

# Numark



# VIRTUALVINYL

REFERENCE MANUAL

# TABLE OF CONTENTS

<b>INTERFACE – ZONES</b> .....	<b>1</b>
<b>BROWSER</b> .....	<b>2</b>
FILE SYSTEM / FOLDER STRUCTURE PANEL (1) .....	3
FILE / SEARCH RESULTS PANEL (2) .....	4
AUDIO & VIDEO TAG SUPPORT .....	5
RETRIEVING TAG DATA .....	5
DISPLAYING CUE/VIRTUAL VINYL DATA FIELD COLUMNS .....	6
ADDITIONAL CUE/VIRTUAL VINYL DATA FIELDS.....	7
KEY VISUAL INDICATORS DISPLAYED IN THE BROWSER.....	7
PLAYLIST AND AUTOMIX (3) .....	8
PLAYLIST SETUP.....	8
PLAYLIST & AUTOMIX MANAGEMENT .....	9
EDITING AUTOMIX MIX POINTS.....	11
SIDELIST (4) .....	11
FILE SYSTEM / FOLDER STRUCTURE ORGANIZATION .....	12
FAVORITE FOLDERS .....	12
VIRTUAL FOLDERS .....	12
FILTER FOLDERS .....	13
DATABASE MANAGEMENT.....	14
GLOBAL SEARCH .....	14
SEARCHING .....	15
NETSEARCH .....	16
TRACK OPTIONS .....	17
BPM ANALYSIS AND KEY DETECTION.....	17
<b>DECK CONTROLS</b> .....	<b>18</b>
<b>INTERNAL MIXER CONTROLS</b> .....	<b>20</b>
<b>TOP TOOLBAR CONTROLS</b> .....	<b>20</b>
<b>RHYTHM WINDOW</b> .....	<b>21</b>
COMPUTER BEAT GRID (CBG) AND MANUAL BPM CORRECTION .....	22
<b>CONFIGURATION SETTINGS</b> .....	<b>23</b>
SOUND SETUP .....	23
OPTIONS .....	24
PERFORMANCE SETTINGS.....	26
SKINS.....	28
MULTI-INSTANCE .....	28
NETWORK .....	28
CODECS .....	29
VIDEO .....	30
INFO.....	31
<b>TIMECODE SETUP</b> .....	<b>32</b>
DEBUG.....	33
<b>SAMPLER</b> .....	<b>34</b>
PLAYING SAMPLES.....	34
RECORDING SAMPLES.....	35
SAMPLE OPTIONS.....	35
<b>EFFECTS</b> .....	<b>36</b>
TRANSITION EFFECTS .....	37
VIDEO EFFECTS.....	38
OPTIMIZATION.....	38
<b>KARAOKE</b> .....	<b>39</b>
KARAOKE ROTATION PLUG-IN .....	39
PLUG-IN CONFIGURATION.....	39
ROTATION LIST MANAGER .....	40
<b>BROADCASTING AND RECORDING</b> .....	<b>41</b>
RECORD FROM .....	41
RECORD AUDIO .....	42
BURN CD .....	43
BROADCASTING TO THE INTERNET ("BROADCAST").....	43
RECORD MOVIE .....	45
<b>LEGAL INFORMATION</b> .....	<b>46</b>
<b>EULA SUMMARY</b> .....	<b>47</b>

## INTERFACE - ZONES

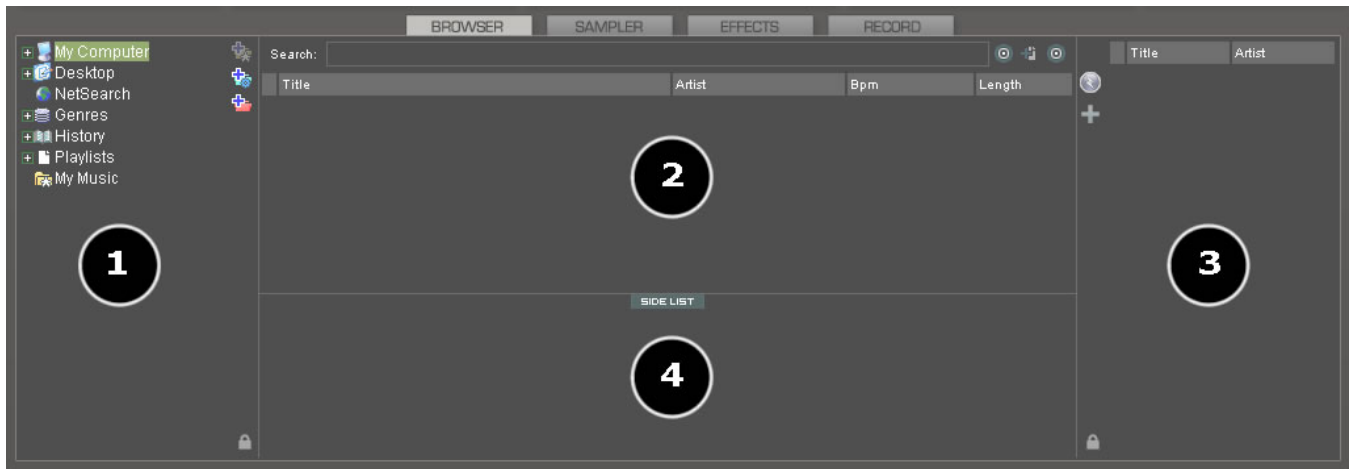
Before beginning to use CUE/Virtual Vinyl, familiarize yourself with the controls and "zones" of the software. Upon opening the application, an interface menu is displayed. Interfaces called "skins" feature different configurations, layouts and functionalities of the software. Let's begin by selecting "Internal mixer interface" to become familiar with the most important features of the software. To change to a different skin while the software is running, click on the "Config" menu (in the upper-right corner of the window) and select the "Skins" tab.



