

PCDJ Dex

Manual

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2 - Introduction

Dex is the ultimate tool for computer mixing and dj'ing. This manual describes the features that are available in a default installation of Dex. Please note that both the skin and the keyboard shortcuts can be completely changed to your liking. Not all skins will implement all of Dex' features and some skins may implement some features that are not available in the default skin.

Each deck can load one song, which can be controlled by starting, stopping, cueing, looping and pitching it. Information such as title, artist, bit rate, bpm, song position and waveform is available on each deck. The BPM¹ indicates the tempo of the song and is used to match the tempo of different songs. Dex can automatically detect this tempo for most songs.

In Dex, each deck has an effect window to control that deck's effects. Built-in effects include a flanger, advanced echo, filter, bitcrusher and gapper. If you need other effects, Dex can also load [vst effects](#)², which allows you to use third party effects within Dex. All effects can use the tempo information to synchronize the effects with the music.

The mixer 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 Dex as well.

On the mixer window, there's also a display that can show a spectrum equalizer, general mix information or 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,...) Because the tag info is

stored in a database, it is really easy to find a song by typing part of any of the tag fields.

Dex also has native support for various external controllers such as the Hercules DJ Consoles, Behringer BCD-2000 and BCD-3000, EKS XP10 and XP5, Vestax VCI-100 and VCM-100, the Denon HC-4500, HS-5500, S3700 and S1200, the PCDJ DAC-2 and DAC-3, the Stanton SCS.3d DaScratch and the Allen&Heath Xone:2D.

Other midi controllers can also be configured for use with Dex.

If you prefer the feeling of real vinyl, Dex also supports the use of turntables with timecoded records. Visit the Dex website for more information about vinyl control in Dex.

¹ Beats per minute, indicates the tempo of a song

² http://en.wikipedia.org/wiki/VST_Plugin

3 - The Playlist and File Browser

To get started you need to load songs first. This can be done with the playlist and file browser. Some skins include a 'Mode' button to customize the layout of the playlist window.



The File Browser

In one list you can select the folder, in another list you will see the music files found in the selected folder. To select a different drive, use the 'Drive' button. For easy access to your most used music directories, you can use the 'Add Favourite' button which allows you to add folders to the list that will always be shown.

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.

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.

If you want to use the third deck, you have to add the file to your playlist, and then right-click and select load in third player. After that, the third player will show up if the skin supports it. 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 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. Dex will search in its tag cache, which consists of all directories you have browsed to from within Dex. If you want to make sure that Dex 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.

The playlist window also contains a search box where you can just start typing to search for something. When you clear the search string, the previous folder will be opened again.

Tag Cache

To speed up browsing and to make it possible to do searches, Dex stores the tag information such as title and artist in a database. Each folder that you browse to for the first time is automatically added to this database, and each time you restart Dex, the folders you browse are checked again for new or deleted files.

When you are just starting with Dex, or when you made a lot of changes like adding/removing files or editing tags with a different problem, it is a good idea to use the 'Build Tag Cache' option to let Dex know about a folder and add all tags in this folder and it's sub-folders to the database.

After you select Menu->Build Tag Cache and select a folder, Dex will start searching all songs and add them to the database. This is done in the background, so you can continue using Dex while it is working. You will see that the background of the search box is colored yellow or red while the tag cache is being built. You can even exit Dex, and building of the tag cache will restart where it left off once you start Dex again.

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 Dex. If you want, you can also manually add existing .m3u playlists to this button by copying them to c:\program files\Dex\settings\username\playlists (in Windows XP)

c:\Users\username\Local Settings\Dex\settings\username\playlists (in Windows Vista)

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

There are a few default record cases which have a slightly different behavior. The first special record case is the **loadedsongs** playlist. It will start empty when you start Dex, 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.

The second special record case is the **waitlist**. With controllers such as the DAC-3, it is very easy to add songs to this record case, and to open it and load songs from it. It is also the record case that is used by default to automatically play songs from when AutoPlay is enabled. It will be opened automatically when you start Dex.

Smart Playlists

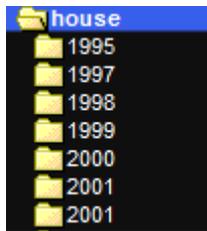
Smart Playlists are playlists that are dynamically generated based on some rules. Whenever songs are added to your database, the smart playlists will also reflect those changes. You could for example have a smart playlist that lists all your tracks with genre 'pop', all tracks with a high bpm, or even various combinations.

To create a smart playlist, press 'Case', and then select 'Create New Smart Playlist'. After entering the name for the new smart playlist, you get a dialog which allows you to create your new playlist. In the left drop-down, select the field you want to filter on, in the second column select the action, and in the right field, enter the search query.

Press 'Add Rule' to add the rule. All rules are combined using 'AND', but on a single row you can also use OR. (For example, one line could contain "genre is rock OR genre is pop")

There are also two special actions, 'sort by' and 'group by'. Sort by will sort the playlist on the selected field. Group by will dynamically generate sub-folders under the smart playlist. An example will make this easier to understand. Suppose you have a smart playlist that looks like this:

genre contains house
group by year
sort by artist



When you open this playlist, you will see all your house tracks sorted by artist. You will also see some sub-groups however.

Selecting one of these sub-groups will show you all the house tracks from a specific year, sorted by artist.

You can refine the group by clause by adding a 'range' parameter to group by a range of values.

group by year range 10 for example will group your smart playlist by decade, **group by bpm range 5** will group by range of 5 bpm, so from 120-124, 125-129, 130-134 and so on...

To create a smart playlist that will only show tracks you have recently added to your library, you can use **createddays < 14** for this:

createddays < 14

This will show only files which creation date is from the past 14 days

Audio CD's

You can use your audio cd's directly from within Dex, 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, Dex will also try to look up the track titles in the [freedb database](#) 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 favorite music library program, as long as it supports drag&drop to load a song, or is specifically made to work with Dex.

Coloring tracks

Another feature of the Dex playlist is that you can give a song a specific color. That makes it easier to find songs in a particular genre or to be played for a specific time or occasion. The color 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 color for the song, or you can choose to remove the color.

Icons

Each song has an icon in the Dex playlist and file browser. There's an icon for songs that you have played in this session, and 3 icons to indicate if this track is new or not.

iTunes Playlists

It is possible to have Dex read your iTunes playlists, after which they will show up under the Case button, and under a separate section called 'iTunes' in the folder list. Go to Menu->Options->Playlist to enable this feature. If you don't enable this feature, the iTunes playlists are still available, but loading them will be much slower.

Autoplay

By default, autoplay plays tracks from the 'waitlist' record case. Press 'case' and select waitlist to open the waitlist. You can also add songs to the waitlist by selecting them and press the 'wl+' button.

To have autoplay play songs from another folder or record case, right-click the folder or case in the list on the left, and select 'Set Autoplay folder'

To activate or de-activate autoplay press the 'autoplay' button.

In Options->General you can configure how autoplay will work:

Basic: At the end of the song a crossfade is started to the other side. The duration of the crossfade is set using 'Fadetime'. You can also enter a negative number here to create a gap between a mix.

Beatmatching: The BPM will be automatically set and a beatmatching fade is attempted.

Fully Automatic: The fade time is ignored, depending on the BPM difference between the songs, either a beatmatching mix of 20 seconds is selected, or a quick mix of 3 seconds.

Start Song: The default is 0%, which will start the next song as soon as the mix starts. You can adjust this so that the next song only starts when the mix is already in progress, so that you don't miss the start of the next song because the volume was still too quiet.

Preview

Use either right-click on a song and select 'Preview...', or select a song and use the play/stop/fwd/back buttons at the bottom of the playlist window to preview the song. If you have set the output mode to use one output for master and one output for headphones, the preview will play through the headphones output. If you have set the output mode to route each deck to a different output, the output with no song playing will be used.

More...

Right-click the scrollbar to show the number of items in the playlist. Center-click (click with the scroll wheel) on an item to show more details such as the full path where the file is located.

The Decks

Cueing



Dex offers 3 methods for cueing. The first is Dex native mode, the second is CDJ mode and the third is PCDJ mode.

In **Dex mode**, the play/pause button plays the song. When the button is pressed again while the song is playing, the current cue point will be set to the new position and the song is paused. The stop button will return the position to the current cue point and stop the song from playing. When the stop button is pressed again the position will be set back to

the start of the song.

