUSH TO ENTER knob. Rotate left or right to move through each letter, numeral and symbol. To select the desired character press the PUSH TO ENTER knob. When you're finished, select Done.
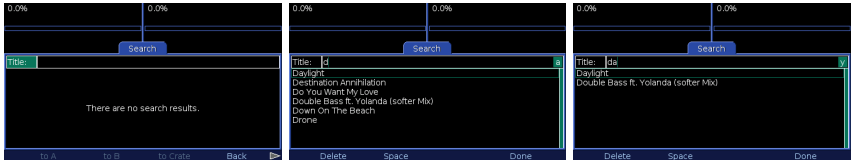
THE LIBRARY

The Library is a collection of tracks which you can browse or search in many different ways. iDJ² allows you to work with several libraries at the same time, either by connecting multiple storage devices or by having multiple file partitions on one device. Whether you prefer to work with one hard disk with all your tracks, or several flash memory keys with different themes, the choice is yours.

PREPARING YOUR STORAGE DEVICE

iDJ² works with most USB storage devices that support the Mass Storage Class standard. See "USB Device Compatibility" section for full details.

Use your PC or Macintosh computer to copy your WAV, MP3 and AAC format audio files to your USB Storage Device. If your tracks are well tagged, you need not organize these in any particular way. iDJ² will make it easy to find the tracks you need. However, if your tracks are not well tagged, or if you prefer to access them by folders, you should organize them in a way that makes most sense to you. Playlists in PLS or M3U format will be included in the library, if present. It's OK to have other kinds of files on the storage device - iDJ² will simply ignore them. However, large quantities of unrelated files will slow down creation of the library so we recommend you use devices that are dedicated to your audio collection.

CREATING A LIBRARY

When your collection is prepared, the next step is to build a library. To access your tracks quickly later, iDJ² will take time to scan your device to note the tracks and playlists you have. The library is stored in a special folder on the device titled ".library" which may be invisible depending on your computer settings. If you want to erase a library, use the Librarian application or simply delete this folder, but in general you should leave it alone.

There are two ways to build a library: either on the iDJ² itself or on your PC or Mac using the Librarian tool.

■ Building with Librarian

The Librarian program, which runs on your PC or Mac computer, is the fastest way to build a library and offers advantages such as building profiles (see "Profile View" section for details). Full documentation is included with the program, which can be downloaded from http://www.numark.com/d2/.

■ Building with iDJ²

If you need to build a library away from your computer, you can use the iDJ² itself. If your storage device has a Write Protect switch, make sure it is in the off position, then insert the device into one of the USB ports. Take care to get it the right way around - the connection should be smooth, do not force it! After a few seconds the New Library dialog will appear...

To build a library, select **Library**. The process will take anywhere from a couple of seconds to a few hours, depending on how many tracks are on your device. While the library is being built, you can play tracks from other devices connected to different USB ports. Once the library has started building, a progress bar will appear to show how much work is remaining.
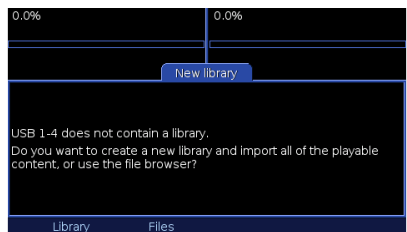
If the device is full, you will be warned and it will not be possible to build a library. If it is almost full, you will be given the option to build a library but should be aware that you might run out of space. In either case it is recommended that you eject the device, erase a few tracks using your PC/Mac and try again. In general, we suggest that you do not fill devices beyond about 98% of capacity so iDJ² will have space for the library and any playlists you may create later.

You could choose to skip building a library by selecting **Files**. In this case you will be able to access the device immediately but only with the Files view - you will not have access to the advanced search and browsing features. This could be useful if the device is on loan to play a request, or if you don't have time to build a library.

When the library is built (or skipped) it is automatically loaded ready for use.

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LOADING A LIBRARY

The library is saved onto its storage device so next time you insert the device it isn't necessary to go through the entire procedure again. When a writable device which already contains a library is inserted, the Loading Library dialog appears...

To load the existing library without checking for any changes, select **Load**. The device is immediately available for use.

If the contents of the device have changed, for example because you transferred some new tracks onto the device, or deleted some old ones, you can update the library by selecting **Update**. iDJ² will scan the device for changes and update the library as needed. If you have added many new tracks, this could take a while and the progress bar will appear. Your library will be available for use when the update is complete.
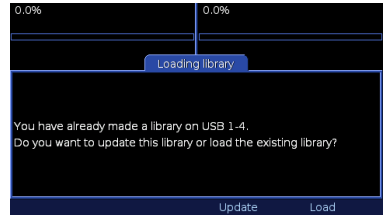
If a write-protected or NTFS device is connected a dialog will appear to warn you about this. The dialog will note whether the device contains a library (in which case it will be loaded) or no library (in which case only Files view will be available).
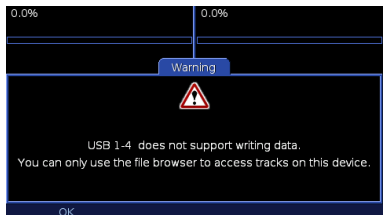
USING A LIBRARY

Press the **Library** button to open the Library work area. If no library is loaded, you will be prompted to insert some media (see "Loading a Library" above). Otherwise, each available library will be listed in the menu bar. If you have several devices or partitions connected, there will be several libraries to choose from.

Although you can interact with one library at a time, you can instantly switch between libraries by selecting them from the Library menu. Each library has a unique name within the menu which indicates how it is connected such as "USB 1" (see "Identifying Libraries" section for details). There is also a device name, such as "Flash Key", which is displayed as the title of the currently selected library.

At the top level the library offers a list of methods to access your content. These are:

↗	*Search*	Text search on Title, Album, Artist or All tags
↗	*Track*	Browse by Track Title
↗	*Album*	Browse by Album Title
↗	*Artist*	Browse by Artist Name
↗	*Genre*	Browse by Genre
↗	*BPM*	Browse by BPM Range
↗	*Year*	Browse by Year
↗	*Playlist*	Browse by or Manage Playlists
↗	*Files*	Browse by File View

Move through this list using the PUSH TO ENTER knob and press to select your desired option. Deeper levels of the library all offer a Back option on the menu to return to the previous level.

■ **Searching**

Searching provides fast, direct access to a track or tracks by matching text that you enter. First, select the type of search you want to perform...