1. **BROWSER / SAMPLER / EFFECTS / RECORD**  
Browse your music folders, Create, edit and save your playlists.  
Adjust effects video, and audio, Record and save mixes.
2. **DECK 1 CONTROLS**  
Drag and drop music from the browser to this virtual deck.  
Track title, beats per minute display, counters, Transport Control.
3. **DECK 2 CONTROLS**  
Drag and drop music from the browser to this virtual deck.  
Track title, beats per minute display, counters, Transport Control.
4. **CENTER PANEL**  
Multiple panels can provide access to Crossfader, Gain, Volume PFL Controls, Video controls, Video preview windows, Effect controls, Timecode Scratch Interface.
5. **RHYTHM WINDOW**  
This window tracks the waveform of each song loaded or playing on a deck. This area also features a Computer Beat Grid (CBG) used for visual mixing and beat-matching.

## BROWSER

The Browser Zone is where you can navigate and organize files stored on a local, external, or network hard disk. The browser contains the compatible file types (whose extensions are associated with the decoders in CUE/Virtual Vinyl) to access the compatible extensions list. Click the "Config" menu then choose the "Codecs" tab. See the "Codecs" section of the manual for further details.



The Browser zone is divided into 4 panels.

- 1. File System / Folder Structure**
- 2. File / Search Results**
- 3. Automix Playlist**
- 4. Sidelist**

## FILE SYSTEM / FOLDER STRUCTURE PANEL (1)

CUE/Virtual Vinyl provides several organizational groupings of the track collection and a few third-party interfaces by default. Also provided is the ability to create additional navigation aids. To better understand the managed groups and interfaces, click the "Config" button and view the "Browser" tab.

The "Browser" tab allows the selection of the various groupings that can be viewed. Each item that is checked will have an associate entry on the File System / Folder Structure panel (1).

**Volumes** – Shows the File System navigation option from the My Computer structure.

**Desktop** – Shows the File System navigation option from the Desktop structure.

**NetSearch** – NetSearch provides access to search the CUE/Virtual Vinyl online collection of audio and video tracks. The feature allows a user with an Internet connection to search and then play (stream) audio and video tracks. (CUE/Virtual Vinyl's NetSearch is a membership service that allows the user to stream audio or video from an exclusive online collection. Membership is not required for trying this feature. Please visit [VirtualDJ.com](http://VirtualDJ.com) to learn more about the membership service and look at the NetSearch section for more about the features with CUE/Virtual Vinyl.)

**Genres** – Provides a generated tree of Genre types based on the imported ID3 tag Genre field. By selecting on the various listed genres the file browser panel (2) only shows those entries that match the tag.

**History** – Provides access to data stored about each session use of CUE/Virtual Vinyl. The data is stored as .m3u playlist files in **My Documents ► CUE ► Tracklisting** or **My Documents ► Virtual Vinyl ► Tracklisting**. History data is saved "on the fly" in order to provide running history of played tracks for each 24-hour timeframe of use.

**iTunes** – Displays iTunes playlists and uses the information in the playlist for accessing files. If the files don't exist in the playlist's path, an "Error" shows up in the deck's display when attempting to load the track.

**Crates** – Allows access to the crates structure created and utilized by the Serato ScratchLive application.

**Playlists** – Shows or hides the contents of the **My Documents ► CUE ► Playlist** or **My Documents ► Virtual Vinyl ► Playlist** folder. This is where an Automix playlist is saved by default.