In **CDJ mode** the play/pause button also plays or pauses the song, but the cue point is not altered. To set the cue point, first pause the song, and then press the stop/cue button. Pressing the stop/cue button while the song is playing will stop the song and return the position to the current cue point. When the song is stopped on a cue point, the stop/cue button will play the song for as long as the button is pressed, and return to the cue point when the button is released. If you want to keep the song playing, press the play button before releasing the cue button. (Of course this can't be done with the mouse only)

PCDJ mode is very similar to CDJ mode. The exception is that when you pause the song, and then move the jog wheel on your controller, the song will stutter-play to indicate the current position of the cue point. In PCDJ mode A the cue point will be set at the start of the stutter loop. In PCDJ mode B the cue point will be set at the end of the stutter loop, which is similar to other PCDJ products.

By default, the keyboard shortcuts are F2 for play/pause and F3 for cue/stop for deck 1, and F6 and F7 for deck 2. To move a cue point, stop the song and right-click and drag the jog wheel up or down. If you want to use the keyboard, the default shortcuts are q and w for deck 1 and e and r for deck 2.

Cue Points

To store a cue point right-click one of the four cue point slots. When you want to return to that position later, simply click the number of the cue point you want. To remove a cue point, center-click the cue point.

With the LOOP/CUE button you can switch between loading and storing loops and loading and storing cue points.

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, right-clicking will reset the pitch to normal speed. Use the 'Sync' button to synchronize the bpm to the other deck.

On some skins, you can use the right mouse button to slide towards the new pitch slowly, on others right-click will reset the pitch to 0%.

The default pitch range is 8%. By clicking the pitch range, 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.

Player Menu

You can access the player menu by right-clicking the turntable 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 Dex, 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.

Note that this menu may not be available in all skins.

BPM Display



BPM means Beats Per Minute, and is an indication of the tempo of a song. This value can be used to correctly start loops and to synchronize the tempo of two songs. Usually

the BPM is automatically detected, and no additional action is required to use it. Sometimes the automatic BPM detection may not be accurate enough. In this case you can use the 'Tap' button to tap the BPM manually. After a while you will see the number changing. Right-click the 'Tap' button to reset the leds on the first beat. This makes it easier to check if the BPM is correct. If the leds are moving faster or slower than the beat, you can make changes to the BPM by using the plus and minus buttons. For finer control, hold SHIFT while pressing the up or down button to change the BPM with just 0.1. Below the BPM there is a second BPM value. This is the BPM that Dex has automatically detected. The percentage next to it indicates the accuracy of the detection.

Note that not all skins include the 'Tap' button. In this case you can edit the bpm in the Tag Editor (double-click the title/artist info)

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.

Jog Wheel

The jog wheel can be used to temporarily speed up or slow down the song to get it synchronized with another song. While moving over the jog wheel with your mouse, you can click the 'p.bend' button, 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 'scratch' button on the jog wheel to do some mouse scratching.

4 - The Mixer Window



What you can do with the mixer window also strongly depends on the skin you are using. Some skins are built to be used with a midi controller or external mixer, and thus only include limited mixer controls.

Volume

The crossfader can be used to fade from one deck to the other. Use left mouse button to set the fader to the centre, or use middle mouse button to fade to a position. On top of each VU meter you also have a volume fader for each deck.

To increase the volume even more for softly recorded songs, you can use the gain. If Replaygain is enabled the gain will be automatically calculated for each song so that all songs sound equally loud.

To hear the song through your headphones for pre-listening, use the headphone button, or the volume knob below the headphone icon.

The master volume can also be altered by using the master volume knob on the 'misc' tab. The 'master cue' knob sets the amount of master output that is also sent to the headphone output.

Equalizer

Each deck has a three-band equalizer labeled 'hi', 'low' and 'mid'. You can use the kill buttons to quickly mute/unmute the specific frequencies. The kill buttons are shown when pressing the 'fader/EQ' button.

FX, PL, MENU

The FX button selects the effect to be shown, the PL button toggles the playlist window on or off, and the Options button will show a menu to access the options dialog.

Misc tab

On the misc tab, you will also find a VU meter, an indication of when clipping is occurring or when the limiter is working (usually this indicates the volume is too loud)

The record button can be used to record a set.

Speed indicates the crossfader speed when controlled with the mouse (lower is faster)

Curve sets the crossfader's curve, and you can also change what side of the crossfader a deck is.

You can also load, activate and show VST effects on the master output (for example a custom compressor)



5 - Effects



The effects currently included are a flanger, echo, gapper, loop, filter and bitcrusher. You can select an effect by clicking the FX button. You can assign a different effect to a slot by clicking the effect name. To enable an effect, press the 'power' button. The parameters that can be controlled depend on the effect. 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 behavior. Sometimes the square wave behavior is too strong, so you can better use the sine wave behavior.

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 its 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.

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.

6 - 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 'Sync' 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' on the other player. Press the p.bend button 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.

7 - Audio Output Configuration

Output Driver

On the Options->In/Out tab you first have to select the output driver. If your soundcard supports ASIO, then it is recommended to select this, since this will give you the lowest latency and best sound quality. If this choice is not available, you should use DirectSound. On Windows Vista, you can also choose Windows Audio Session, which is recommended instead of DirectSound if it is available. If you hear a lot of crackle/noise when playing, this is probably because the latency was set too low. For DirectSound and Windows Audio Session, this can be increased by using the BufferSize option. For ASIO you can do this by opening the ASIO Control Panel.

Using Dex' internal mixer

If you mix just with your computer, or with a controller such as a midi controller, you need to use Dex' internal mixer. Several Output Modes are available depending on your configuration:

- If your soundcard has 4-speaker output (front and rear), you can use the front speaker out for your speakers and the rear speaker out for your headphone.
To get this working correctly, make sure that your speaker configuration is set to 5.1 surround speakers. You can do this in
Control Panel->Sounds And Audio Devices->Speaker Settings->Advanced
- 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 Dex, you can use one of the following output modes:

- One soundcard; player1->front, player2->rear
To get this working correctly, make sure that your speaker configuration is set to 5.1 surround speakers. You can do this in
Control Panel->Sounds And Audio Devices->Speaker Settings->Advanced
- 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.
Panning can be done on the effect window when the 'panning' effect is selected.
- Two soundcards: player1->card1, player2->card2
- One soundcard with 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 Dex' crossfader in the center so that you can use your mixer's faders to control the volume. Dex 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.

8 - Recording and Broadcasting

MP3, Ogg and Wave Recording

You can record your mix to an mp3, wave or Ogg file. If you want to record your mix, simply select Menu->Start Recording... 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 most computers this should be no problem, but for slower computers, or when you notice that Dex 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 [rarewares](http://rarewares.org)³. 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 Dex, 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 Dex, Dex will also automatically write a [cue file](#), 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 Dex 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 Dex directory at c:\Program Files\PCDJ Dex, and paste the files here (or press CTRL+V).

When you start Dex 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>

³ <http://rarewares.org>

Edcast (formerly known as Oddcast)

Edcast is another winamp plugin that can be used from within Dex. It can stream ogg, mp3, flac 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 [Winamp 5](#)

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

At <http://www.oddsock.org/tools/> you can download and install “[Edcast DSP For Winamp and Foobar2k](#)”

After installing it, you need to copy **dsp_edcast.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**, **libFAAC.dll** and **pThreadVSE.dll**.

When the files are copied and you start djDecks, there will be a Menu item called start/stop Edcast 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.

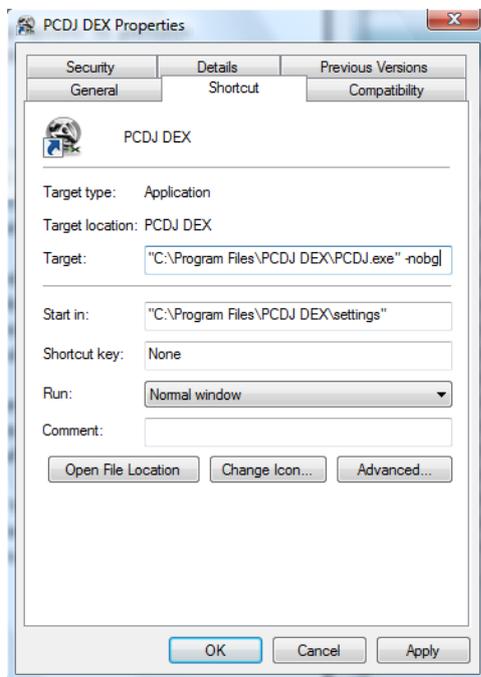
More information about the icecast server can be found at <http://www.icecast.org>

9 - Scripts and command-line parameters

Scripts

To allow you to perform a number of actions at once, Dex has a scripting system to perform multiple actions at once. Scripts can be started when Dex starts, or by binding them to midi or keyboard shortcuts.

