djDecks

Manual

djDecks Version: Latest Update to this document: Website: 0.78 #4893 December 19, 2006 <u>http://www.djdecks.be</u>

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Introduction

djDecks is the ultimate tool for computer mixing and dj'ing. I will explain the basic features and lay-out of djDecks as it is installed by default.

Please note that both the skin and the keyboard shortcuts can be configured to how you prefer them.

djDecks consists of two decks on which you can play your mp3, wav, ogg, wma and flac files as well as audio cd's, connected by a central mixer window and a song browser and playlist.

If necessary, a third deck can be brought up using the menu, but it is not shown by default.

Each deck can load one song, which can be controlled by starting, stopping, and pitching cueing, looping it. Information such as title, artist, bit rate, bpm, song position and waveform is available on each deck. The bpm (beats per minute) indicates the tempo of the song and is used to match the tempo of different songs. djDecks can automatically detect this tempo for most songs.

The effect window allows you to apply various tempo-aligned effects to the music including advanced Echo and Flanger effects. The equalizer's frequencies can also be changed on this window, allowing various filter effects. If you want more effects, djDecks can also load any <u>vst effect plug-ins</u>, which allows you to use third party effects within djDecks.

The mixer (the center window) connects the two decks. You use the mixer to mix your songs. From this window, you can change volume, gain and cue volume. There also is a 3-band equalizer for each deck, as well as a crossfader and main volume.

If you prefer to use an external mixer that you may already have, this is possible with djDecks as well.

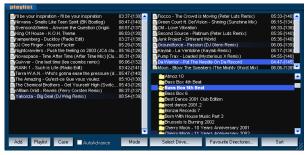
On the mixer window, there's also a display that can show a spectrum equalizer, general mix information or be used to alter crossfader settings, record a mix or control the third deck.

Selecting songs is also very easy with the file browser/playlist that reads ID3v1 and ID3v2 tags for mp3's, as well as ogg, wma and flac tags and presents the songs in the format you want.

All information for each song is saved using ID3v2 tags, which means all information you need for the song is stored. (BPM, title, artist, length, cue points, ...)

Other features of djDecks include controlling the songs with a real turntable and timecoded records (see <u>http://www.djdecks.be/vinylcontrol</u> for more information) and controlling djDecks with an external midi controller. djDecks also offers native support for the Hercules DJ Controller, the Behringer BCD-2000 and the EKS XP10.

The Playlist and File Browser



To get started you need to load songs first. This can be done with the playlist/file browser.

The File Browser

The easiest way to select files is by using the file browser, which is the right side of the playlist window.

In the lower part you can select the drive and directory and in the upper part the

songs found in that directory are shown. For easy access to your most used music directories, you can use the Favourite Directories button which stores 5 custom directories and 5 recently used directories.

If a directory does not contain any songs but has less than 4 subdirectories, the contents of these subdirectories are shown. For example, when you have a directory called 'Some Album' with subdirectories 'CD1' and 'CD2' the complete cd is shown when you select the 'Some Album' directory.

Once you have selected the directory you want to load a song from, you can either put the song in your playlist to play it later, or you can immediately load it to one of the decks.

To add the song to your playlist, simply double-click it, or drag it to the playlist. You can then continue to search for other songs you would like to play later.

To load a song from the browser directly to one of the decks, drag it to the deck you want to load it in, or right-click the song and select 'Load in Free Player', which will select the deck that is currently not playing a song. If no player is currently available (both players are already playing a song), the song is not loaded and you need to stop one of the players before you can load the song.

The file browser also allows you to delete and move files by right-clicking them. This makes it easier to manage your music library.

If the file you want to move is playing, it will stop playing, the file will be moved and will start playing again at the position where it stopped. If the song is loaded into memory, you will not even notice the file being moved.

The playlist

To load a song that you have added to your playlist, double-click it to load it in a free player, right-click it and specify which deck you want to load it in or drag it from the playlist to the preferred deck. When you select the deck manually, the song will be loaded in that deck, even if it was still playing a song. Use with care!

If you want to use the third deck, you have to add the file to your playlist, and then rightclick and select load in third player. After that, the third player will show up. Of course you can delete a song from your playlist (not from your hard disk) by selecting the song and pressing the delete button on your keyboard.

Searching

If you press F1 while either the browser or the playlist window is selected, a search window will show up. Enter any part of the song title, artist, cd or any other kind of data stored in the tag to search for. djDecks will search in its tag cache, which consists of all directories you have browsed to from within djDecks. If you want to make sure that djDecks searches in the correct folders, or to update the tag cache, you can use the Menu->Build Tag Cache... option to manually select a folder to add to the cache.

Record Cases

To make it even easier to find and sort the music you want to play, you can sort your music in 'Record Cases'. You can create new crates or load existing ones using the 'Case' button at the bottom of the playlist window.

Record Cases are automatically saved when you exit djDecks. If you want, you can also manually add existing .m3u playlists to this button by copying them to c:\program files\djDecks\settings\username\playlists

You can even sort the playlists in different subdirectories if you want.

There are a few default record cases which have a slightly different behaviour. The first one is the **current** playlist. It is the playlist that is selected when opening djDecks, and whenever you start djDecks, it starts empty. If you want to recover your current playlist from a previous session however, you can do so by selecting it from the 'case' button list when starting the program. As soon as you've added a new song to the playlist, the old current playlist is not accessible anymore.

The second special record case is the **loadedsongs** playlist. It will also start empty when you start djDecks, but when you load songs in any of the decks, those songs will be added to this playlist. It also works similar to the current playlist in that you can recover the last loaded songs by opening it before loading any new songs.