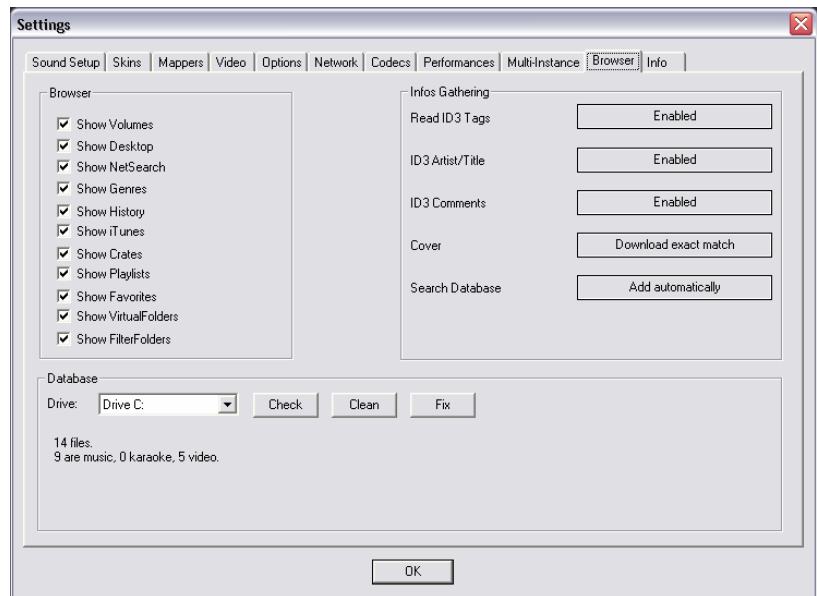
**Favorites** – Shows or hides any created folder favorites, created from a right-click on a folder in the Desktop navigation structure and selecting "Set as favorite" from the menu or by using the icon shown on the right on the panel's right divider bar.



**Virtual Folders** – Shows or hides any created Virtual Folders created from clicking on the icon shown on the right found on the right divider bar.



**Filter Folders** – Shows or hides any created Filter Folders created from clicking on the icon shown on the right found on the right divider bar.



## FILE / SEARCH RESULTS PANEL (2)










CUE/Virtual Vinyl provides several elements of information about each track. The information is a combination of ID3 Tag and CUE/Virtual Vinyl defined data fields. By default, the title of the song and artist are listed for each file along with columns for beats per minute (BPM) and duration (Length) with additional columns, explained elsewhere in the manual. The width size for each column can be modified individually and by clicking on a column the contents are sorted. For example, clicking on the artist column sorts the browser by artist initially in ascending order (click it again for descending order).

The track's title and artist are automatically filled in if the file is named according to two standard conventions: "(artist) title.ext" or "artist - title.ext" or if the "Tags" option is set to "Enabled" in the **Config ► Browser** tab, and Info Gathering section. See the "Audio & Video Tag Support" section of the manual for further details.

The BPM and length information are calculated automatically when a track is loaded to either deck. All track information is then stored inside the respective drive database files for later recall. And all data is stored and saved at time of discovery or entry to the database(s).

### Icon key

-  This title is unknown and was never played or scanned by CUE/Virtual Vinyl.
-  This title is known and has been scanned by CUE/Virtual Vinyl.
-  This title was played during this session.
-  Indicates an audio file with a linked video.
-  Indicates a video file.
-  Indicates a karaoke file.
-  Indicates that the BPM difference between the analyzed song and current playing song is too great. This is a track that you might wish to avoid playing next.

## AUDIO & VIDEO TAG SUPPORT

CUE/Virtual Vinyl supports ID3 tagging of MP3 audio files and MP4 and MOV tagging of video files. CUE/Virtual Vinyl has always provided the fast information access about one's collection by using CUE/Virtual Vinyl's database. Adding direct tag access to every file considerably slows applications ability for timely browsing and searching.

CUE/Virtual Vinyl retrieves and stores the tag information in similar fields as part of its own database. The tag information stored can be updated at anytime using the CUE/Virtual Vinyl file menu. Since tag data is not directly accessed, any of the information can be changed using the File Info dialog and it will not affect the tag info of the file.

*\*\* CUE/Virtual Vinyl currently only supports these types – ID3tags (MP3), MP4, MOV.*

## RETRIEVING TAG DATA

This can be accomplished in several methods at different points in time. The first and most common way is to use the **Config ► Browser** tab's options in the Info Gathering section.

### TAGS

- **Enabled** – Supported tag fields (BPM, Album, etc.) are read immediately when track first seen.
- **Disabled** – Tags are not read and need to be added manually through the browser interface.