Command-line parameters



Some advanced options can only be selected by adding a command line parameter to the Dex shortcut. To do this, right-click the Dex shortcut and select ‘properties’. There you will be able to add these parameters in the ‘Target’ text box.

-nobg – This will hide the background

-nofx – This will hide the effect windows

-nopl – This will hide the playlist window

-vinylcontrol – Will start vinyl control on both decks when you start Dex

-user:Name – Change ‘Name’ with any name you want to create a new user profile to start Dex with. In this way you could have different shortcuts which start with different configurations.

-playlistsdir:”Path” – Change ‘Path’ to any foldername to store the record cases there. By default this is C:\Program Files\PCDJ Dex\settings\username\playlists

10 - Keyboard Shortcuts

Default 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. Please note that while the playlist is selected, some shortcuts may not work. Press ESC to toggle the focus between playlist and mixer.

Keypad:4, 6	Fade to left deck, fade to right deck.
5	Set the slider to the center
1,3	Cut player 1, player 2 volume as long as the key is pressed.
8,2	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	Open search window. Press ESC to close.
F2->F4	Play/Pause, Stop, Loop 4 beats on/off for player 1
F6->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, w	Move Cue point for player 1 back or forward
e, r	Move Cue point for player 2 back or forward
u,i	Pitch Bend Down, Up for Player 1
o,p	Pitch Bend Down, Up for Player 2
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 loop.
3,4	Play the song starting from the cue point for as long as you hold the key pressed. (Stutter effect)
ALT+up/down arrow	Scroll in the file browser, even if one of the decks is selected
ALT+left/right arrow	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	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
ESC	Switch focus between playlist and decks

Editing keyboard shortcuts

To edit the keyboard shortcuts, go to Menu->Options->Keyboard. To add or edit a shortcut, first press the key you want to use.

Now you can either manually select the command from the drop-downs (for most actions, you can use Command 'Keyboard' and select the action in the Sub-Command list) or you can use the 'Learn...' button. After you have pressed the learn button, just press any button on screen that you would like to bind to the selected key.

Once the command is selected, you can use the shortcut. Don't forget to use 'Save Preset...' to save changes; otherwise they will be lost when you restart Dex.

11 - External Controllers

Hercules DJ Console

Configuration - Sound Device

You can choose to use another sound card that you may already have, or you can use the Hercules DJ Console 1 or DJ Console Mk2 as a sound device.

To do this, you need to configure the audio device in Dex. You can find this configuration in Options->In/Out

Select 24-bit if you want to use at most one input, or select 16-bit if you want to use 2 inputs on the Hercules Control Panel.

Configuration - Controller

To use the DJ console's controls, you have to activate it in the Dex configuration as well. To do this, open the options window, and select the **General** tab.

There you can check the **Hercules DJ Console** option. On the DJ Console config panel, you can then connect/disconnect the hercules dj console.

You can also choose if you want to use the dj console to control the decks, or to use it as a complete effect panel.

General Use

The **play/pause buttons** and the **cue button** work in the same way as on screen or using the keyboard shortcuts.

Use the **Track FWD/BCK** buttons to scroll through the loaded track.

By default the **crossfader** will fade from one deck to the other, and the two **vertical faders** will control the volume of each deck. You can also configure them to control the pitch.

The **Pitch endless rotary knob** can be used to increase/decrease the pitch in small steps to make small adjustments to correct the pitch. If you have selected to use the faders to control the pitch, then these knobs will control the channel's volume gain.

The **Bass, Medium and Treble** knobs control the equalizer to cut or boost low, mid or high frequencies.

The **Auto Beat** button will synchronize the tempo of the deck to match the other deck. At this point the beats are not aligned automatically yet, this is something you have to do yourself using the jog wheel or pitch bend buttons.

The **pitch bend buttons** can be used to temporarily speed up or slow down the speed of the deck, so that the two songs can be aligned.

The **Jog Wheel** can be used for the same function. As long as you spin it, the song will slow up or down depending on the direction you turn it in.

When the song is not playing, the jog wheel will move the current cue point.

Use the **Master Tempo** button to select what the jog wheel will do. If the led is off, the jog wheel can be used for pitch bending. If the led is on the jog wheel can be used for scratching. When the led is flashing, you can use the jog wheel to scroll through the playlist.

The **joystick** in the center can be used to send the sound of a deck to the headphones for pre-listening. If you push it to the left-top, the left deck will be heard through the headphones. If you push it to the left-bottom the left deck will not be heard through the headphones. The right side does the same for the right deck.

Holding the **button under the joystick** for a second and releasing it will load the selected song from playlist or browser to the selected deck.

Effects

The DJ Console also has three effect buttons. The **first effect button** will activate/deactivate a 4-beat loop. The **second effect buttons** will activate/deactivate the flanger effect. The **third effect button** will activate the gapper effect for as long as the button is pressed.

By pressing the **triangular button** you can also select some other effect modes.

-When the **Cue** led is flashing, pressing one of the three buttons will select cue point 1, 2 or 3.

-When the **Loop** led is flashing, the buttons will start a loop of a different length

Inputs

To use one of the inputs, simply hold the **Cue Button** pressed for at least one second, then release it.

The sound from the input channel is then played on that channel through Dex, and you can use all controls, effects and loops on the sound in real time. If you want to use the DJ Console in combination with **Vinyl Control**, you can hold the **Tempo Control** button pressed for at least one second to enable vinyl control on that deck.

Hercules DJ Console RMX

Configuration - Sound Device

You can choose to use another sound card that you may already have, or you can use the Hercules DJ Console RMX as a sound device.

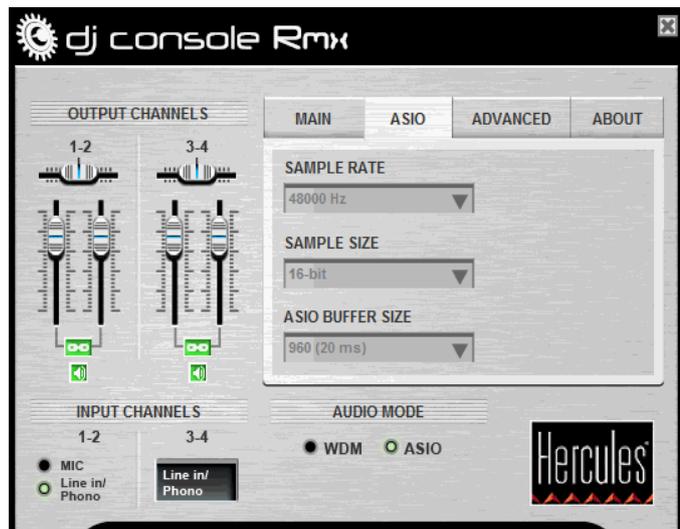
To do this, you need to configure the audio device in PCDJ Dex. You can find this configuration in Options->In/Out. Check the 'Streaming ASIO' option if you have less than 1GB RAM. See the PCDJ Dex documentation for more information about this mode.

Select 24-bit if you want to use at most one input, or select 16-bit if you want to use 2 inputs.

Configuration - Controller

To use the DJ console's controls, you have to activate it in the PCDJ Dex configuration as well. To do this, open the options window, and select the **General** tab.

There you can check the **Hercules DJ Console RMX** option. On the DJ Console config panel, you can then connect/disconnect the Hercules DJ console.



General Use

The **play/pause buttons** and the **stop button** work in the same way as on screen or using the keyboard shortcuts.

Use the **Fast Forward/Back** buttons to seek through the loaded track.

The crossfader will fade from one deck to the other, and the outer two **vertical faders** will control the volume of each deck. The **pitch faders** will control the pitch. By default they are in relative mode, which means they move the pitch up or down relative to the current pitch.

The **Bass, Medium and Treble** knobs control the equalizer to cut or boost low, mid or high frequencies.

The **kill switches** will temporarily completely cut the low, mid or high frequencies until the button is pressed again.

The **Sync** button will synchronize the tempo of the deck to match the other deck. At this point the beats are not aligned automatically yet, this is something you have to do yourself using the jog wheel.