Audio CD's

You can use your audio cd's directly from within djDecks, but there are a few things you need to know on how to load them. The first option is to drag&drop .cda files from the windows explorer onto the deck you wish to load the track in. The second option is to select your cd drive in the library. To see the tracks or update the list when you insert a new cd, you need to press F5. If an internet connection is available, djDecks will also try to look up the track titles in the <u>freedb database</u> and show them instead of the track numbers.

Windows Explorer or Other Music Library programs

If you rather use the windows explorer, you can use that as well. Drag songs in the playlist to add them to the playlist, or on one of the players to load a song. You can also use your favourite music library program, as long as it supports drag&drop to load a song, or is specifically made to work with djDecks.

Colouring tracks

Another feature of the djDecks playlist is that you can give a song a specific colour. That makes it easier to find songs in a particular genre or to be played for a specific time or occasion. The colour is also stored in the song's tag, so it stays with the file wherever you move it. To select the color, simply right-click the file either in the playlist or in the file browser, and press 'Select Color'. You can now choose the colour for the song, or you can choose to remove the colour.

lcons

Each song has an icon in the djDecks playlist and file browser. In the default skin, it can have 4 colours. When the icon is blue, this means you have already played this file in this session. When it is red, the file is changed less than a week ago, and when it is yellow, the file is changed less than a week ago, allowing you to see which files are new. All other files are coloured white.

The Decks



Play and Cue

You can see which song is loaded at the top of each player. You can scroll the title by clicking and dragging it with your mouse. What information is shown and how it is shown can be altered in the options dialog.

Use the green Play/Pause button to play and to pause a song. When you pause a song, the current cue-point will be set at the current position in the song. You can use the red stop button while playing to return to the cue point.

Pitch and Pitch Range

The speed of the song can be changed with the vertical slider next to the jog wheel.

Left-clicking will simply change the pitch, while right-clicking will have the pitch sliding toward the new pitch. Use the 'Reset' button to reset the pitch to normal speed and the 'Auto' button to synchronize the bpm's to the other deck. Again, you can use the right mouse button to slide towards the new pitch slowly.

The default pitch range is 8%. By clicking the pitch range button, you can select between 8, 16, 24, 50 or 100% pitch range.

Position

You can seek to any position in the song by clicking on a position in the position bar. You will see a visual overview of the track in the position bar. A more detailed overview of the music is shown in the area above the position bar. If you have enabled the option 'High Quality and Zoomable waveforms' from the Visuals options, you can set the zoom level by dragging the detailed position bar up or down. Right-clicking will reset the zoom level to the default. Note that this option is only recommended for fast computers.

Looping

If you want to loop some beats, press the number of beats you want to loop. To deactivate the loop, press the number again. The loop will only work well if the bpm was successfully detected. By default, the loop's end point will be the current play position, so that you have heard what you want to loop before you press the button. Some people prefer to set the start point of the loop when clicking, so if you want this you can configure this on the 'General' tab of the options dialog.

Cue Points

To store a cue point, first press the CueRec button. The CueRec button is now lit up. When you click on one of the numbers next to it, the current position will be stored in that position. When you want to return to that position later, simply click the number of the cue point you want.

Player Menu

You can access the player menu with the menu button. Use the menu to edit/show tags of the current song. If you have external hardware such as a turntable or cd-player connected and configured in djDecks, then you will be able to select these external inputs from this menu. If you have installed the FinalScratch, SSL, VirtualDJ or MsPinky digital vinyl plug-in, then you will also be able to start these from this menu.

Beats per minute

BPM, or *Beats per Minute*, give an indication of a song's tempo. Fast songs have a high BPM, slow songs have a lower BPM. This value does not only give you an indication of how fast a song is, but it can also be used to synchronize the tempo of 2 songs, so that you can fade from one song to



another seamlessly. The bpm number in the BPM box is the bpm found in the song's tag, or the best automatically detected bpm yet. When it is white, it is likely that the bpm is accurate; when it is grey it may not have been detected correctly yet. There is also a bpm reading next to the time elapsed/total time display. This is the bpm as automatically detected by djDecks, along with the accuracy. As soon as 20% or more is reached, the bpm is likely to be correct, but may not be accurate enough for mixing yet.

Automatic BPM Detection

The Automatic BPM Detection is enabled by default, but you can turn it off in the options if you don't want to use it. The detection is started as soon as the song is loaded in the deck. When the accuracy of the detected BPM is high enough, the displayed BPM will get a brighter color. Because beat detection isn't always 100% accurate, you may still want to fine-tune the bpm yourself. After the bpm is set, it is stored in the ID3v2 tag so you don't need to set it again later. The BPM Value in grey next to the track time indicates the bpm value currently found by the automatic detection, as well as a value indicating how accurate the detected value is. If it is greater than 50% then you can be pretty sure that the value is correct.

Manual BPM counter

By tapping the 'Beat' button every time you hear a beat, you can manually set the bpm. To increase accuracy, click very short and try to click as constantly as possible. After about 15 to 20 beats the BPM value will turn white. When you see the value isn't changing very much you can stop clicking.

Now you have to fine-tune the bpm. Right-click the 'beat' button when you hear a beat to make sure the LED's are synchronized to the music. Follow the LEDs, listen to the music and see if the LEDs run faster or slower than the music. If they are running faster, lower the bpm by clicking the down arrow and right-click the 'beat' button again when you hear a beat. If they are running too slow, click on the up arrow and right-click the 'beat' button again when you hear the beat. Repeat this until they are as exact as you can get them. You only have to do this once for each song because the BPM are saved in the tag when you exit the program.

If you feel the bpm is still not correct, you can fine-tune by holding Shift while pressing the arrows. This will increase or decrease the BPM by 0.1 instead of by 1.

Jog Wheel

The jog wheel can be used to temporarily speed up or slow down the song to get it synchronized with another song. Use the right mouse button on the jog wheel, and keep it pressed while moving the mouse up or down to speed up or slow down the song.