Rotate the PUSH TO ENTER knob or use the arrow keys on the keyboard (if connected) to select the type of search. The search type can be:

↗	*All*	The text is matched against all the tags (not just Title, Album and Artist)
↗	*Title*	The text is matched against track titles only
↗	*Album*	The text is matched against album titles only
↗	*Artist*	The text is matched against artist names only

Once you have selected the desired type of search, press the PUSH TO ENTER knob (or Tab on the keyboard) to move to the text entry box. Now start to enter the search text, either by rotating the PUSH TO ENTER knob or with an attached USB keyboard. The character you are entering is previewed on the right side of the text box. Once you have entered the desired search text, select **Done** from the text entry menu (Tab or Enter on the keyboard). The results will be displayed on the screen. You can now move through the list using the PUSH TO ENTER knob, or press again to move back to the search type option.
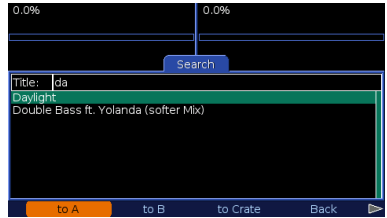
Please note that the first character you enter is a special case - it is always matched against the first character of each tag. So, for example, to list all tracks with a title starting with the letter "D", select a Title search and enter "D".

If a second character is entered, the search text is matched to any position within each tag. So, to search for tracks on an album containing the word "Love", select an Album search, enter "LOVE" (upper or lower case is not important) and select **Done**. The search will match tracks on any album with the word "Love" in its title, such as "The Greatest Love Songs", "Love Boat" and "A Lovely Collection".

Note that searching always returns a list of tracks - you can narrow down by artist, album or other tags and you will see the tracks that are contained within that album or by that artist, etc.

Except when entering text, the search screen offers a set of menu options which refer to the currently highlighted track. If no track is highlighted then only the Back option is available.

↗	*to A*	Send the track direct to deck A
↗	*to B*	Send the track direct to deck B
↗	*to Crate*	Send the track to the Crate
↗	*Back*	Return to the Library top level
↗	*Playlist*	Send the track to a playlist
↗	*Info*	Get detailed info about the track

Menu options to send a track direct to a deck are not available if that deck is currently playing back. You should first pause the deck and then select the option. This will reduce the chance of accidentally replacing a track that could be in the mix.

■ **Browsing**

Browsing offers a different method to find tracks within your library, by navigating through structured lists. Six browsing options are available, each of them narrowing down toward a list of tracks:

↗	Track	Browse by Track Title		
↗	Album	Browse by Album Title	then Track Title	
↗	Artist	Browse by Artist Name	then Album Title	then Track Title
↗	Genre	Browse by Genre	then Artist Name	then Album Title	then Track Title
↗	BPM	Track Title (first in range)		
↗	Year	Browse by Year	then Artist Name	then Album Title	then Track Title

Each list is navigated using the PUSH TO ENTER knob in the usual way, pressing to move to the next level, or selecting the Back option from the menu to move to the previous level. At the top of each intermediate list is an option "All". This means "All Tracks at this Level", so for example could mean "All tracks by this artist" if you previously selected an artist and are viewing a list of albums by that artist. Sometimes there will be an option "<Unknown>" for content where the particular tag has not been filled in.
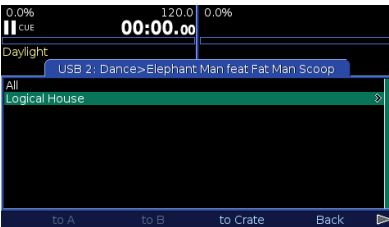
As an example, let's browse for some dance music.
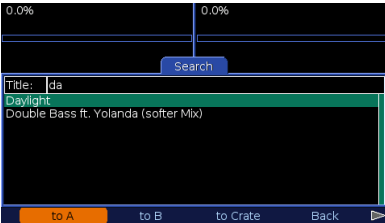
1. From the library top level select Genre, then move to highlight and select Dance.
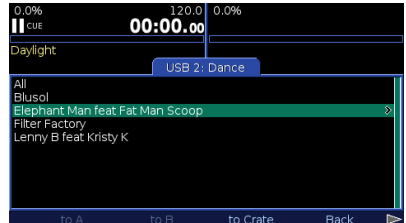
2. A list of artists with dance tracks will appear. Select an artist from the list.

3. A list of albums by that artist (and within the Dance genre) will appear. Select an album from the list.
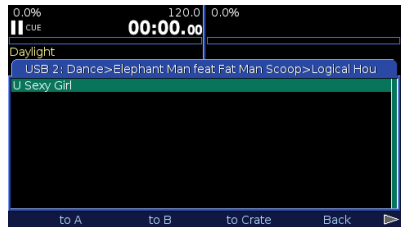
4. A list of dance tracks by your chosen artist (and from the selected album) will appear. You can load the tracks to either deck or send them to the crate.

Browse screens offer a set of menu options which refer to the currently highlighted item. If nothing is highlighted, then only the **Back** option is available; if the item is a collection of tracks then **to Crate** and **Playlist** are also available; or if the item is a track then all options are available.

- ↗ *to A*   Send the track direct to deck A
- ↗ *to B*   Send the track direct to deck B
- ↗ *to Crate*   Send the track or collection of tracks to the crate
- ↗ *Back*   Return to the previous level
- ↗ *Playlist*   Send the track or collection of tracks to a playlist
- ↗ *Info*   Get detailed info about the track

Please note that, as always, menu options to send a track direct to a deck are not available if that deck is currently playing back. The deck will have to be paused before you can load a track to it.

You will have noticed that, unlike the search function, browsing offers the possibility to work with collections of tracks at a time. For example, you could choose to send an entire album to a playlist, or an entire genre to the crate. However, a collection of tracks can never be sent to a deck, which accommodates just one track at a time. Use the crate if you want to play a collection of tracks in turn.

When you choose to send content to a playlist a list of playlists in the library will pop up. Move the highlight to the playlist you want, and select **Add** from the menu, or select **Cancel** to change your mind. If there are no playlists you must first create one using the **Playlist** option from the top level of the Library (see Working with Playlists below).

You may also use the convenient Letter Picker feature to browse and navigate large lists in the Library more quickly. Press and rotate (while holding in) the PUSH TO ENTER knob to bring up the Letter Picker – each click moves by one initial letter at a time and only letters actually used in the list will appear. Then release the PUSH TO ENTER knob to jump to the first entry with the selected initial letter.

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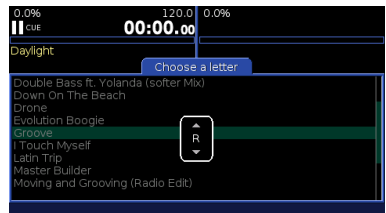
■ **File View**

File view ("Files" from the top level of the library) is available for any device, whether or not a library has been built. It uses folder and filenames so is particularly useful if you prefer to organize your content on disk instead of (or as well as) with tags.

The view starts at the top level (root) of the device and lists folders followed by tracks. Navigate with the PUSH TO ENTER knob, pressing to move into folders and selecting **Back** from the menu to return to the previous level.
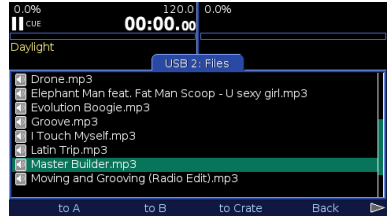
The file view offers a set of menu options which refer to the currently highlighted track. If no track is highlighted then only the Back option is available. Playlist is only available if the device has a library (please note that entire albums or all tracks by an artist may not be sent to a playlist – only individual tracks are allowed at a time).