The **Jog Wheel** can be used to temporarily increase or decrease the pitch. As long as you spin it, the song will slow up or down depending on the direction you spin it.

When the song is not playing, the jog wheel will move the current cue point.

Use the **Scratch** button to select what the jog wheels will do. If scratch mode is enabled, the jog wheel will scratch the sound, if scratch mode is disabled, the jog wheel will be used for pitch bending.

The **cue select** button can be used to send the deck's sound to the headphones.

Loops and Cue Points

Loops and cues can both be controlled with the six numbered buttons.

The **CUE** button at the bottom will select either Cue or Loop mode.

When the **CUE** button is disabled, use **1** and **4** to set a Loop In and a Loop Out point. Loop Out will also exit an existing loop.

While holding **1** you can use the jog wheel to move the loop forwards or backwards.

Use **2** and **5** to start or stop a 4 or 8 beat loop.

Use **3** and **6** to decrease or increase the length of the current loop.

When the **CUE** button is enabled, press buttons 1 to 6 to load one of six stored cue points.

To store a cue point, hold the CUE button and then press one of the 6 buttons.

EKS XP10 / EKS XP5

Configuration - Sound Device

You can choose to use another sound card that you may already have, or you can use one or two EKS XP10's as sound card. To do this, you need to configure the audio device in Dex. You can find this configuration in Options->In/Out

If you have only one XP10, select 0 - Master Output as output mode and select the XP10 as sound card 1

It will usually be called 'USB Speakers'

If you have 2 XP10's, select output mode 4, and select the 2 xp10's as Sound Card 1 and Sound Card 2.

They will usually be called 'USB Speakers' with a number after it.

Configuration - Controller

To use the XP10's controls, you have to activate it in the Dex configuration as well. To do this, open the options window, and select the **General** tab.

There you can check the **EKS XP10** option. On the xp10 config panel, you can then connect/disconnect the xp10.

Up to three xp10's can be automatically detected and used. By default they will be configured to control deck 1, deck 2 and deck 3.

-**Pitch Slider Relative mode** will switch between a relative or an absolute pitch slider. Absolute means that the center of the pitch slider will always be 0%. This means it can't be used in combination with automatic bpm matching. Relative mode is default, and it means that the pitch will increase/decrease from the current pitch as you move the pitch slider, whatever absolute position the pitch slider was on. This means that the center position on the pitch slider may not always be 0% song pitch.

General Use

The **play** and **cue** buttons work the same as the on-screen buttons. The exact functions depend on the Cue mode set in Options->General. For more information, read the PCDJ Dex manual.

Use the **pitch slider** to adjust the pitch of each deck. Note that this slider works relative to the current pitch. This means that you can use PCDJ Dex' auto beat match function, and then adjust the pitch slightly with the pitch slider if necessary.

With the **Pitch Mode** button you can switch between relative and absolute pitch slider mode.

With the **right and left arrow** buttons, you can scroll through the track. Pressing forward will move the song position about 30 seconds forward, pressing backwards will move the song position about 10 seconds backwards.

The **Play Mode** button will toggle the jog wheel mode between pitch bend mode and vinyl simulation mode.

In simulation mode, holding your finger on the jog wheel will stop the track, and moving it forwards or backwards will scratch the track.

In pitch bend mode, the pitch will be temporarily increased or decreased.

In both modes, the outer ring of the jog wheel can be used for pitch bending.

The **Loop** button will stop a loop if one is activated, or start a 4-beat loop otherwise.

The **Reverse** button will temporarily reverse song playback until the button is released.

The **Brake/Spin Up** button will simulate a slow turntable brake or spin up.

Cue Points and Deck Selection

As mentioned, you can use the **Cue** button to go back to the current cue point, or to the start of the song.

You can also store and retrieve up to 4 cue points per song.

If you have selected the **A,B,C,D** buttons to control the cue points, you can set the current cue point to cue point 1,2,3 or 4 by pressing button **A,B,C or D**.

To store a cue point, first press the 'CueRec' button on screen, then press one of the 4 buttons to store the current position to that cuepoint.

If you have selected '**Select Deck**' as option for the **A,B,C,D** buttons, then the buttons will select which deck will be controlled by your XP10. This allows you to control up to 3 decks with just one XP10. Press A to control deck 1, B to control deck 2 or C to control deck 3.

Loops

As explained in the previous part, the **Loop** button can be used to start/stop a 4-beat loop.

Use the **up and down arrows** to halve or double the length of the current loop.

To specify a loop yourself, press the **Loop In** button to select the start point of the loop, and press the **Loop Out** button to select the end point of the loop, after which the loop will be activated.

Playlist

Press the **Playlist** button to toggle the jog wheel to playlist mode.

Turn the jog wheel to scroll through the list. Press the **OK** button to load the selected song, or to open the selected folder.

Use the **Menu** button to switch between the playlist, the folder list and the files list.

When you are finished, use the Playlist button again to activate the decks.

Behringer BCD-2000 and BCD-3000

Configuration - Sound Device

You can choose to use another sound card that you may already have, or you can use the BCD-2000 as a sound device.

To do this, you need to configure the audio device in Dex. You can find this configuration in Options->In/Out

By default, using the jog wheel while the song is paused will move the current cue.

Configuration - Controller

To use the BCD-2000's controls, you have to activate it in the Dex configuration as well. To do this, open the options window, and select the **General** tab.

There you can check the **Behringer BCD-2000** option. On the bcd-2000 config panel, you can then connect/disconnect the bcd-2000.

-The **PFL Mix knob fades between channels** sets the behaviour of the PFL Mix knob. If this option is selected, then the volume will gradually fade from cueing one deck to cueing the other. In the center position you will hear both decks.

If this option is not selected, then the pfl mix knob will switch between deck a and deck b. In the center position, neither will be audible.

-**Disable Synch Button flashing** will disable the synch button from flashing on the beat if you find this distracting or inaccurate.

-**Pitch Slider Relative mode** will switch between a relative or an absolute pitch slider. Absolute means that the center of the pitch slider will always be 0%. This means it can't be used in combination with automatic bpm matching. Relative mode is default, and it means that the pitch will increase/decrease from the current pitch as you move the pitch slider, whatever absolute position the pitch slider was on. This means that the center position on the pitch slider may not always be 0% song pitch.

-**Jog Wheel sensitivity** sets the sensitivity of the jog wheel. The default is 100, increasing it will make the pitch respond harder on small wheel movements.

-**Default Effect** sets the default effect when starting Dex to be controlled by the effect section on the bcd.

General Use

Use the **play** button to start or pause a track. Pausing a track will also set the current cue point.

Use the **cue** button to stop the track. This will return it's position to the current cue point.

The **crossfader** and **volume** sliders will adjust the volume as expected, and so will the **low, mid and high** equalizer knobs and **kill** switches.

The **pitch bend + and -** will temporarily bend the pitch of the track up or down for beatmatching. As soon as you release the button, the pitch will return to it's original value. The longer you hold the button, the more the pitch will change.

Use the **pitch slider** to adjust the pitch of each deck. Note that this slider works relative to the current pitch. Which means that you can use Dex' auto beat match function, and then adjust the pitch slightly with the pitch slider if necessary.

If you want to make very small adjustments to the pitch, you can also hold the **To Top** button and use the **Pitch Bend + and -** buttons, to change the pitch by +/-0.05%

With the **search forwards/backwards** buttons, you can scroll through the track. Pressing forward will move the song position about 30 seconds forward, pressing backwards will move the song position about 10 seconds backwards.

You can hold the fwd/bck search button to scroll through the song. The longer you hold them, the faster it will skip.

The **Sync Slave** button will adjust the pitch to match the other decks' bpm. Holding the button for more than a second and then releasing it will reset the pitch to 0%.

The **Scratch** button switches between all modes for the jog wheel. When the led is off, the **jog wheel** can be used to bend the pitch up or down when the track is playing. When the track is paused, it will move the cue point. When the led is on, the jog wheel can be used for scratching while the track is playing. When the led is flashing, you can use the jog wheel to scroll through the

playlist (see later).

You can use the **Loop In/End** button to start/stop a 4-beat loop. The led on the **Loop Out** button will show if the loop is enabled or not.

Hold the **Analog Input** button for about a second to activate the line input on that deck. Note that on the BCD, the Mic Input and Phono Input A are sharing the same input, so only one of the two can be used simultaneously.

If you use Dex' [Vinyl Control](#) features then you can activate/deactivate vinyl control by pressing **To Top** and the **Analog Input** button simultaneously.