The more you move your mouse, the more the song will slow up or down. As soon as you release the mouse button, the pitch will return to where it was before.

You can also use the left mouse button on the jog wheel to do some mouse scratching.

The Mixer Window



pictures of the loaded song or album.

Crossfader

Fade to the left or the right deck. Use left mouse button to set the fader to the centre, or use middle mouse button to fade to a position.

Settings

On the main window, you will also find a digital LCD-like display. The function of each tab is explained here.

General

This tab shows the current Crossfader behaviour, a VU meter, the Master Volume (The bar left of the VU meter). It will also indicate clipping and limiter status, and if available it will show

Fader

You can select one of four crossfader curves as well as the time it takes to fade from one deck to another (in seconds). If you want to be able to quickly switch between one deck and another with the shortcut keys, it is recommended to set the slide time to 0.1 seconds. You can also configure the decks' brake and start speed to create turntable startup/shutdown effects. (Click the numbers and drag your mouse up or down)

Decks

This will show the waveforms from both songs next to each other. This way you can check visually if the beats are synchronized.

Deck 3

You can use this tab to open the third deck, and to control volume and equalizer of the third deck.

Console

On the console tab you can see the latest system messages as well as some status information.

Spectrum

On the spectrum tab you can see a spectral display of the music.

Recording

Recording is explained later in this document.

Vinyl Control

If you want to use turntables or cd players to control djDecks using timecoded records, you can use this tab to quickly activate/deactivate vinyl control on each deck. This tab also shows some information about the timecode quality.

Volumes

At the left and at the right side of the mixer, there is a slider to control the volume for each deck. The smaller horizontal slider controls the volume of that deck to your headphones. You can use the 'cue' button to quickly turn the headphone volume on or off. The gain knobs can be used to give an additional volume boost to songs that are recorded too quiet, or to soften songs that are recorded too low compared to your other songs. 1.0 means normal volume, 2 means twice as loud, 0.5 means half as loud.

The master volume is the total volume that goes to the speakers. You can lower it with the master volume knob. The Cue Balance is used to send a certain amount of the master output to the headphones as well.

Equalizer

There is a 3-band equalizer for each deck. The left slider controls the low tones and the right slider the high tones. You can right-click on a slider to set it back to its default value. You can use the kill switches to remove a certain range of the audio with one click.

FX, PL, MENU

The FX button toggles the effect panels on or off, the PL button toggles the playlist window on or off, and the Menu button will show a menu to access the options dialog.

Beat-matching

When you have loaded two songs with their BPM set, you probably want to synchronize them so the beats run together.

Start one song. Start the other song. Click on the 'Auto' button on the other player (the one you don't hear yet) to synchronize the beats. Now slowly fade to the other song until you can hear the beat very silent. They probably aren't synchronized; this is what we still have to do.

The easiest way to do this is to use the 'jog wheel' (rotating lights) on the other player. Keep the right mouse button down on the record. This will do nothing. When you slide your mouse up or down, the pitch will go up or down as well. When you release the mouse button, the pitch will go to its original state. Now slide up or down until the beats are synchronized. Hearing if a beat is before or after the other beat requires some skill, but you will learn this after a lot of practice.

Now you can continue fading to the other player. Because the BPM's you have set might not be 100% correct (both players might be about 0.1/0.2 BPM different) you might have to fine-tune constantly while mixing. If it seems one song keeps running slower or faster than the other, you should change the pitch using the pitch bar. Try not to slide more than 5% up or down while the song is playing, because this will probably be audible.

Pre-listening (Headphone Cueing)

A lot of methods for pre-listening are supported by djDecks.

- If your soundcard has 4-speaker output (front and rear), you can use the front out for your speakers and the rear out for your headphone.
- If you have 2 soundcards, you can send the master output to one soundcard and the headphone output to the other soundcard.
- If you have a soundcard with multiple outputs and an ASIO driver, you can select which output is used for the master output, and which is used for pre-listening.
- If your soundcard has only one output, you can split the left and right channel so that the left channel will be the master output and the right channel will be the headphone output.

These modes can be selected in Options->In/Out->Output Mode.

With pre-listening, you can use headphones to synchronize beats without the audience hearing it.

External mixer

To use an external mixer with djDecks, you can use one of the following modes :

- One soundcard; player1->front, player2->rear
- One soundcard; player1->left, player2->right. This option cannot be selected directly, but can be achieved by using 'Master Only' output mode, and pan one player left and the other right.
- Two soundcards: player1->card1, player2->card2
- One soundcard w/ ASIO: Each deck to a different output (up to 3 decks in this case)

If you are using an external mixer, you can just set djDecks' crossfader in the middle so that you can use your mixer's faders to control the volume. djDecks does this by default at start-up when you selected one of the external mixer output modes.

There also is an option to disable the crossfader entirely to make sure that you don't use it by accident when using an external mixer.

Recording MP3, Ogg and Wave Recording



You can record your mix to an mp3, wave or Ogg file. If you want to record your mix, first go to the recording tab on the main window. Now press the New File icon and select where you want to save your mix and in what format (wav, mp3 or ogg). When you are ready to record, press the record button.

Recording directly to ogg or mp3 will use more cpu power than recording to wav. For relatively new computers this should be no problem, but for slower computers, or when you notice that djDecks is running rather slow while recording to mp3, your computer is probably not up to it and you better try recording to wav first, and compressing it to mp3 later. (You can find some free programs to convert wav's to mp3 or to ogg at <u>rarewares</u>. Recommended programs are LameDrop for mp3 and OggDropXPd for ogg's)

You can change the bitrate on the options dialog. The default is 160kbps CBR using the high-quality lame encoder for mp3. For Ogg, the default quality is 5.00, which produces files around 160kbps.