    ↗   *to A*   Send the track direct to deck A
    ↗   *to B*   Send the track direct to deck B
    ↗   *to Crate* Send the track to the crate
    ↗   *Back*   Return to the previous level
    ↗   *Playlist* Send the track to a playlist

■ **Working with Playlists**

Playlists are list of tracks in a particular order. You can create as many playlists as you wish using iDJ², and you can also create them on your PC or Mac in one of the supported formats (see "Preparing your Storage Device" above). You might use them to save sets, or to organize tracks in a personalized way. You can access and manage playlists from the **Playlist** option at the top level of the library.

- To add a new playlist select **Add**. A new playlist will appear in the list, with the default name "New playlist 1/2/3/etc". Any playlists imported into the library from the storage device will also appear in the list.

- To delete a playlist select **Delete** and then **Remove** to confirm. Once confirmed this cannot be undone so take care!

- To rename a playlist select **Rename**. A dialog will pop up with a text box containing the playlist name. Edit the text in the usual way, select **Done** to confirm.

- To copy the contents of one playlist to another select **Playlist**. It is possible to send a playlist to itself in which case the contents will be duplicated once. The contents of a playlist can be sent to the Crate by selecting the **to Crate** option.

- To browse a playlist, highlight it and press the PUSH TO ENTER knob. A list of tracks in order is displayed with a set of menu options which refer to the currently highlighted track.

    ↗   *to A*   Send the track direct to deck A
    ↗   *to B*   Send the track direct to deck B
    ↗   *to Crate* Send the track or collection of tracks to the crate
    ↗   *Back*   Return to the previous level
    ↗   *Remove* Remove the track from the playlist
    ↗   *Clear*   Remove all tracks from the playlist (requires confirmation)
   ↗   *Info*   Get detailed info about the track

The order of tracks within the playlist is saved so it is possible to re-order them using the PUSH TO ENTER knob. Highlight the track to be moved and press the control. Rotate to move the track through the list to its new position and press again or select **Done** to complete the operation. To drop the track back at its original position select **Undo**.

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As with a PC or Mac computer it is very important to always eject a storage device before unplugging it or cutting the power. This ensures that all files are properly closed and that all data has been saved to the device. Failure to follow this instruction can cause file system corruption which might render the device unusable (if this happens, connect the device to your PC or Mac and follow the file system recovery procedure for your particular operating system – see "Avoiding and Fixing Errors" section).

To eject a library press the **Eject** button. This causes a list of each active library to open...
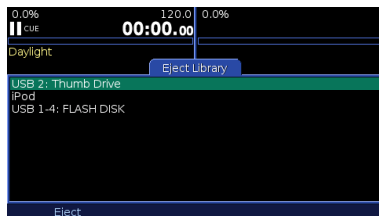
Each library is listed with its short location name and longer device name. Identify which library you wish to eject and move the highlight over it. A message might appear at the bottom of the work area:

In this case you must stop playback of the track or tracks from that library before you can eject. This is to prevent accidental ejection of a library which could be in the mix.
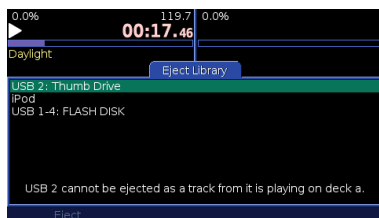
Another warning might appear:

In this case you are warned that some of the tracks in the crate are stored on the library you have selected. If you continue to eject, these tracks will be removed from the crate.

To proceed with ejecting, select **Eject** from the menu. If there are tracks in the crate you will be asked to confirm the operation. Once the library or libraries for a particular device have been ejected and are no longer present in the list it is safe to physically remove the device. If you have more than one device connected take care to remove the right one!
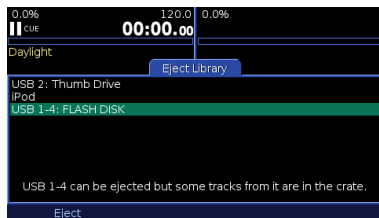
If you are going to switch off the player there is no need to eject the libraries first, provided you switch off by holding the power button for three seconds and not by cutting the power.

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THE CRATE

The crate is an innovative tool for the digital DJ based upon one of the oldest tricks of the trade...

For decades the vinyl DJ has used his record crate as a scratchpad for organizing a set. Records to be played - or to be considered for play - are pulled out, turned and propped above the rest. When no longer needed, the record is dropped back out of sight. Between mixes the DJ can spend time flicking through the collection to find more records to pull out, or to locate requests.

The crate feature of the iDJ² can be viewed much like a conventional record crate. In other words, the crate contains the tracks that you would like to play in your session. You do not necessarily need to have tracks loaded in your crate - you can always directly load them to either deck - however, the crate offers a good way to keep all the music that you would like to use in your session organized and easily accessible.

You might have many thousands of tracks using several different devices as your music sources. Having to browse each library every time you want to select the next track can be time-consuming and confusing. Instead, you can send the tracks to your crate and then easily access them while you perform.

The crate also helps to prevent situations where you might reach for a track that you have already played. When a track is replaced on deck it is thrown out unless you specifically choose to pull it back into the crate.

LIBRARY

↓

CRATE

0.0%   0.0%

DECK A   **DECK B**
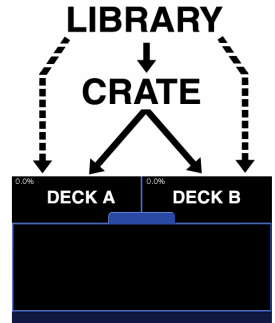
WORKING WITH THE CRATE

In "The Library" we considered several different methods to load tracks into the crate, whether by searching, browsing, from playlists or directly from folders on disk. Now we will discover how to work with that crate.

Press the **Crate** button to open the crate work area.