Use the **On Air** button to enable the mic. Internally, it will be loaded to Dex' third deck, so by opening it you can even apply any effect you want to the mic input on screen.

Use the **Master/Split** button to switch between hearing the master output through the headphones or the cue output. Hold the button pressed for about a second to activate split mode, where one side of the headphones is the master output, and the other is the cue output.

The **PFL Mix** button can be used to select which side you want to hear in the headphones.

Cue Points

As mentioned, you can use the **Cue** button to go back to the current cue point, or to the start of the song.

You can also store and retrieve up to 4 cue points per song.

To do this, hold the **Cue** button pressed, and also press one of the **effect buttons (A,B,C,D)** to load cue point 1,2,3 or 4

To store a cue point, first press **To Top + Cue** to activate CueRec mode. Once cuerec mode is activated, you will see buttons A,B,C and D flashing.

Press button **A,B,C or D** to store the current cue point to cue position 1,2,3 or 4.

Loops

As explained in the previous part, the **Loop In/End** button can be used to start/stop a 4-beat loop. More advanced looping is possible though, by using the **Loop Out** button.

While holding the **Loop Out** button, here are the other options you have:

- Press one of the **effect buttons (A,B,C,D)** to start a 2, 4, 8 or 16 beat loop.
- Press the **bend +** button to double the loop length, or **bend -** to halve the loop length.
- Use the **jog wheel** to move the loop forwards or backwards
- Press **To Top** to switch between short loops and long loops. When short loops are selected, the effect buttons will start 1/4th, 1/2th, 1 and 2 beat loops instead.
- Use **Search Back/Fwd** buttons to change the loop length by a small amount

Effects

The effects are controlled with the top row of knobs and buttons. Since the effects are separate for each deck, knob A and B and button A and button B control deck A's effect, knob C and D and button C and D control deck B's effect.

The first thing to do is select the effect you want to use. You can do this by holding the **To Top** button and then pressing effect button **A, B, C, or D**. You can select a different effect for each deck by using that deck's to top button.

Effect A: Flanger. Enable the flanger by using the first button. The strength of the effect can be set with the first knob. The second knob can be used to fix the flanger at it's current position.

Effect B: Echo. Since this effect is always enabled, make sure you first set the first knob to the far left before selecting this effect. Then use the first knob to select the amount of echo, and the second knob to select the length. The length will be fixed to a multiple number of beats (1/8, 1/4, 1/2, 3/4, 1, 2, 4, 8)

You can use the second button to hold the echo buffer, which means that when you later use the first knob to stop the effect, you can later on use the same sample by using the first knob again.

With the first button you can disable the source sound, leaving only the echo audible.

Effect C: Gapper. Press the first button to enable/disable. The moment you press to enable defines where the gap will start. Use the first knob to define the strength. The second button switches between 1/4th and 1/2th beat gapper length. Use the second knob to select the shape.

Effect D: Filter. Before enabling this, set the first and second knob to the center. Then enable the effect with the first button. Use the first knob to filter the sound. When using it from center to left, it will first cut the high frequency sounds, then the low frequency sounds. When using it from center to right, it will first cut the low frequencies.

With the second knob you can specify the feedback. Moving this knob more to the left will make the effect sound stronger.

Effect A+B: Third Deck. See the last section of this documentation.

Effect A+C: Bitcrusher. Set the first knob to the left and the second to the right before enabling to have no effect. Enable this effect using the first effect button. The first knob will set the downsample parameter, the second knob will set the bit-depth parameter.

Effect A+D: Custom Effect The custom effect can be configured by selecting 'custom' on the Dex BCD-2000 config panel.

Third Deck

Besides using the effect knobs and buttons to control the Dex effects, you can also use them to control the third deck. To do this, first select the third deck mode by pressing **To Top, Effect Button A** and **Effect Button B** simultaneously, and in this order. Now the four buttons and four knobs can be used to control the third deck.

Button A: Play/Pause third deck

Button B: Stop/Cue third deck

Button C: Pitch Bend Down

Button D: Pitch Bend Up

Knob A: Volume

Knob B: Cue volume

Knob C: Low Equalizer

Knob D: High Equalizer

Playlist

Use the **Scratch** button to scroll through the jog wheel modes, until the scratch led flashes, which is the playlist mode.

You can now use the **low, mid and high kill switches** to select which list to scroll in (playlist, directory browser or file browser)

Scrolling is done with the **jog wheel**.

When you have selected a song, press the **To Top** button to load the song.

If a song is already loaded and playing in a deck, you have to hold the to top button for at least 1 second to load a song in this deck, to prevent accidentally stopping a playing song.

Vestax VCI-100, VCM-100

Configuration - Controller

To use the VCI-100's controls, you have to activate it in the Dex configuration. To do this, open the options window, and select the **General** tab.

There you can check the **Vestax VCI-100** option. On the VCI-100 config panel, you can then connect/disconnect the vci-100.

-**Disable Synch Button flashing** will disable the synch button from flashing on the beat if you find this distracting or inaccurate.

-**Pitch Slider Relative mode** will switch between a relative or an absolute pitch slider. Absolute means that the center of the pitch slider will always be 0%. This means it can't be used in combination with automatic bpm matching. Relative mode is default, and it means that the pitch will increase/decrease from the current pitch as you move the pitch slider, whatever absolute position the pitch slider was on. This means that the center position on the pitch slider may not always be 0% song pitch.

-**Jog Wheel sensitivity** sets the sensitivity of the jog wheel. The default is 100, increasing it will make the pitch respond harder on small wheel movements.

-The VCM-100 is also supported, and it is also possible to use 2 VCI-100's (or 1 VCI-100 and 1 VCM-100) together to control 4 decks.

General Use

Use the **play/stop** button to start or pause a track. Pausing a track will also set the current cue point.

Use the **cue/play** button to stop the track. This will return it's position to the current cue point.

The **crossfader**, **volume** sliders and **stereo balance** knobs will adjust the volume and stereo balance as expected.

The **low**, **mid low** and **mid hi** knobs control the low, mid and high equalizer

Use the **pitch slider** to adjust the pitch of each deck. Note that this slider works relative to the current pitch. Which means that you can use Dex' auto beat match function, and then adjust the pitch slightly with the pitch slider if necessary.

The **Sync** button will adjust the pitch to match the other decks' bpm. Holding the button for more than a second and then releasing it will reset the pitch to 0%.

The **Vinyl Mode** button switches between vinyl mode and mix mode for the jog wheel. When the led is off, the **jog wheel** can be used to bend the pitch up or down when the track is playing. When the track is paused, it will move the cue point. When the led is on, the jog wheel can be used for scratching while the track is playing. Using the outer part of the jog wheel will always result in pitch bending.

You can use the **Loop*4** button to start/stop a 4-beat loop.

The **Master Level** knob will control Dex' master volume, the **Monitor Level** will control the cue volume.

The **Monitor Select** knob controls the amount of the master output that is sent to the monitor output.

The **Cue** button next to the equalizer knobs toggles that output to be sent to the monitor output.

Cue Points

To load a previously saved cue point, hold the CuePause button, and then press one of the four small buttons at the top to load one of 4 cue points.

To store a cue point, hold the Set Cue button and press one of the four small buttons to store it to that location.

Before loading or storing cue points, make sure that the first of the three larger buttons at the top is enabled.

Loops

As explained in the previous part, the **Loop*4** button can be used to start/stop a 4-beat loop. More advanced looping is possible though, by using the **Key** button.

While holding the **Key** button pressed, here are the other options you have:

- Press one of the **small loop function buttons** to start a 2, 4, 8 or 16 beat loop.
- Press the playlist up or down button to double or halve the loop length.
- Use the center part of the **jog wheel** to move the loop forwards or backwards
- Use the outer part of the **jog wheel** to change the length of the loop
- Press the first of the 3 buttons to select long loop lengths (2,4,8 or 16 beats)
- Press the second of the 3 buttons to select short loop lengths (1/4, 1/2, 1 or 2 beats)

Loops can also be stored and later retrieved. To do this, press the third button on the left-top of the vci.

- Use CUE/PAUSE + one of the four small buttons to load a stored loop, or
- Use Set Cue + one of the four small buttons to store the current loop

Effects

The effects are controlled with the 'effect parameter' knobs and buttons.

The **select** button selects how the knobs and buttons control the effects.

When set to **A** or **B** the 4 knobs and buttons control the current effect of either deck A or deck B.