All recorded files are 16-bit audio files. The samplerate depends on the output samplerate selected in djDecks, and defaults to 44.1 kHz. When you are finished mixing, make sure you press the stop button so that the file is saved properly.

While recording a mix from djDecks, djDecks will also automatically write a <u>cue file</u>, containing the track title, artist and time you played the song. This file can later be used to burn your mix on a cd.

Shoutcast

It is also possible to stream your mix live to the internet by using the winamp shoutcast plugin. To do this, you must first install the shoutcast source plugin into the djDecks folder. You can get this plugin at http://www.shoutcast.com/download/broadcast.phtml You will only be able to install it into your winamp directory (so you must first have

winamp 5 installed) Now you can open a windows explorer and go to c:\Program Files\Winamp\Plugins. There you will find the files dsp_sc.dll and lamedll.dll. Select both files and select copy (or CTRL+C). Now go to the djDecks directory at c:\Program Files\djDecks, and paste the files here (or press CTRL+V).

When you start djDecks again, an item will be added to the main menu. To start the plugin, simply press Menu->Start/Stop Shoutcast plugin. When you want to close the plugin, simply press Start/Stop Shoutcat plugin again.

More information about how to use the shoutcast plugin, as well as how to set up a shoutcast server and get people to listen to it can be found on http://www.shoutcast.com

Oddcast 3

Oddcast 3 is another winamp plugin that can be used from within djDecks. It can stream ogg, mp3 and aac to an icecast2 server. Ogg Vorbis streams give a far better sound quality than mp3 (with ogg, you can have a 44.1khz mono stream at only 32kbps), but may not yet be supported by all players. It is supported by <u>Winamp 5</u>

Configuring an icecast2 server and configuring the oddcast3 plugin might be a bit more difficult than configuring a shoutcast server though.

At <u>http://www.oddsock.org/tools/</u> you can download and install "<u>OddcastV3 DSP For</u> <u>Winamp And Foobar2k</u>"

After installing it, you need to copy dsp_oddcast_v3.dll from your winamp\Plugins directory to the djDecks directory, and the following files from the Winamp directory also to the djDecks directory: bass.dll, ogg.dll, vorbis.dll, libFLAC.dll, libOggFLAC.dll and pThreadVSE.dll.

When the files are copied and you start djDecks, there will be a Menu item called start/stop Oddcast 3 plugin which can be used to start and stop the plugin.

At the same website, you can also download a compiled version with installer of the Icecast 2 server for windows.

More information about the icecast server can be found at <u>http://www.icecast.org</u>

Effects



The effects currently included are a 3-band equalizer, flanger, echo, gapper, loop, tempo control, filter and bitcrusher. You can select an effect by clicking on the number next to it. You can assign a different effect to a certain number by right-clicking it. Since there are only 7 slots available, this is also necessary to select some of the effects not listed by default. To enable an effect, press the 'TAP' button. The parameters that can be controlled depend on the effect. The touchpad can be

used to control 2 parameters at once.

You can change which parameters are controlled by the touch pad by using the 'X' and 'Y' buttons next to each parameter. All effects are tempo-synchronized.

3-band Equalizer

This is the effect you are probably going to use most in your mixes. To cut away a frequency-band, lower the vertical sliders on the mixer window. The equalizer tab on the effects panel allows you to change the frequency at which each band works. You can use this to cut more or less from the sound. Moving the slider 'low eq freq' more to the right will cut or boost more of the bass of the sound. Moving the slider 'high eq freq' more to the left will cut or boost more of the high frequencies.

Flanger

First press the tap button to enable the effect, and then use the depth slider to control the amount of the effect, and use either the buttons or the slider to control the length of the effect. You can use the 'high pass' parameter to make sure the effect doesn't affect the bass frequencies. The 'mode' and 'sound' sliders can be used to adjust the sound of the flanger.

Echo

This effect has a lot of parameters, but you can get a lot of cool effects out of it when you understand how to use them. The depth slider controls how much of the sound is echoed. You normally shouldn't set it at 100%, because that will make the sound go louder and louder, until you only get a lot of noise. The length slider controls the length of the echo. You can also select the length as a number of beats by using the buttons. The high and lowpass sliders control how the echoed sound is filtered.

Gapper

The gapper is an effect that quickly turns the sound on and off. The speed can be selected with the length slider, or with the buttons. The depth slider controls the strength of the effect. The shape parameter switches between square and sine wave behaviour. Sometimes the square wave behaviour is too strong, so you can better use the sine wave behaviour.

Loop

The loop tab is just an extension to the loop buttons on the decks. The difference is that you get a lot more options ranging from $\frac{1}{4}$ beat up to 16 beats. You can also move the loop forward and backwards, and increase/decrease the length of the loop using the X and Y buttons. Right-clicking the button will move the loop by one beat or change the length by exactly one beat.

Tempo Control

To use this effect, simply turn it on with the tap button. When turned on, whenever you change the speed of the record, the pitch remains the same (so your songs will sound faster, but not higher). This is quite useful when you have 2 records that you want to match together that are very different in speed. If you set the 'automatic' parameter to the left, you can manually change the tempo with the tempo parameter, which will make the music sound higher or lower, without affecting the speed.

Filter

You can select this effect by right-clicking an effect slot number and select 'filter'. First enable it by pressing the tab button, and then use the filter slider to filter the sound. When you move the slider to the left, you will cut off high frequencies first, and when you move the slider to the right, you will first cut off the low frequencies.

Use the bandwidth setting to specify the resonance of the filter. (Lower means more resonance)

Bitcrusher

This effect actually introduces specific kinds of distortion. The bit-depth parameter changes the amount of bits used to represent one sample. The downsample parameter specifies how much to reduce the samplerate of the sound. The downsampling is done with a very simple algorithm that also introduces some new sounds. The easiest way to understand what it does is simply trying it.