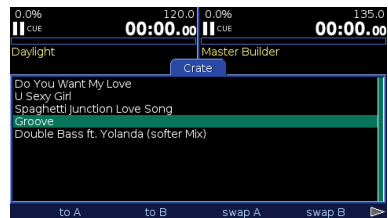The crate comprises a list of tracks and a menu as follows:

↗	*to A*	Send the track to deck A
↗	*to B*	Send the track to deck B
↗	*swap A*	Swaps highlighted track with track on deck A
↗	*swap B*	Swaps highlighted track with track on deck B
↗	*pull A*	Pull the track on deck A back into the crate
↗	*pull B*	Pull the track on deck B back into the crate
↗	*Shuffle*	Shuffles the tracks in the crate
↗	*Info*	Get detailed info about the track
↗	*Remove*	Remove the track from the crate
↗	*Clear*	Remove all tracks from the crate
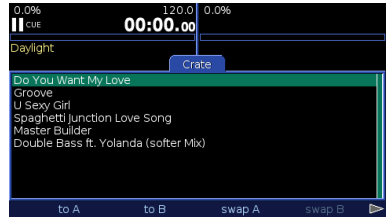
A track can be sent to, swapped or pulled from an inactive deck only. If a track is playing on the deck you must first pause it before sending, swapping or pulling. An example of swapping a track is shown below.
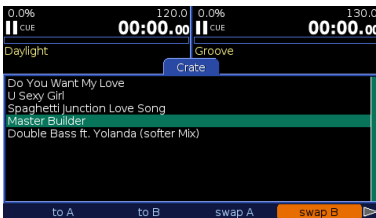
Pause Deck B and select "swap B"   Music loaded on Deck B is swapped with selected track.

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The order of the crate is significant to iDJ² only in continuous play modes (see "Track Loading" section). However, you may choose to maintain a play order as an aid to organizing your set. To change a track's position in the crate, first highlight it, then press the PUSH TO ENTER knob. Rotate to move the track through the list to its new position and press again or select **Done** to complete the operation. To drop the track back at its original position select **Undo**. Note that a track pulled from a deck is always sent to the top of the crate whereas tracks sent from the library always go to the bottom.

The **Clear** operation, which completely empties the crate, prompts for confirmation as it could be a little inconvenient to do this by mistake during a performance!

You may also reorder tracks in the crate by holding down the PUSH TO ENTER knob on a selected track and turning the knob to select its new position within the crate. When you release the PUSH TO ENTER knob, the track will be moved to the selected location. If you are using a keyboard the same operation may be achieved by pressing the Return key on the highlighted track and using the arrow keys to select its new location. Pressing Return again will put the selected track at this location.

LOADING AND SAVING THE CRATE

The crate is stored automatically within the library from which its tracks have been sent. Each time a library is loaded iDJ² checks whether it previously had tracks in the crate and, if so, offers the option to restore them.

Select **Load** to restore tracks to the crate or select **Ignore** to discard them. Once you have selected **Ignore** the crate data is lost forever (of course the tracks are still in the library and can be sent to the crate all over again).

You may be wondering what happens if your crate contains tracks from multiple libraries. In this case parts of the crate are stored within each library. To fully restore the crate, all of the libraries must be reloaded by making sure that all the devices used are connected to the iDJ². If one library is not connected, or should you choose to ignore the crate for that library, a partial crate will be restored from the other libraries. iDJ² will attempt to recreate the crate in the original order, even if the libraries are loaded in no particular order. If this all sounds a little confusing then rest assured that, in brief, iDJ² will simply try to do the most logical thing!

It is intended that the crate is a somewhat short term entity by nature. If you want to save a more permanent running order you should consider using playlists which can easily be sent to the crate in one operation (see "Working With Playlists").
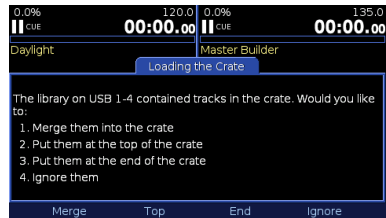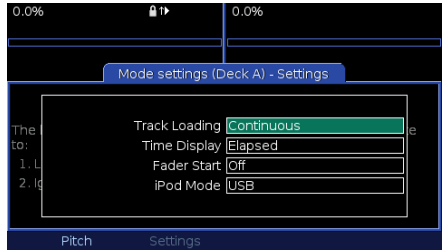
DECK MODE SETTINGS (A AND B)

MODE

MODE buttons, located near the jog wheels of each deck, can be pressed to pop up the settings dialog for Deck A or B. The appropriate button lights up blue while active. Press again to close the dialog.

Use the Mode Settings dialogs to adjust those settings for each deck which do not have their own dedicated button. Mode settings are organized under 2 different pages which can be accessed via the function buttons below the display.
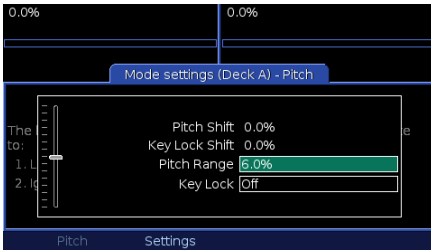
PITCH AND KEY LOCK PAGE   **SETTINGS PAGE**

If you select Pitch, you will be able to view Pitch and Key Lock settings for the deck. If you select Settings, you will be able to view additional settings, such as Track Loading, Time Display, Fader Start and iPod Mode (deck A only).

Turn the PUSH TO ENTER knob to change the selected setting and press down on the knob to move to the next field.

PITCH RANGE

Select the desired pitch range for the pitch slider. Available pitch range settings are:

- **0.0%**
  Disabled the pitch slider.
- **±6.0%**
- **±12.0%**
- **±25.0%**
- **-100%/+25%**

Note: Different pitch ranges allow for different precision over the speed of the music. Selecting a smaller pitch range, such as ±6%, allows you to have more precise control over the speed of the music. Selecting a larger pitch range, such as +25/-100%, allows for more extreme speed adjustments and can be used for interesting effects.

KEY LOCK

Enabling Key Lock will "hold" the key of the music playing on the corresponding deck. While Key Lock is enabled, adjusting the pitch of the music playing on the deck will only influence its tempo independent of its musical pitch.

- **On**
  Turns Key Lock on. You will notice the Key Lock icon becomes illuminated in the deck display area.
- **Off**
  Turns Key Lock off. If there is still a Key Lock shift applied to the deck when Key Lock has been disengaged, you will notice that the Key Lock icon will blink.
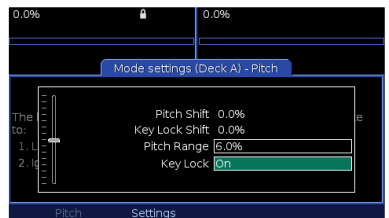

Note: Using extreme pitch settings while Key Lock is activated may result in unwanted audio artifacts. To avoid choppy audio playback please use modest pitch modifications while Key Lock is activated.

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TRACK LOADING

Choose how you want songs loaded and played from the Crate.

- ▪ **Manual**
  Tracks are loaded to deck manually, by you. When songs are finished they return to the start and pause.

- ▪ **Automatic**
  The next song (at the top of the Crate) will be loaded to deck, and cued at the start.

- ▪ **Continuous**
  Like Automatic, but the next song will automatically start to play.