When set to **mas** the first 2 knobs and buttons control the current effect for deck A, and the second 2 knobs and buttons control the effect for deck B

Most effects can be enabled/disabled by either using the **Effect** button next to the equalizer knobs, or by pressing the **second effect parameter button**.

The first thing to do is select the effect you want to use. You can do this by holding the **Effect Select** button (in mas mode, the up button selects deck A's effect, and the down button selects deck B's effect) and pressing one of the 4 **small loop buttons**.

Effect A: Flanger. The strength of the effect can be set with the first knob. The first button can be used to fix the flanger at it's current position.

Effect B: Echo. Since this effect is always enabled, make sure you first set the first knob to the far left before selecting this effect. Then use the first knob to select the amount of echo, and the second knob to select the length. The length will be fixed to a multiple number of beats (1/8, 1/4, 1/2, 3/4, 1, 2, 4, 8)

You can use the first button to hold the echo buffer, which means that when you later use the first knob to stop the effect, you can later on use the same sample by using the first knob again.

Effect C: Bitcrusher. The first knob controls the downsampling, with the effect increasing from left to right.

The second knob controls the bit-depth, with the effect increasing from right to left.

Effect D: Filter. This effect can be used with the **hi EQ** knob.

When using it from center to left, it will first cut the high frequency sounds, then the low frequency sounds. When using it from center to right, it will first cut the low frequencies.

With the first effect knob you can specify the feedback. Moving this knob more to the left will make the effect sound stronger.

Third Deck

Controlling the third deck can be done with the effect buttons.

First make sure the effect selection is on 'master', then hold the effect select button and press the first of the 3 custom buttons on the left of the controller so that it lights up.

Now the first effect button is the play/pause button for the third deck, the second button is the stop/cue button and the third and fourth buttons can be used for pitch bending or cue point moving.

The first knob controls the volume of the third deck, and the second knob controls the headphone volume.

Sampler

You can start the samples loaded in the sampler using the 4 small buttons at the left top of the vci. Before this works, you have to select Sampler mode by pressing the second of the 3 buttons next to the small buttons.

The first button selects the vu meter, the second the sampler, and the third disables the buttons.

When Sampler mode is selected, you can also copy an active loop from one of the decks to one of

the samples.

To do this, simply use **Set Cue** on the deck you want to copy the loop from, and while holding it, press one of the 4 small buttons to select the sampler in which to copy the loop.

To control the volume of the samples, you have to use the effect knobs.

First select sampler as effect, by pressing one of the effect select buttons, and then pressing the second button of three on the left side of the controller.

The first knob now controls the volume of the first sample, the second knob of the second sample and so on.

The 4 effect buttons can now be used to start or stop the samples as well.

Playlist

Use the **Up** and **Down** buttons to select a song in the playlist. Press **Preview** once to preview the song, and press it a second time to stop the preview.

Hold up and down simultaneously to switch between the lists (playlist, file selection and folder selection)

Press the **Load A** or **Load B** button to load the selected song in deck A or deck B.

Denon DN-HC4500, DN-HS5500, DN-S1200

Configuration - Controller

To use your Denon controller's controls, you have to activate it in the PCDJ Dex configuration. To do this, open the options window, and select the **General** tab.

There you can check the **Denon Controllers** option.

-**Use Pitch Slider as Volume Slider** allows you to use the pitch slider to control the volume instead of the pitch

-**Pitch Slider Relative mode** will switch between a relative or an absolute pitch slider. Absolute means that the center of the pitch slider will always be 0%. This means it can't be used in combination with automatic bpm matching. Relative mode is default, and it means that the pitch will increase/decrease from the current pitch as you move the pitch slider, whatever absolute position the pitch slider was on. This means that the center position on the pitch slider may not always be 0% song pitch.

-**Constant Pitch Bend** When enabled, the pitch bend buttons will do a bend of a fixed percentage, rather than speeding up or slowing down the longer you keep them pressed.

-**Disable HC-4500 touch sensitivity** By default, when in scratch mode you need to press the jog wheel to scratch.

With this option enabled, scratching will start as soon as you move the jog wheel, even without pressing it.

-**Jog Wheel sensitivity** sets the sensitivity of the jog wheel. The default is 100, increasing it will make the pitch respond harder on small wheel movements.

-If you have 2 controllers you can select each of them by using the drop-down controls.

With the numbers after them you can assign which decks that unit will control.

If you have 2 DN-S1200's or 2 HS-5500's and you want the first to control deck 1 and the second to control deck 2, select 1/2 for both units. On the unit itself, configure the first one for channel 1, and the second for channel 2.

General Use

The way the **Play/Pause** and **Cue** buttons work depend on the cue mode configuration in PCDJ Dex. (Menu, Options, General)

-In **CDJ Mode**:

Play/Pause will start or stop playback. The cue point will not be affected.

Cue will return the position to the current cue point when the song was playing.

When the song is not playing and the song is at the current cue point, playback will start for as long as you hold the cue button. When you release the cue button, the position will return to the cue point.

When the song is not at the cue point, the cue point position will be changed.

-In **PCDJ Dex mode**:

Play/Pause will start or stop playback. When playback is stopped, the cue point is set to that position.

Cue will return the position to the cue point and stop playback.

When pressing cue again the position will be set to the start of the song.

The **Sync** button will adjust the pitch to match the other decks' bpm. Holding the button for more than a second will reset the pitch to 0%.

The **Jog Mode** button switches between scratch mode, pitch bend mode and track browsing mode for the jog wheel.

The **Pitch/Key** button will toggle tempocontrol on or off.

When you hold the button pressed for 1 second, the pitch range can be adjusted by turning the parameter knob.

The **Fast Search** buttons can be used to seek forward or backwards in the current song.

The **Pitch Bend** buttons will temporarily bend the pitch up or down.

Pressing the **Time** button will switch between Elapsed and Remaining time display, and will also temporarily show the track length in the display.

Press the **Cont/Single** button for 1 second to switch the display between pitch and bpm display.

Cue Points

When you first connect the device, the function keys will be set in cuepoint mode. Pressing a button will instantly load the cue point and set the position on that cue point. To store a cue point, press **Memo** and then press one of the function keys to store the current position to a cue point.

Press **Memo** again to cancel storing a cue point.

To access more cue points, use the parameter knob to scroll through all 20 cue points.

Loops

Press **A1** to set the loop-in point, then press **B** to set the loop-out point.

The loop-out point will automatically be beat-aligned.

Alternatively, when no loop is started, press and hold **B** and press one of the function keys to start a loop with a predefined length. Function key 3 will start a 4-beat loop.

When a loop is started, press **Exit/ReLoop** to exit the loop. **Holding A1** while a loop is started allows you to move the start of the loop using the jog wheel.

Holding **B** while a loop is started allows you to change the length of the loop. You can use the jog wheel for continuous changes, press the function keys to select a predefined length, or use the parameter knob to halve or double the loop length.

To store loops, or to load stored loops, press **A2** to toggle between Loops and Cue Points mode.

When in loops mode, the function keys can be used to load a stored loop.

Press **Memo** and then a function key to store the current loop.

Effects

Effects can be selected with the three effect buttons.

Which effect is controlled by which effect button can be assigned from the config window.

You can also change what effect a button controls by holding the effect button pressed, and then press one of the 5 function keys.

Effect Startup/Brake With this button, you can select a few single-click effects.

Click the button once, and the led should light up. Now use the parameter knob to select **Brake, Reverse, Backspin or Dump**.

Press the parameter knob to start/stop the effect.

You can click the jog wheel up or down to change the length of the brake and startup effect.

Effect Filter Press the parameter knob to enable/disable this effect.

Use the jog wheel to change the frequency. Moving the jog wheel clockwise will filter frequencies from low to high.

Moving the jog wheel counter-clockwise will filter frequencies from high to low.

Effect Echo Use the parameter knob to select the length of the echo, and the jog wheel to select the strength.

Effect Flanger Use the parameter knob to toggle the effect on or off and to select the length of the flanger, and the jog wheel to select the strength.

Effect Bitcrusher Use the parameter knob to toggle the effect on or off and the jog wheel to select the strength.

Cue Points Use the parameter knob to select one of 20 cue points. Press the parameter knob to load a cue point, or when in write mode (with **Memo**) to store a cue point.

Third and Fourth deck

Use **Flip+load** to switch from controlling deck 1 and 2 to controlling deck 3 and 4.