Finally the overdrive parameter is just a gain followed by soft clipping, creating a very hard and distorted sound.

VST Effect

To load a vst effect, use the Load button. To enable it, use the tap button.

The first 7 settings can be edited with the sliders on the effect panel. Some vst effects include a graphical user interface to edit all parameters. You can open this interface by using the 'Show' button. With the drop down you can select a preset if the plugin has any presets defined.

Currently, in the default skin, there are 2 vst effect slots available (you can replace any of the other effects with the second vst effect slot by right-clicking the number in front of the effect, and selecting vst effect 2) This means you can have 2 vst effects loaded and working at the same time.

Cue points

There is always one active cue point for each player in djDecks. It will be set as soon as you press the pause button, and it can be moved forward and backward with the shortcut keys q and w for player 1, and e and r for player 2. You can also move the cue point by dragging the right mouse button up or down over the jog wheel while the song is paused. When you press the stop button while playing, the play position will return to the cuepoint. When you press the stop button again, the play position will move to the beginning of the song.

If you want to play the song from the cue point multiple times (for repeating a vocal or a kick bass for example) you can use the shortcut keys 3 and 4.

3 will start the song, and play as long as it is pressed. When released the song returns to the current cue point. 4 will do the same for player 2.

It is also possible to store and restore such cue-points. To store a cue-point, simply set the position of the song to the point that you want to store, then press the 'cue rec' button, and then press one of the numbers to select a slot to save the cue point in. By pressing the number again you will return to the stored cue point. The cue points are stored in the tag when you exit djDecks.

Scripts

To allow you to perform a number of actions at once, djDecks has a scripting system to perform multiple actions at once. Scripts can be started when djDecks starts, or by pressing a midi button.

More information about how to create and use scripts can be found <u>on-line</u>.

Keyboard shortcuts

There are some keyboard shortcuts that make it easier to do some things than by using the mouse. It is possible to add new shortcut keys, or load another shortcut key scheme in the options dialog. Here's a short overview of the djDecks default shortcut keys:

5	4,6 5 1,3 8,2	Fade to left deck, fade to right deck. Set the slider to the center Cut player 1, player 2 volume as long as the key is pressed. Fade a small part to left or right deck
Left arrow	,	Will play the song in reverse.
Right arrow		Fast forward at a speed of 150%
F1->F4		Play, Pause, Stop, Loop 4 beats on/off for player 1
F5->F8		Play, Pause, Stop, Loop 4 beats on/off for player 2
F9->F10		Pitch 0.1% down, Pitch 0.1% up for player 1, use CTRL for 0.02%
F11->F12		Pitch 0.1% down, Pitch 0.1% up for player 2, use CTRL for 0.02%
q		Move Cue point for player 1 10 ms back
w		Move Cue point for player 1 10 ms forward
e		Move Cue point for player 2 10 ms back
r		Move Cue point for player 2 10 ms forward
Home		Set Main Volume to 0%
End		Pause all songs
Page Up		Increase Main Volume
Page Down		Decrease Main Volume
a,z s,x d,c		Increase, Decrease equalizer Low Mid High for Player 1
f,v g,b h,n		Increase, Decrease equalizer Low Mid High for Player 2
		Use in combination with ctrl (0.25) or shift (0.125) for slower
		increase and decrease of the equalizer.
1,2		As long as you keep the number pressed, that song will loop 4 beats. Use in combination with ctrl, alt or shift to change the length of the
3,4		loop. Play the song starting from the cue point for as long as you hold the key pressed. (Stutter effect)
		Scroll in the file browser, even if one of the decks is selected
		Load the selected song in the left or the right player
CTRL+up/down		Scroll in the playlist, even if one of the decks is selected
CTRL+left/right	t	Load the selected song in the left or the right player
CTRL+q		Previews the selected song in the cue channel. Press again to stop
CTRL+w/CTRL+	e	Seeks forwards/backwards in the preview song
u,i		Pitch Bend Down, Up for Player 1
o,p		Pitch Bend Down, Up for Player 2
ESC		Switch focus between playlist and decks

External Controllers Hercules DJ Console

Full documentation and instructions on configuring the Hercules dj console can be found on the <u>djDecks website</u>.

Once the dj console is configured to be used in djDecks, the controls will work as follows: The play and cue buttons work the same as in djDecks. You can browse through a song by using the forward and backward buttons.

If the song is stopped, you can move the cue point by using the jog wheel. If the song is playing, you can use the jog wheel to bend the pitch up and down to synchronize two songs. By using the 'Master Tempo' button, you can switch the wheel's function from pitch bending to scratching. You can also pitch bend by using the pitch bend + and - buttons.

You can use the 'Auto Beat' buttons to match the pitch of that deck to the bpm of the other deck. Note that usually djDecks has already done this automatically when loading a new song, but it may be necessary if no bpm info was available for that song yet. The cross fader and the equalizer knobs will work as you would expect.

By default, the pitch faders will act as volume sliders, and the volume knob can be used to increase/decrease the pitch. You can however configure djDecks to use the pitch slider for the pitch and the volume knob for the volume. Note however that in this case you will not be able to use the auto beat buttons anymore since the pitch will be overridden by the pitch fader.

To cue a song on the headphone output, you can press the headphone button. Because the buttons on the DJ console do not always respond very well and because there is no headphone button on the DJ Console MK2, you can also turn on the headphone output by moving the joystick to the right-top for the second deck, and left-top for the first deck. To turn the headphone output off again, you just move the joystick to the right or left bottom. To change the volume of the headphone output, you can hold the headphone button pressed, and then move the jog wheel.