- ▪ **Cyclic**
  Like Continuous, but after each song has played it is sent back to the bottom of the Crate, creating a never ending sequence of playback.
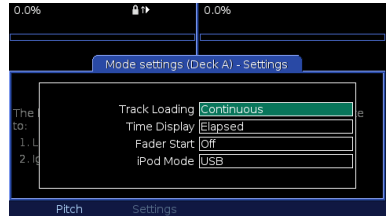
For the modes which automatically load the deck, the following conditions must be met for iDJ² to load the next song:

The previous song has fully played out - or - **The previous song is paused having played more than 75% through**

This is to prevent automatic loading while you're cueing or mixing on the deck.

> *Tip: For continuous looping play of a collection of songs, send your collection to the crate then choose Cyclic from the list of Track Loading options. This works for either or both decks at once! The songs will play continuously from the crate until you pause the decks.*

TIME DISPLAY

Set the time code display mode.

- ▪ **Elapsed**
  Display time elapsed (count up) on the deck.

- ▪ **Remaining**
  Display time remaining (count down) on the deck.

FADER START

Fader Start allows you to start playback on either deck directly from the crossfader. With this feature, every time you move the crossfader toward either side, the track loaded on that deck will begin playing.

- ▪ **Off**
  Ignore fader start signals.

- ▪ **Cue**
  Return the play position to the cue point and pause after fading away from the deck. Resume playback when starting to fade back toward the deck.

- ▪ **Pause**
  Similar to Cue, but pauses at the current position instead of the Cue point.

iPod MODE

This field allows you to specify the functionality of Deck A when using an iPod. You will notice that there are two different options: USB or Direct.

In USB Mode, your iPod will functions as a USB mass storage device. In terms of operation, USB Mode will allow you to load songs from your iPod to the decks and manipulate them in a variety of different ways. This includes scratching, looping, pitch bending, etc. Please note, however, that in this mode you cannot play video files from your iPod.

iPod *Direct Mode*   0.0%
[Exit from mode menu]
Mode settings (Deck A) - Settings

Track Loading Continuous
Time Display Elapsed
Fader Start Off
iPod Mode Direct

Pitch   Settings

In iPod Direct Mode, you can control an attached iPod directly from Deck A's controls and play music as you normally would on your iPod. Please note that in this mode you will not be able to pitch-bend, scratch or loop the audio from your iPod - Deck A will simply act as an iPod player. However, this mode does allow you to output video content from a video-compatible iPod through the S-Video output on the rear of the unit. This will enable you to display video on attached monitor, projection system or TV which supports S-Video.
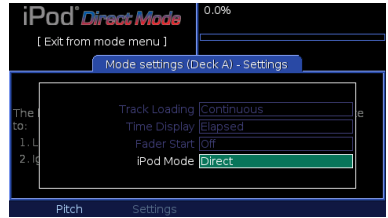
Tip: iPod Direct Mode does not require that a library is built before you can access your iPod's contents. Therefore, iPod Direct Mode is highly useful when trying to quickly cue up and play material from your iPod without having to wait.

▪ **USB**
  Selects iPod USB Mode. In this mode, you can manipulate music from your iPod as you would music from any other USB device.

Important: When switching from Direct to USB Mode, you may need to physically remove the iPod and replace it in the dock.

▪ **DIRECT**
  Selects iPod Direct Mode. In this mode, Deck A will simply function as an iPod player and not allow you to manipulate the music from your iPod. In this mode you can, however, display video content.

For information on iPod Direct Mode controls, please see "iPod Direct Mode Controls" section.

VIEWS

VIEW

You may use the **VIEW** button to access different information about the music playing on the decks. The **VIEW** button will toggle between Track View and Profile View, as explained below.

TRACK VIEW

Track View displays extra information about the tracks loaded on each deck, other than that shown on the deck displays at the top of the screen.

- ↗ *Artist*   Name of the Artist
- ↗ *Album*   Title of the Album
- ↗ *Year*   Year of release
- ↗ *Device*   The device on which the track is stored

PROFILE VIEW

A track profile is a visual representation of a song, designed for quick and easy identification of phrases within that song, differentiated by their "energy". Distinct from a waveform, a profile doesn't show every small detail of the track, just the big changes in terms of energy.

The profile is split into three shades of blue, with black making up the total number of variations to four. The bright blue portions of the track indicate high energy and volume, graduating down to the black sections representing quieter phrases. The length of each profile is scaled to exactly fit the available work area, so the entire track is always visible.
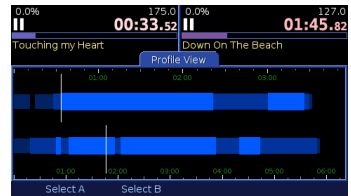
Tip: Use Track Profiles to identify the breaks in a song, much like the changes you see on a vinyl record when viewed using a light across the grooves. Skipping to these breaks is quick and easy using the PUSH TO ENTER knob.

■ **Creating Track Profiles**

Profiles can only be generated using the Librarian tool (see "Building With Librarian" section). For a large library this can take a while, as the entire track must be analysed. Allow several seconds per track on a fast computer.

■ **Working with Track Profiles**

The work area is split into two sections, the upper for Deck A, and the lower for Deck B.

- **Time Indicators**
  Above and below the profiles are markers which indicate the length of each track separated by minutes, with smaller indents for 30 seconds and 15 seconds.

- **Skipping through phrases**
  Use the PUSH TO ENTER knob to seek through the song, having first selected the deck (see below). With each rotation of the control, you can skip through to the next change in the song. You will see a flashing vertical cursor for the deck which is currently selected. Its position in the profile is representative of the playback position in the song.

- **Selecting the deck**
  The decks are, by default, not selected (locked) to prevent accidental seeking through a track which might be in the mix. Choose **Select A** or **Select B** to unlock the required deck. Relock a deck by selecting **Deselect A** or **Deselect B**.
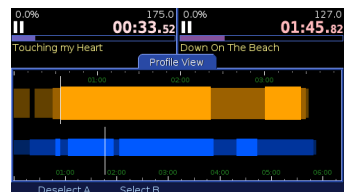
UTILITY

The **Utility** button gives access to System information and settings.

The main utility work area displays the unit serial number. This information is useful if you need to contact Customer Care or check for firmware updates at the Numark web site.

> **Tip:** *It is strongly advised that you periodically compare your firmware version with that available at the Numark web site, and install any more recent version that may be available. New software will be posted regularly to add features and fix problems. See "iDJ² Software Upgrades" section for details.*

Further utility screens are accessed from the menu as follows.

■ Display

From here the display brightness can be adjusted.

Also, a scale of shades from black to white is shown on screen as an aid to setting the display contrast. Adjust the contrast by rotating the PUSH TO ENTER knob until the left most segment of the scale is black, the right most is white, and three shades can be identified in between.
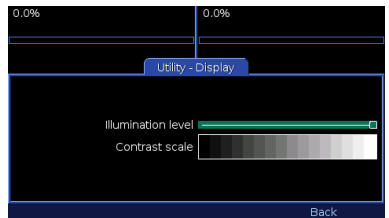
■ Restore

This operation will reset the unit to default settings. Select **Restore** to proceed, or press Utilty or another function button to cancel. Just to be really sure, you will be asked one more time if this is something you want to do. Select **Yes** or **No** as appropriate.