Playlist

Hold **Jog Mode** pressed for about one second to set the jog wheel to track browsing mode. You can then use the jog wheel to scroll through your tracks.

Clicking up or down on the jog wheel will scroll through your folders or playlists.

Clicking right on the jog wheel will open the selected folder or playlist.

Clicking left on the jog wheel will switch the focus from playlist to file browser.

You can also use the parameter knob to browse through your files.

You can either configure this as the default action for the parameter knob, or assign it to one of the effect buttons.

While using the parameter knob to browse through your files, use FLIP+Back to switch between playlist and browser list.

Use FLIP+Param to browse through the folder list.

PCDJ DAC-2

Configuration - Controller

To use the PCDJ DAC-2's controls, you have to activate it first. To do this, open the options window, and select the **General** tab.

There you can check the **PCDJ DAC-2** option and press the Config button.

Select the correct COM-port for your DAC-2 and press 'Connect'.

-**Pitch Slider Relative mode** will switch between a relative or an absolute pitch slider. Absolute means that the center of the pitch slider will always be 0%. This means it can't be used in combination with automatic bpm matching. Relative mode is default, and it means that the pitch will increase/decrease from the current pitch as you move the pitch slider, whatever absolute position the pitch slider was on. This means that the center position on the pitch slider may not always be 0% song pitch.

-**Jog Wheel sensitivity** sets the sensitivity of the jog wheel. The default is 100, increasing it will make the pitch respond harder on small wheel movements.

General Use

The way the **Play/Pause** and **Cue** buttons work depend on the cue mode configuration. (Menu, Options, General)

SHIFT+Play/Pause will start or stop the song slowly, like a turntable spinning up or down.

The **+/- buttons** will bend the pitch up or down. When the song is not playing, you can use them to move the cue point forwards or backwards.

SHIFT+ +/- buttons will do a larger pitch bend.

Match will match the bpm of the song with the bpm of the song in the other deck.

Hold down the button for 1 second to reset the pitch to 0%.

SHIFT+Match will switch between BPM and Pitch display. Because there are only 2 digits available, the first '1' for BPM's greater than 100 is not shown.

Waitlist + Match will change pitch range

Waitlist + FX will enable scratch mode with the jog wheel.

Loop sets the start of a loop. The led will flash until loop is pressed again.

Loop will then set the end of a loop. It is automatically aligned to a number of beats.

Shift + Loop Out sets the end of a loop, but not beat-aligned.

Loop will exit a loop when it was started.

FWD and BACK buttons will load select a cue point.

Playlist

While a song is not playing:

GROUP + outer jog wheel will scroll through the folder list.

Outer Jog Wheel will scroll through the list of files.

Load will load the currently selected song to the deck.

GROUP + Load will open the selected folder or playlist

Shift + Waitlist will open the waitlist, or switch back to the previous folder.

Waitlist + Load will add the selected song to the waitlist.

PCDJ DAC-3

Configuration - Controller

To use the PCDJ DAC-3's controls, you have to activate it in the PCDJ Dex configuration. To do this, open the options window, and select the **General** tab.

There you can check the **PCDJ DAC-3** option.

-**Pitch Slider Relative mode** will switch between a relative or an absolute pitch slider. Absolute means that the center of the pitch slider will always be 0%. This means it can't be used in combination with automatic bpm matching. Relative mode is default, and it means that the pitch will increase/decrease from the current pitch as you move the pitch slider, whatever absolute position the pitch slider was on. This means that the center position on the pitch slider may not always be 0% song pitch.

-**Jog Wheel sensitivity** sets the sensitivity of the jog wheel. The default is 100, increasing it will make the pitch respond harder on small wheel movements.

General Use

The way the **Play/Pause** and **Cue** buttons work depend on the cue mode configuration in PCDJ Dex. (Menu, Options, General)

-In **CDJ Mode**:

Play/Pause will start or stop playback. The cue point will not be affected.

Cue will return the position to the current cue point when the song was playing.

When the song is not playing and the song is at the current cue point, playback will start for as long as you hold the cue button. When you release the cue button, the position will return to the cue point.

When the song is not at the cue point, the cue point position will be changed.

-In **PCDJ Dex mode**:

Play/Pause will start or stop playback. When playback is stopped, the cue point is set to that position.

Cue will return the position to the cue point and stop playback.

When pressing cue again the position will be set to the start of the song.

SHIFT+Play/Pause will start or stop the song slowly, like a turntable spinning up or down.

The **+/- buttons** will bend the pitch up or down. When the song is not playing, you can use them to move the cue point forwards or backwards.

SHIFT will bend the pitch faster.

R will activate/deactivate reverse playing.

SHIFT+R will start an automatic backspin.

MT will activate/deactive master tempo.

SHIFT+MT will switch the pitch slider between pitch and volume.

Match will match the bpm of the song with the bpm of the song in the other deck.

Hold down the button for 1 second to reset the pitch to 0%.

SHIFT+Match will switch between BPM and Pitch display.

Seek forward/backward can be used to seek through the song.

Waitlist + Match will change pitch range

Waitlist + CP will enable scratch mode with the jog wheel.

When Scratch Mode is enabled the display will flash CONTINUE

Time Display will toggle display between remaining and elapsed time

Loop In sets the start of a loop. The in led will flash until loop out is pressed.

Loop Out sets the end of a loop. It is automatically aligned to a number of beats.
Shift + Loop Out sets the end of a loop, but not beat-aligned.
Reloop will exit a loop.

Cue Points 1 to 10 will load the selected cue point.
Shift + 1 to 10 will store the current position in the selected cue point slot.

Mix Now will fade to the other deck. If it was not playing yet it will start playing.
Shift + Mix Now will set the fade speed.

Effects

You can toggle the default effect selected in the DAC-3 configuration on or off by pressing the **FX** button on the DAC-3.

Playlist

Recordcase up/down buttons will scroll through the current folder or playlist.
Folder + Up/Down will scroll through the folder list.
Shift + Up/Down will scroll through the playlist in certain playlist modes.
Load will load the currently selected song to the deck.
Folder + Load will open the selected folder or playlist
Shift + Load will load the song selected in the playlist
Shift + Waitlist will open the waitlist, or switch back to the previous folder.
Waitlist + Load will add the selected song to the waitlist.

Shift + Jog Wheel will scroll through the current folder or playlist.
Folder + Jog Wheel will scroll through the folder list

Stanton SCS.3d DaScratch

Configuration - Controller

To use the DaScratch's controls, you have to activate it in the configuration. To do this, open the options window, and select the General tab. There, activate the Midi checkbox, and click the 'XML Config' button next to it. Now select the SCS.3d from the list, and select the stanton_dascratch.xml configuration from the drop-down box. Finally, click 'Connect' to connect the device.

General Use

The Play and Cue buttons work as expected.

The Pitch and Gain sliders can be used to increase or decrease the pitch and gain.

There are 6 buttons that define what the center circle will do:

-FX

Selects filter effect. Use the outer ring to control the filter effect.

Don't forget to turn the filter effect on first. (Bottom-left button outside the disc)

-EQ

The disc works as 3 sliders, which control low, mid and high frequency equalizer.

-Loop

In loop mode, the disc works as 8 buttons, which set a loop from 1/4th beat to 1 beat (top-left to bottom-left) and 2 beats to 16 beats (top-right to bottom-right).

The bottom-left button outside the disc will activate or deactivate Synchronized Loops mode.

When enabled, the song will stay synchronized with the other deck on exiting the loop, even when the loop length was randomly changed during the loop.

-Trig

In trigger mode, the disc work as 8 buttons which instantly play 1 of 8 cue points.

The bottom-right button outside the disc will toggle record mode.

While record mode is enabled, pressing one of the 8 buttons will store the current position to one of the 8 cue points.

The bottom-left button outside the disc will toggle Synchronized Cue Points.

When enabled, moving to a cue point will happen without disturbing synchronization by aligning to 4-beat jumps.

-Vinyl

In vinyl mode, the disc can be used for scratching.

-Disc

In disc mode, the disc can be used for pitch-bending.

MIDI Devices

Any generic midi controller can be used as well. It is even possible to use multiple midi devices simultaneously. To configure a midi device, first go to Menu->Options->General->Midi config...

First select the device you want to use from the list and check the 'Use this device' checkbox. The bindings you have made earlier for this device will be shown on the right. The bindings are linked to a specific port number (the number next to the Use this device checkbox). Usually one device is linked to one port number, but sometimes it may be necessary to manually select the correct port number to retrieve earlier made bindings.