For the effects, button 1 will activate a 4 beat loop, button 2 will activate the flanger effect, and button 3 will stutter the song as long as it is pressed. With the effect selection button, you can cycle through 4 modes: default, loop, cue and fx. In Loop mode, buttons 1, 2 and 3 will activate a loop, but with different length (2, 4 or 8 beats)

If you are using external inputs such as a turntable, hold the cue button pressed for a few seconds to switch to line input mode on that deck.

By holding the tempo control button pressed, you can also turn on vinyl control.

EKS XP10

You can connect up to three of these controllers in djDecks, however you can only use two of them for audio output in DirectSound.

The play and pause buttons work the same as in djDecks. You can move forward or backward in the song by using the left and right buttons.

If the song is stopped, you can use the jog wheel to move the cue point. Using the inner part of the wheel will move the cue point faster. If the song is playing, you can use the jog wheel to bend the pitch up or down. You can use the 'play mode' button to switch between regular and simulation mode. In simulation mode, you can use the inner part of the wheel to perform scratching.

There are two modes for the pitch slider. In the default, absolute mode you can simply set the pitch to the value that you want. You can switch to relative mode by using the 'Pitch Mode' button. In relative mode, you can still use the 'Auto' button in djDecks to match the tempo of one song to the other song, but you can then fine-tune the pitch by using the pitch slider on the XP10. You can use the 'Pitch Range' button to select the pitch range.

To start a 4-beat loop, simply press the loop button. If you want to increase or decrease the length of the loop, use the up and down buttons while after you have activated a loop with the loop button. To exit a loop, press the loop button again. You can move the loop forwards or backwards by using the jog wheel while the 'IN' button is pressed.

If you have only one XP10, you can still use it to control both decks. Use the A key to have the unit control the first deck, B to control the second deck, or C to control the third deck.

Behringer BCD-2000

This controller is also fully supported. Documentation on how to use it in djDecks can be accessed from <u>the djDecks website</u>.

Options

There are a lot of options available to configure how djDecks works. When you start djDecks for the first time, a lot of the options will already be set optimal, based on your computer's speed and memory.

In/Out

Output Driver:

- DirectSound: This is the default output mode. It works with almost any soundcard, but the latency is higher than with ASIO.
- waveOut: Use only when you are experiencing problems with DirectSound. Not recommended, usually very high latency.
- ASIO: Only available on soundcards that support ASIO. This is recommended for lowest latency and highest quality.

Output Mode:

- 1. Master Output: Will just send the sound to the output.
- 2. Master to front, Headphone to rear: Use this with a 3D sound card (make sure speaker mode is set to 4 speakers). The Master will go to the front output, the Headphone output will go to the rear output
- 3. Master to left, Headphone to right: If you can split the stereo output to 2 mono signals, this will work the same as the previous mode, but also on non-3d soundcards.
- 4. Player1 to front, Player2 to rear: Also with a 3d sound card in 4 speaker mode, use this to mix the sound with an external mixer.
- 5. Player1: card 1, Player2: card 2: Use this when you have two soundcards and an external mixer.
- 6. Master: Card 1, Headphones: Card 2: Use this when you have two soundcards, and you don't want to use an external mixer.

Sampling rate: Default is 44100 Hz. On SoundBlaster cards, 48000 Hz is recommended for optimal sound quality.

Buffer Size: (Milliseconds) Increase the buffer size if the audio stutters or skips. Decrease it to decrease latency. This has no effect when output mode is ASIO.

Streaming ASIO: Strongly recommended if you have less than 512MB RAM and you want to use ASIO mode. This will load only a part of the file into memory instead of the whole file. Another advantage is that you don't have to wait until the complete file is loaded before you can seek to a different position in the track.

ASIO Control Panel: Open the control panel of the selected ASIO device. Can be used to configure buffer size and sample rate.

Inputs: Select the inputs of your soundcard you want to use for either passing sound through, or for controlling mp3's using timecoded vinyls or cd's.

When ASIO inputs are selected, you can pass the input through one of the players by pressing the 'Menu' button and selecting Start Line Input #1 or #2.

Apply RIAA Correction: Use this only if you don't use phono pre-amps and your turntable only has phono outputs.

Sound

Mixer Quality: Setting the mixer to "Highest Quality" will improve the sound quality, especially on pitch changes. Higher quality will also use more processing power. If you have a very fast pc, you can manually enter "Insane Quality" for even better quality. **Output:** Mono or Stereo. In ASIO mode, mono will require only half as much memory. **ASIO CPU Load:** This can range from about 10 to 100. The higher you set it, the faster the song will load but the more likely it will be that the sound will start to skip while loading. Default is 55.

Memory per stream: This sets the amount of memory djDecks can allocate for each deck. Recommended maximum is about $1/4^{th}$ of the amount of memory you have.

Maximum Memory per stream: When using ASIO with Streaming ASIO disabled, determines the maximum amount of memory to allocate for one deck. If the song is longer than this, then the file is opened in Streaming ASIO mode instead.

Equalizer Type: This will change how the equalizer sounds. Try both and see which you like best.

Auto Gain: To make sure that all your songs sound equally loud, you can enable this option. If you want to use this, it is also recommended to enable the 'real time calculation' check box. This will perform the necessary calculations to determine how loud each song sounds automatically when the song is loaded. This is only done the first time you play the mp3. After that, the result of the calculation is stored in the tag.

Note that this feature takes some processing power when the loudness information is not yet available. Disabling the 'Real Time Calculation' will only set the correct gain when replay gain information is available in the tag. When it is not available, the song will be normalized to peak volume.

For more information about the algorithm used, visit <u>http://www.replaygain.org</u> **DC Filter:** This filters the 'Direct Current' from the main output. By applying effects or by mixing 2 songs, it is possible that some direct current is added to the sound, which is not really good for your amplifier or speakers.