The default settings are:

        Pitch Range 12%
        Track Loading - Manual
        Time Display - Elapsed
        Fader Start - Off
        Display Brightness - Center position

Note that the calibration (see below) will not be reset by this operation.

■ **Calibrate**

This function is used to calibrate the pitch sliders. Your iDJ² has been pre-calibrated at the factory, but the characteristics of the sliders may change slightly over time. If the top, center and bottom positions no longer align with the expected pitch range you should run this calibration routine.

Select **Calibrate**, then when prompted:

1. Move both sliders to the fully upward position (to the -% symbol)
2. Select Next
3. Move both sliders to the center position
4. Select Next
5. Move both sliders to the fully downward position (to the +% symbol)
6. Select Next
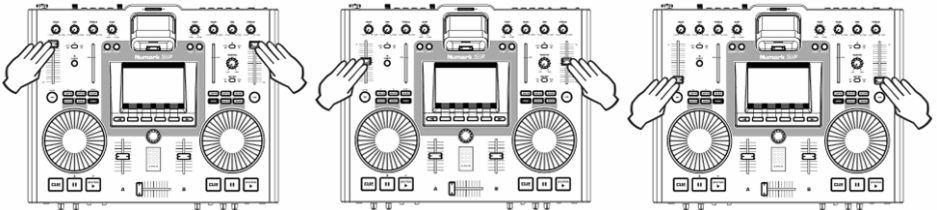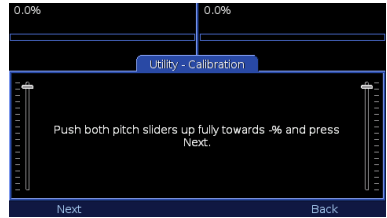
Calibration is now complete. Press the **Utility** button to exit.

> **Note:** If you mix up the calibration procedure by mixing up the minus and plus ends of the scale, the pitch slider will have no effect! Simply re-run the calibration.

■ **Updates**

The Updates page shows the current software version of the iDJ². Please check http://www.numark.com/d2/ regularly for available software upgrades. If the version of the software upgrade on the website is higher than the version of the current software on your iDJ², please follow the upgrade procedure outlined in the next section of this manual.
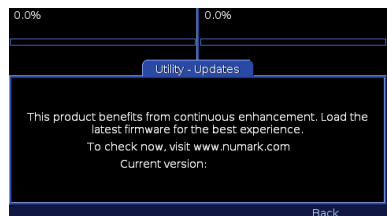
iDJ² SOFTWARE UPGRADES

As we continue to improve and add functionality to iDJ² for the best user experience, software upgrades may be released at our web site. Please check www.numark.com/idj2 regularly for software upgrades and the latest news from Numark.

UPGRADE PROCEDURE

iDJ² features a failsafe upgrade procedure. Should an upgrade fail part way through for any reason (including loss of power) the upgrade process should be restarted from the beginning. However, for your convenience we recommend that you take care to ensure that power is not interrupted until the process is complete.

1. Download the software upgrade (.UPG) file to your computer.
2. Copy the .UPG file to the top level of a USB storage device compatible with iDJ². You should erase any earlier .UPG files from the device. If more than one upgrade file is present the upgrader will use the first one it finds.
3. With the iDJ² powered off, connect the USB device to any USB port.
4. Remove any other connected storage devices.
5. With the DC power jack connected, press and hold the power button until you see the message "Waiting for Media" on screen. This will take about four seconds, after which you can release the power button. If the unit does not display this message switch off and try again, taking care not to release the power button too early.
6. After a few seconds, provided iDJ² is able to locate the connected .UPG file, the message "Any key updates to version ..." will be displayed.
7. The version of the firmware upgrade is indicated.
8. Press any button (except power!).
9. The firmware upgrade will be loaded, a process which can take up to about a minute. After several seconds a progress indicator will be shown to give you an idea of the work remaining.
10. Once the update procedure has completed a message will confirm successful loading. Select OK and the unit will switch off.
11. The upgrade procedure is now complete. Now you may power on the iDJ² as you would normally. Be sure to read the release notes at the Numark web site so you'll know what's new!

    Note: If iDJ² detects that the upgrade file is identical to the firmware already loaded, it will not load the update.

IMPORTANT INFORMATION ABOUT UPGRADING
The iDJ² upgrade procedure may only be performed with a FAT-formatted USB device.

To check if your USB device is formatted with the FAT file system;
*   Under Windows, right-click the device in your Explorer, select **Properties** and check the **File System** category. Please make sure that it says FAT, FAT16, or FAT32.
*   Under MacOS, hold down Apple, click the device and select **Get Info**. Check the **Format** category and make sure that it says "MS-DOS File System (FAT16)" or "MS-DOS File System (FAT32)".

If your device is not formatted with the FAT file system, you will need to reformat it before using it for upgrading:
*   Under Windows, right-click the device in your Explorer and select **Format.** Under the **File system** tab select FAT and click Start to format the device.
*   Under MacOS(10.4), go to **Applications -> Utilities** and double-click on **Disk Utility**. Select the device from the browser on the left and then select the Erase tab. Under **Volume Format**, please select "MS-DOS File System" and then press the **Erase** button below to format the device.

PLEASE NOTE: Formatting a device will erase any of the data which is currently on the device. Please make sure you save all data you wish to keep to your hard-drive first.

Numark iDJ²

KEYBOARD SHORTCUTS

If you have a USB keyboard connected to your iDJ², you can access some handy shortcuts:

TEXT ENTRY
Used in the text entry 'widget'; when searching and during renaming playlists etc.

(When not editing)
- Return = starts editing

(When editing)
- Cursor left / right = Moves caret
- Return / Enter = DONE and move focus to next field
- Escape = Clears or cancels entered text
- Home / End = beginning / end of string
- Backspace = Delete backwards
- Delete = Delete forwards
- Caps-lock and number-lock are honoured

LISTS
Used when browsing the library
- Left (or) Up = Same as rotating PUSH TO ENTER knob anti-clockwise
- Right (or) Down = Same as rotating PUSH TO ENTER knob rotary clockwise
- Return = Select (same as PUSH TO ENTER press)
- Page up / down = Page up / down
- Ctrl-Page up / down = Top / bottom of list
- Escape = Go back up one level

SLIDER
- Left (or) Up = Move slider left
- Right (or) Down = Move slider right
- Ctrl-left / right / up / down = Move to beginning / end of slider

COMBO BOX
- Left / Up = Previous item
- Right / Down = Next item

GENERAL
- Tab = Move focus to next field
- Shift-tab = Move focus to previous field

MENU BUTTONS
- CTRL + 1,2,3,4 = Buttons one through four of the function buttons
- CTRL + Cursor Left / Right = Pages left and right for available menu pages.