(For example when saving/loading presets from a different computer)

To create a binding, first move the control or click the button on the midi controller. You should see the 'Incoming midi message' field change when you do this. Then click the 'Use MIDI message' button to use this control. Now you can press the 'Learn' button and click on a control on-screen to bind the midi control to this on-screen control.

If you want to create a binding with an action that is not seen on-screen, first select the Command Type, then the Command and Additional Parameter and finally the player.

MIDI and VST effects/instruments

It is also possible to use a MIDI device to control a VST effect. If the VST effect is created to accept midi messages, or has a configuration to create midi bindings, first select the MIDI device you want to use, check 'Use this device' and also check 'Send MIDI to VST effects'. Now you can do the configuration from the VST effect.

If the VST effect does not have such functionality by itself, create a regular midi binding, and select Slider as command type, EffectVST as command, and type xx|yy as additional parameter. Xx is the vst effect number (00 for the first vst effect, 01 for the second) and yy is the parameter number (starting from 00)

Midi Output

Dex is also capable of sending the current tempo to a midi device. This can be used to synchronize the tempo of other programs such as Ableton Live to Dex. To do this, simply select the midi device you want to send a clock signal to, and check the 'Send midi clock signal to' checkbox. Some programs can't handle a clock signal, so for these programs a solution may be to use the 'send tap message' checkbox.

If you want to send a midi clock to a program on the same computer, you can use the MIDI Yoke⁴ virtual midi driver for this purpose.

⁴ <http://www.midiox.com>

12 - Sampler

Dex includes a basic sampler that allows you to quickly play short sounds, loops or sound effects. The sampler is still in a development stage, so there are still some things missing. To open it, press Menu, and select 'Sampler'.

Only limited control with keyboard or midi is possible at this point.

There are 5 sample slots available. You can load files to these samples by dragging them from the playlist or browser, from windows explorer, or from a deck. In the default skin, dragging from a deck can be done by dragging the time display.

If you have a loop running in a deck, you can also copy this loop to a sampler channel by using the 'Get Loop' button. The loop will then be copied, and starts to play in synch with the deck.

You can now even load a new song in the deck, while the loop continues to play.

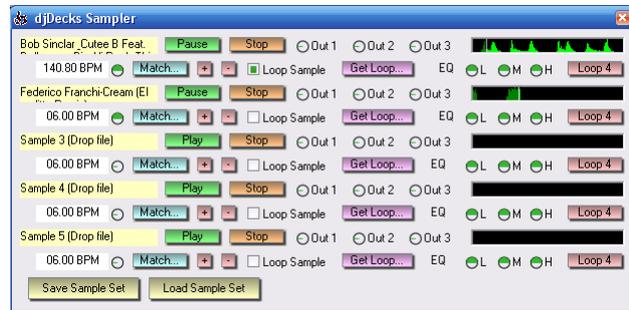
The 'Out 1', 'Out 2' and 'Out 3' knobs control the volume to output 1, 2 or 3. The 'L', 'M' and 'H' knobs control the equalizer.

To keep the samples synchronized you can use the + and – button to apply some pitch bending.

To automatically match the bpm, you can use the match button. You can match the bpm either with a deck, or with another sample.

Use 'Save Sample Set' to store a set of 5 samples, and 'Load Sample Set' to load a previously saved sample set.

The sampler will be further improved in future versions of Dex.



13 - Options

There are a lot of options available to configure how Dex works. When you start Dex 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.⁵

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 Mode: Strongly recommended if you have 512MB RAM or less. 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.

For line input pass through it is necessary that the input soundcard is the same as the output driver however.

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

⁵ http://en.wikipedia.org/wiki/Audio_stream_input_output

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 Dex can allocate for each deck. Recommended maximum is about 1/4th of the amount of memory you have.

Maximum Memory per stream: When Streaming Mode is disabled, this 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 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. More information about the algorithm used can be found online.⁶

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.

⁶ <http://www.replaygain.org>

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.

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.

Multicolored waveforms: When enabled, the color of the waveform will indicate the frequency of the sound at that position. When mostly low frequencies are detected the waveform will be blue, when higher frequencies are detected it will range from red to yellow as well.

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 Dex' 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 `\Dex\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, Dex 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 this option.

Disable Crossfader: This will disable the crossfader. Useful if you use an external mixer so you can't accidentally move Dex' internal 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.

Disable Tempocontrol on FX: When Tempocontrol is enabled, when you start to scratch or start a vinyl startup or brake effect, tempocontrol will be temporarily disabled to make the effect sound more realistic.

Enable Tempocontrol on pitch bend: Even when Tempocontrol is disabled, it will be activated temporarily while performing a pitch bend. This makes pitch corrections to synchronize songs almost completely inaudible for your audience.

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 Dex\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 scrobber.log file can be used to update your [last.fm](http://www.last.fm/) statistics.⁷

DMC1/DAC2: If you have such a hardware controller, you can use it with Dex by enabling this setting. Support for this hardware is not very complete.

Hercules DJ Console: If you have such a controller, you can use it in Dex.

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

Behringer BCD2000: If you have such a controller, you can use it in Dex.

Vestax VCI-100: If you have such a controller, you can use it in Dex.

MIDI: You can use any midi device in Dex. Use the config button to open up a dialog box in which you can bind midi controls to actions in Dex. See the section about midi devices earlier in this document for more information.

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 Dex' own tag database. If this option is disabled, changes will still be stored to the tag cache, but this can be cleared upon upgrading or removing Dex.

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.

⁷ <http://www.last.fm/>

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 Dex preset, but you can store your own keyboard presets if you want. To create a new preset, first enter the name of the preset, then make the changes you want, and then press the Save Preset button.

More information about keyboard shortcuts can be found in the chapter about keyboard shortcuts earlier in this document.

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 Dex supports Final Scratch, Serato Scratch Live, VirtualDJ, MsPinky, Traktor Scratch and PCDJ Reflex records.

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. Dex 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 Dex switch to relative mode (you can still adjust the pitch, but not the position) or you can have Dex 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, Dex 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 Dex. 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 Dex 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)

Correct pitch when disabling vinyl control: When this option is enabled, and you disable vinyl control, Dex will match the pitch to the other deck's bpm if they are close enough.

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.

The pitch variance value should be well below 0.01 for a good quality signal. Anything higher than this will probably make beat matching more difficult. Manually lowering this value will allow you to select a compromise between responsiveness and pitch smoothing.

The gain value should be higher than 0.5, and can be up to 4 for good quality signals. It can be a lot higher when you are not using phono pre-amps, but it is possible that signal quality will be affected when the signal strength is too low (and thus the gain will be high)

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 Dex 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 Dex 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.

Debug

Usually it is recommended to leave these settings to their default, but in some cases they can be used to fine-tune Dex' performance.

Log all system messages: Will log any information, warning and error messages to a log file. Warning and error messages will be logged even when this option is disabled.

Show benchmark messages: For debugging purposes only.

Show error messages: Shows a popup on any error or warning, including non-critical ones. It is recommended to leave this off.

Use Refresh: Enabling this may give a small decrease in graphics performance, but in case of graphical problems you could try if this solves them.

Faster Graphics: Improves graphic performance by only drawing the elements that change. In some skins this will make some items flash/not appear correctly. This is only recommended if you really need the performance.

Track Loading Priority: If loading is slower than playback, it might be resolved by increasing the priority. This may slow down graphics while loading.

SpeedLoading: Recommended for dual or quad core processors to speed up loading.

Accurate MP3 Time: On VBR MP3's, this helps if the track length is displayed incorrect. For all MP3's (both CBR and VBR) it will also improve seeking accuracy in Streaming mode. This will slow down loading a little.

Lower vinyl control cpu usage: Decreases the cpu usage a little when using vinyl control, but can result in less responsive vinyl control.

Smooth Pitch Readout: Will smooth out the pitch readout so you don't see as many fluctuations in vinyl control mode. Note that this has no effect on the actual playback pitch.

Noise and rumble filter: Recommended to leave this enabled for a more stable pitch.

Pitch Detection Method: Initial smoothing level on pitch detection. It is recommended to leave this at its default, but you can try different methods to see which you prefer. No smoothing might give slightly more responsiveness, but a less stable pitch.

14 - Errors & Bug Reporting

Please visit the PCDJ website at <http://www.pcdj.com> or visit the PCDJ Dex forum at <http://message.pcdj.com/forumdisplay.php?f=50> if you have any questions or problems.