Odb Limiter: This limits the output volume at maximum volume. It does not alter the sound quality as long as the output doesn't clip. When the output would clip, this filter decreases the volume resulting in a smoother sound. It is recommended to leave this option on for best sound quality.

Adapt volume with pitch (vinyl mode): When enabled, the volume will be louder when you increase the speed of the song (similar to regular vinyl records). It is recommended to enable this if you want to obtain the most realistic scratch sounds.

Cue output before effects and eq: When enabled, the sound you hear in the headphones will not be altered by the effects or equalizer. When disabled, you will hear the sound exactly as you will hear it through the speakers when you turn up the volume.

Visuals

Skin: Select the skin you want to use from the available skins. Currently, only one skin is included by default. Let me know if you have created a new skin or wish to create one. You can find information about the skin system and how to create your own skins online at http://www.djdecks.be/index.php?module=docs&sub_help=skinning.php

Rescaling: In case you want to increase or decrease the size of the windows, you can change this value.

0 means rescaling is done automatically based on your resolution, 1 means no rescaling is done to the original size, 1.2 is 20% larger, 0.8 is 20% smaller, ...

Draw Waveform: This will draw a waveform giving an overview of the track, which makes it easier to see breaks coming, or to set the cue point right visually.

High Quality and Zoomable Waveform: Since this uses quite some cpu power, it is only recommended for pc's faster than 2Ghz. When enabled the waveform will be drawn smoother, and by dragging it with your mouse you can zoom in or out.

Stripes/Second: The default number of stripes per second that the waveform consists off. A greater value will give a more zoomed-in waveform; a smaller value will give a zoomed-out waveform.

Program FPS: Recommended to leave this at 40. If you want to lower djDecks' cpu usage, you can decrease this value to 20 or even less.

Playlist

Playlist format: This is how the items on the playlist are show. Everything after \\\ will be right-aligned.

Browser format: This is similar to the playlist format, but is used for the file browser. **Artist and Title Info Format:** Specifies how the song information is shown on the decks when the song is loaded. Possible fields are: %[Album], %[Title], %[Artist], %[Comments], % [Genre], %[Year], %[Track], %[BPM] and %[kbps]

Experienced users can also add new fields by editing the file \djDecks\settings\ playlistcolumns.cfg

Playlist Column Mode: This will show the playlist in columns. You can change the columns and the order by changing the 'playlist format' string.

Directory Browser Picture Mode: This will show icons in the directory browser for each folder. A jpeg picture inside the folder will be used. If more than one picture is found, the picture with the name folder.jpg is preferred, or the first picture found is used. File Browser Picture Mode: This will show icons for the songs in the file browser. The pictures can be loaded from the id3 tag of the song, or a .jpg file with the same name as the file. If no picture is found, the picture of the directory the picture is in will be used. Picture Size: Sets the size in pixels of the icons used in picture mode.

General

Calculate BPM: Automatically calculates the bpm for each player. Also enable the alternative method if you want to detect DnB,RnB,rap,rock,... correctly. Disable the alternative method if you experience sound stuttering.

Disable Auto BPM Matching: By default, djDecks will try to match the bpm of two songs by changing the pitch as soon as you load the song. If you don't want this to happen automatically, enable option. this **Disable Crossfader:** This will disable the crossfader. Useful if you use an external mixer so can't diDecks' accidentallv move internal vou crossfader. Disable warning when loading a new track in a playing deck: If you try to load a song in a deck that is already playing, a warning is shown, which can be disabled with this option. Auto Cue: This will automatically set the cue point to where the music starts. This is useful when your songs have some seconds of silence at the beginning.

Activating loop sets start of loop: By default, when you start a song, you set the end of the loop, so that you loop what you already heard. With this option, activating a loop sets the start of the loop, so that you will loop what will be coming next.

Playing sound while cueing: If you use the an external controller (dj console, xp10, bcd2000, ...) by default the jog wheel will move the cue point when the deck is stopped, but you will not hear the sound. Enable this option to hear the sound while using the jog wheel.

Logging: There are three types of log files that can be written, containing the songs played during a set. Text and m3u playlist logs are stored in the djDecks\logs\username folder, and are named per date. Text logs also contain the hour and the start of the session the songs were played in.

A scrobbler.log file can be used to update your <u>last.fm</u> statistics.

DMC1/DAC2: If you have such a hardware controller, you can use it with djDecks by enabling this setting. Support for this hardware is still beta, and I'd be interested to get some feedback from people who have this controller.

Hercules DJ Console: If you have such a controller, you can use it in djDecks. See <u>the</u> djDecks website for more information.

EKS XP10: If you have such a controller, you can use it in djDecks.

Behringer BCD2000: You can use this controller by enabling this option. More info about how to use it can be found on <u>the djDecks website</u>.

MIDI: You can now use your midi device in djDecks. Use the config button to open up a dialog box in which you can bind midi controls to actions in djDecks. First you have to select a midi device in the list that you want to use. To bind an action to a control, first move the slider or press the button on your midi hardware that you want to use. The 'incoming midi message' text should change. Now press the 'Use MIDI message' button to copy the correct values to the fields below. Finally, press the 'Learn command' button to bind the midi control to an action. After you have pressed the learn command button, just click on a slider or button that you want to bind to the control. You can see a list of the currently allocated bindings at the bottom of the dialog. Double click an action to edit it. Use the clear button to clear the current bindings, and use the save and load buttons to store and retrieve midi presets.

Save ID3v2 tags: Will save changes to the tags of mp3, ogg and flac files on exiting. Tag changes include title, artist, ... information, as well as cue points, bpm and gain information. Waveform information is not stored in the tag, but in djDecks' own tag cache. If this option is disabled, changes will still be stored to the tag cache, but this can be cleared upon upgrading or removing djDecks.