GENERAL SHORTCUTS
- Ctrl + F = Begins a "Title" search, similar to pressing F2
- Ctrl + L = Goes to Library window
- Ctrl + C = Goes to Crate window
- Ctrl + U = Goes to Utility window
- Ctrl + V = Goes to View window
- Ctrl + E = Goes to Eject window

- Escape - Cancel any popup windows

- F1 = Open search browser for current library, set to "All" and put keyboard focus in the text entry widget
- F2 = Begins a "Title" search
- F3 = Begins an "Album" search
- F4 = Begins an "Artist" search
- F5 = Browse by Genre
- F6 = Browse by BPM (with correctly tagged tracks)
- F7 = Browse by Year
- F8 = Playlist menu
- F9 = Files (File browse the device directly)
- F10 = Library (press again to change to next library, if available)

USB DEVICE COMPATIBILITY

This section explores the technical aspects of connecting USB devices to iDJ². For many users much of the detail will be irrelevant - the player will simply do the expected thing. However, it is a good idea to familiarize yourself with this information so you are prepared for any unexpected issue that might occur while working.

USB CONNECTION

iDJ² is a USB Media player. It has no storage of its own, but rather external storage is connected via up to three USB ports (one at the front, two at the rear). This allows three devices to be connected directly to the unit, which is ample for most situations. However, USB hubs are also supported for extending the possibilities to at least twelve devices. Hubs must be connected directly to the iDJ²; connecting a hub to a hub is not supported.

The USB specification limits the amount of power a USB port can provide. Some devices, particularly motorized devices such as hard drives, require more power than can be taken from one port and so ship with an AC Adapter or a second USB cable. Please be sure to use the adapter or cable to ensure reliable operation. We recommend that hubs should be of the powered type to ensure that sufficient power is available for the devices connected to them, especially if any of those devices are motorized.

When connecting to the USB ports, take care to get the plug the right way around. Forcing a plug the wrong way could damage the connectors both of your device and iDJ². For your convenience you may choose to connect USB extension cables to the iDJ² ports, and your devices to the cables. This is fine however you should avoid the use of excessively long (greater than 1 meter / 40 inch) extensions as these can cause unreliable operation.

SUPPORTED STORAGE DEVICES

iDJ² is compatible with most USB storage devices that support the Mass Storage Class standard. This includes USB hard drives, flash memory keys, flash card adapters and personal music players. Devices that require device driver installation on your PC or Mac might not be compatible. Devices must comply with the USB 1.0, 1.1 or 2.0 standards including the specification for bus powering (no device may draw more than 500mA from one port).

Although iDJ² has been tested with a wide variety of devices, it is of course impossible to test with all of the thousands of variants that exist. If you discover a compatibility issue, please let us know, stating the type, make and model of the device and where and when you bought it. It is likely that any problem is due to the device deviating from the USB standard, however sometimes it is possible to accommodate even these devices in a future firmware update.

iDJ² supports devices with multiple partitions. Each partition that contains a supported file system will show up as a separate library. When ejecting, be sure to eject all of the partitions before removing such a device.

If your device has a Write Protect switch we recommend setting it to Off. iDJ² can work with write protected devices but some functionality will be lost, such as creation of playlists and saving of the crate. A device must be write enabled to create a library, however an existing library on a write protected device can be loaded.

IDENTIFYING LIBRARIES

Each library in use has a unique name which indicates how it is connected, like this:

↗	USB 1	USB Port 1 on rear panel
↗	USB 2,	USB Port 2 on rear panel
↗	iPod,	iPod connected to the iPod dock on the top panel
↗	USB1: iPod	iPod connected to the USB1 Port on the rear panel
↗	USB 1-1	Port 1 of a hub connected to USB Port 1
↗	USB 1-4	Port 4 of a hub connected to USB Port 1
↗	USB 1b	The second partition on USB Port 1
↗	USB 1-2c	The third partition on Port 2 of a hub connected to USB Port 1

In most cases, for simple devices connected direct to the unit, you will simply see USB 1, USB 2 or iPod.

Each library also has a device name which is displayed within the user interface. This name is taken from the storage device itself and will vary from device to device, manufacturer to manufacturer. Examples include:

- ↗ USB DISK
- ↗ Hard Disk Drive
- ↗ iPod

Some badly behaved devices, often flash memory keys, provide gibberish titles. For your convenience, you can set your own title by creating a file named volume_name.txt in the top level directory. The file should contain your desired title in plain text up to 20 characters.

SUPPORTED FILE SYSTEMS

Supported file systems are FAT16, FAT32, HFS+ and NTFS (the latter is supported read-only). The FAT16 and FAT32 file systems are commonly used by pre-formatted media devices and are compatible with the vast majority of computer systems. NTFS is commonly used by Windows computers, especially for larger drives. HFS+ is the default format for the Apple Macintosh computer, and is also the default file system for the Apple iPod personal music player. Another Macintosh file system is HFS, which is older and not compatible with the iDJ². Some Macintosh computers still allow you to format your media with HFS ("Mac OS Standard").   To ensure that your device will work with the iDJ², we recommend formatting with HFS+ "Extended" or "Journaled".

> *Important: When formatting your media on a Mac, some systems default to formatting with "Mac OS Standard (HFS)". This file system is not supported by the iDJ² and should not be used. Please make sure that you are formatting with either the "Extended" or "Journaled" file system format.*

In general, we recommend formatting devices with FAT32 whenever possible, as this is the most widely supported format. Windows XP does not support formatting hard drives larger than 32GB with FAT32. However, there are free programs available that do support this.

> *Note for NTFS: The NTFS file system is supported Read-Only on iDJ². This limits the functionality slightly, and requires that you use the Librarian tool to build a library (see below). When possible we recommend formatting FAT32 instead.*

If none of this means very much to you, don't panic! Most USB storage devices come ready formatted in a format likely to be compatible with iDJ².

AVOIDING AND FIXING ERRORS

The most important advice to remember is <u>ALWAYS EJECT THE LIBRARY</u> before removing it or switching off (see "Ejecting a Library" section for details). Failure to do so can and will lead to file system corruption which could be extremely inconvenient while working. This advice applies equally when disconnecting media from your PC - both Windows and MacOS provide methods to safely remove devices.

This is particularly important for HFS+ media which must be connected to a Macintosh computer after unsafe removal before it can be used again with iDJ².

If you think your media may have become corrupted you should connect it to your PC or Macintosh computer for maintenance. Under Windows, bring up the device properties and select "Check Now" on the Tools tab. Under MacOS, run the Disk Utility application.

DEFRAGMENTATION

During normal use a storage device can become fragmented. Fragmentation is a condition whereby files become split up into many parts. This is invisible to the user but degrades performance, potentially slowing down library access and causing glitches during playback. From time to time you should defragment your media to ensure reliable operation. Under Windows, run the Disk Defragmenter program. MacOS does not include a defragmentation program as HFS+ does not suffer from this problem. However, both commercial and free programs are available to perform this task for non HFS+ media.

KEEPING YOUR DATA SAFE

Just as it is important to backup your PC hard drive, it is equally critical to always backup your data for iDJ². No media is infallible - every flash key, hard drive or flash card has a finite life and it is your responsibility to ensure your data is safe and secure. Never ever gig with the sole copy of your content, always work with a backup and preferably carry another backup with you in case a device fails (or is lost or stolen) while you work.

While you take the time to make your backups, consider how lucky you are to be able to carry two complete copies of all your tracks in your pocket or a small bag. Take simple precautions and embrace the digital age!

Some encoders offer a choice of sample rates from 8KHz to 48KHz, however iDJ² always resamples to 44.1KHz so there's nothing to be gained from encoding at a higher rate than that.

iDJ² can extract tags from MP3 files using the popular ID3 format. We recommend using ID3v2, as this offers greater flexibility in the length of tags and types of information that can be stored (BPM for example).

Many packages support encoding to MP3, some commercial and some free. Some suppliers charge an additional fee for MP3 encoding above 64Kbps (which is far too low a bitrate for professional use).

■ AAC

This format, invented in the late 90s, also started out in the broadcast industry. Its breakthrough in the music industry came with its adoption as the default format for Apple iTunes and the iPod portable music player. Sometimes this format is known as MP4 or MPEG-4 although more correctly it is Part 3 of the MPEG-4 standard. The most common file extension is .M4A.

AAC has improved performance over the older MP3 format leading to superior sound reproduction for the size of file. The greatest improvement is with low bitrate files, but this is less relevent to the professional user and at higher bitrates the formats are considered about equal in sound quality.

iDJ² can extract tags from AAC files using the M4A format, supported by many popular audio applications.

If you use iTunes to encode your music collection, chances are it is in AAC format (using the M4A file extension). However if you purchased music from the online iTunes Music Store you should be aware that this protected content cannot be played by iDJ², or by any other digital music player other than the Apple iPod at this time. This limitation is imposed by Apple.

■ WAV

WAV (or Wave) format has been in use for many years and is a simple (usually uncompressed) audio format. Although the file extension is the same, WAV files can contain various formats of digital audio - iDJ² can play the popular 16-bit PCM format. At 44.1KHz sample rate this is a faithful reproduction of CD audio. The format is useful if you want to be sure of the best possible sound quality, but as a result the files are large (typically five to ten times larger than an MP3 file).

There is no standard for tagging within WAV files and at this time iDJ² will use only the filename to identify a track (this is represented as the track title).

MIXING TUTORIAL

Now that you have familiarized yourself with the iDJ², let's try a quick mixing tutorial. This tutorial will help you better understand the process and steps required to blend one track into the next. For the purposes of this tutorial, let's assume that you are mixing music from an attached USB mass storage device or iPod. The fundamental concepts can be applied to mixing music from external sources, such as turntables and CD players, just as well.
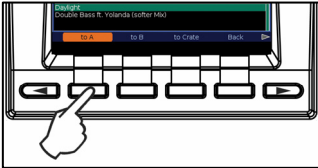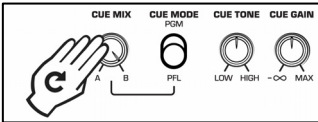
1. Load a track to Deck A by selecting To A while viewing a track in the Crate or Library.
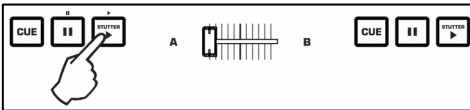
2. With the crossfader in the left-most position (Deck A), press PLAY to begin playing the track.
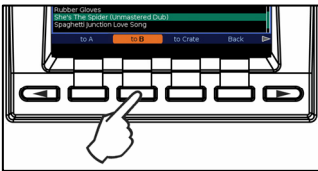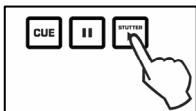
3. While the track is playing on Deck A, select another track and load it to Deck B.
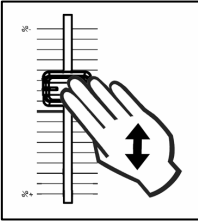
4. Set the CUE MIX knob on the front panel to audition Deck B in the headphones.
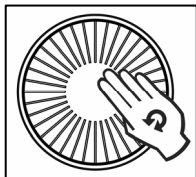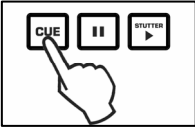
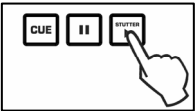5. Use Deck B's jog wheel to cue the first downbeat of the track in the headphones.

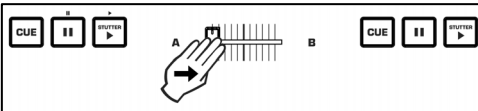6. Press PLAY on Deck B when the music on Deck A hits a downbeat.

7. Use Deck B's pitch slider to match the tempo of the track to the music on Deck A.
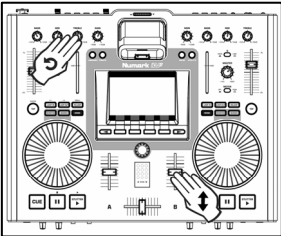

8. When you have matched the tempo, press CUE on Deck B to return and pause at the cue point.


9. When you are ready to start your mix, press PLAY on Deck B.

10. Use the crossfader to transition from Deck A to Deck B.

11. As you are transitioning to Deck B with the crossfader, use the volume sliders, gain and EQ knobs for each channel to adjust the sound. If the incoming track is starting to drift in time, use Deck B's jog wheel to make adjustments to the tempo so Deck B's music "locks" with the beat playing on Deck A.
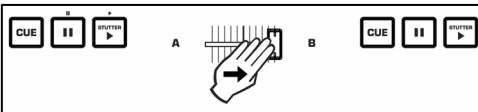
12. When you wish to complete the transition, move the crossfader all the way to the right (Deck B). You have successfully completed a mix! Repeat the procedure to continue mixing.

As you can see, mixing is not too difficult! Good mixing, however, does take some time to perfect. As you practice, you will get a better sense of which musical material goes well together and how you can create smooth transitions between tracks using the volume, EQ and crossfader controls. Do not get discouraged if your mixes are not sounding professional right away – practice makes perfect!

TECHNICAL SPECIFICATIONS

Output Level	1.4V RMS 0dBFS
SNR	80dB A-weighted
THD+N	0.06% -6dBFS 1kHz
Frequency Response	20Hz – 20kHz +/- 1.5dB
Audio Path	24-bit 44.1kHz
Pitch Ranges	+/- 6%, +/- 12%, +-25%, +25%/-100%
Weight	6.5lbs (2.948kg)
Dimensions	402mm (W) x 77mm (H) x 329mm (D)

LICENSING INFORMATION

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http://www.numark.com/idj2/

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