Get Length while browsing: Songs that have not been opened yet will not show their length in the file browser. To show the length of these files, enable this option. Note that this will open each of these files, which might make browsing a little slower.

Keyboard

Keyboard Layout: Select your keyboard layout: qwerty (us/uk/...), or azerty (belgian). This will make sure the position of the shortcut keys is the same on all keyboards. **Preset:** The default preset is the djDecks preset, but you can store your own keyboard presets if you want.

To create a preset, first enter the name of the preset, then make the changes you want, and then press the Save Preset button.

Command: To add or edit a shortcut, first select the key textbox and type the key you want to edit (you can also use combinations with shift, ctrl and alt). Select the action you want for this key in the command drop down box. A default value for parameter will automatically be filled in. What a parameter does depends on the command selected. In most cases, it determines how much the parameter should change. For example, when the command is fx_eq_mid_up, a parameter of 1 will bring the mid equalizer slider up to its maximum; 0.5 will only bring it up half as much. Player selects which player the action should be done to. If you select Active player, the action will be done on the player that you last clicked on. When you want to save the shortcut, just press OK. After pressing ok, you can repeat this until you are finished.

DMC1/DAC2: If you have such a hardware controller, you can change what each button does similar to how you change the keyboard presets.

Vinyl Control

Only available when you have a vinyl control plugin installed. Currently djDecks supports the FinalScratch, Serato Scratch Live, VirtualDJ and MsPinky records. More information about this and how to set it up correctly can be found at <u>http://www.djdecks.be/vinylcontrol</u>

Lead in Time: Time on the record before the song starts. Increasing this will put the start further on the record (useful if the first part of the record starts to wear). On some versions of the finalscratch vinyl without lead-in timecode, you may have to set this to -20000 to have the song start at the beginning of the record.

Vinyl Speed Multiplier: This can be used to extend the pitch range of your turntable. It can also be used to play the 33rpm side of the control record at 45rpm, or the 45rpm side at 33rpm.

When using loops: Using loops while using vinyl control in absolute mode can lead to some obvious problems because the time on the vinyl keeps increasing, while the song's time will be reset at each time. Therefore if you want to use loops while in absolute vinyl controlled mode, there are a few possible options. djDecks can automatically disable vinyl control when you start a loop (the song will keep on playing, but you can't control it with the control vinyl anymore), you can have djDecks switch to relative mode (you can still adjust the pitch, but not the position) or you can have djDecks stay in absolute mode (as soon as you disable the loop, the position will jump to the current position on the record, so a part of the song is skipped)

Default Vinyl: If you have different kinds of vinyl, you can select here which you want to use as default for each deck. When you press the Vinyl Control button, djDecks will start vinyl control with this vinyl type. Of course you can still manually select another type by starting vinyl control to the decks' menu.

Pitch Smoothing: Selects the algorithm used to smooth out pitch fluctuations. Usually the default most recent algorithm is preferred, but in some situations the other algorithms may give better results.

Relative Mode: When you start vinyl control mode the first time, it will start in relative mode (pitch, direction only, no position) when this switch is turned on.

Super Relative Mode: With this mode, you will get the benefits of pc mixing and of mixing with turntables, but it might be a bit complicated to understand how it works exactly at first. What it will do is whenever you turn on vinyl control, it will detect the pitch on the turntables, and adjust the vinyl speed multiplier so that it matches the pitch of the song in djDecks. So suppose you are already playing a song in deck A at 8%, and your turntable is spinning at -3%, and you enable vinyl control, then the song will continue to play at 8%. When you then increase the turntable's speed to 0%, the actual song's speed will be about 11%.

The advantages of this mode are:

-You can use the 'auto' button in djDecks to match the bpm's of the song, even while using vinyl control mode.

-You can extend the pitch range of your turntable (If your turntable is set at 8%, switch off vinyl control, move the turntable back to 0%, and re-enable vinyl control. You can then again speed up the record from 8% to 16%)

-It makes mixing with only one turntable easier (you can swap vinyl control from one deck to the other, make adjustments, and swap back without pitch jumps, even if both tracks are playing at different speeds)

Auto Calibration: Use this to automatically adjust gain and pitch variance settings for optimal performance. It will also detect common errors with the incoming signal due to bad wiring or wrong connections.

Latency: This is not the same as your soundcards latency. It is the average time used to detect the pitch of the incoming signal. Increasing this will improve the stability of the pitch; decreasing it will give a better pitch response, which might be useful for scratching.

Minimum Sensitivity: This is the sensitivity to the timecode signal djDecks uses. Decreasing this value may be necessary if you don't use phono pre-amps, or for very slow scratches. Increasing this value may reduce pitch jumps on records with dust/scratches. The default of 400 is usually a good compromise.

Show Analysis: Gives a picture of about 25 milliseconds of the incoming timecode signal. This can be useful to quickly check if there is a problem with the signal. If you have difficulties setting up djDecks with vinyl control, and you want to post about your problem on the forum, it can help if you can post a screenshot of this analysis as well.

Errors & Bug Reporting

You may report your bugs by e-mailing them to support@djdecks.be Please include following information to make it easier for me to fix the bug: -Processor/Videocard/Soundcard

-log.txt (found in C:\Program Files\djDecks\log.txt)

-The error message you received and what you were doing/trying to do If you can repeat the error:

Start djDecks with the debug shortcut (found in the start menu)

Then try to repeat the error and send log.txt to me, this can greatly help me debugging djDecks.

If you still have any questions, please visit the djDecks forum at <u>http://forum.djdecks.be</u> to see if your question has already been asked. If you can't find an answer, you can post your question on the forum.