### ARTIST/TITLE

- **Enabled** – If the corresponding tags do not contain data for the Title and Artist fields then the filename is parsed and used for those fields. Parsing format of the filename is "Artist – Title."
- **Disabled** – Do not read the tags and use the filename parsing.



### COMMENTS

- **Enabled** – Load the tag Comment field when track first seen.
- **Disabled** – Do not load the tag Comment field.

### COVERS

- **Local Search Only** – For the CoverFlow viewer files already locally stored will be used (to include ID3tag embedded).
- **Download Exact Match** – If no cover found locally, download a cover that only matches based on the song's information.
- **Download No Matter What** – If no cover found locally, download anything that closely matches using the song's information.
- **Don't Search** – Never look for covers if no cover exists.

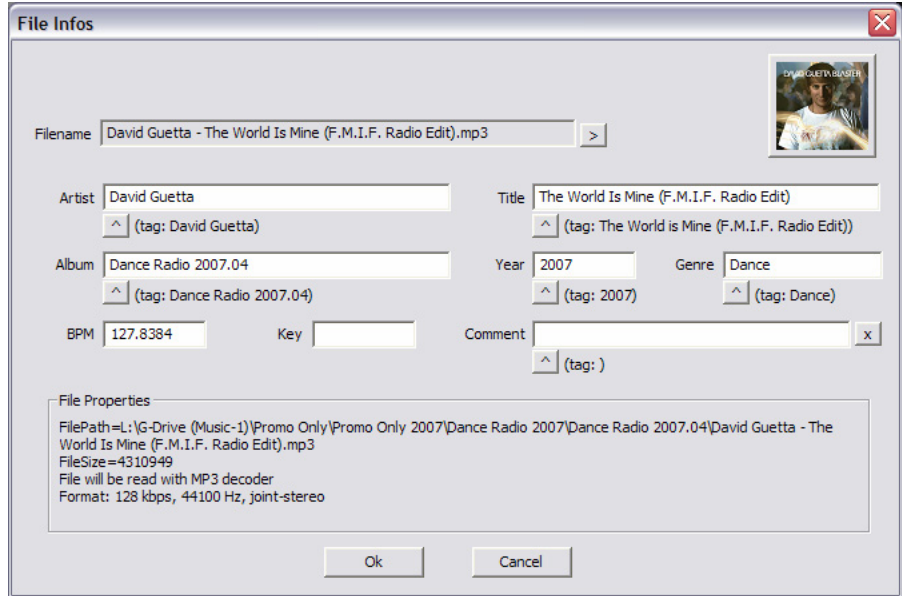
Alternatively, tag information can be retrieved by using a right-click on a specific track in the browser and selecting File Info. The figure on the following page gives an example of the database stored information along with the corresponding tag information that is retrievable.

Under each field with a  button will have the tag info next to it that can be read from the tag. Click on the button to copy that data into the CUE/Virtual Vinyl data field. This data will be stored and used by the CUE/Virtual Vinyl database. The  next to the FileName field is used to parse the file name into the Artist and Title fields.

# Numark

Another method of retrieving tag info is through the browser directly with multiple files selected. Right-click on a group of selected tracks and then make a choice from the following File Info menu options:

- Title from tag
- Title from filename
- Reload tag
- Erase comment
- Download cover



## DISPLAYING CUE/VIRTUAL VINYL DATA FIELD COLUMNS

In the file browser (2) or playlist panels (3) right-clicking on any column and choose from the pop-up list any or all of the available data fields now stored in the CUE/Virtual Vinyl database.

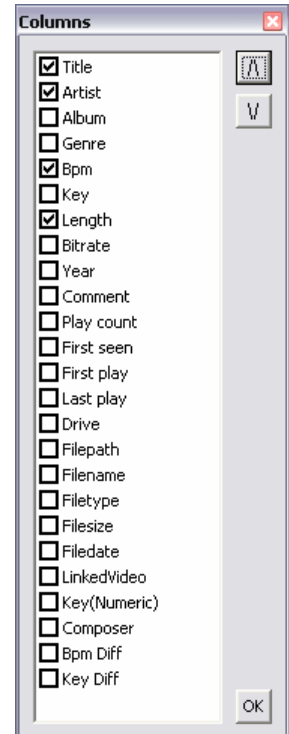


Changing the order of the columns is very easy by selecting the "Order..." option from the bottom of the list. Then, in the presented dialog, choose the order by highlighting the field and using the up and down arrows. Also add or remove fields from the display by selecting the check box for the field.

You can also select what you want displayed in the browser by clicking on the second bull's eye circle to the right of the search box and chose from the Show Covers, Show Music, Show Videos, and Show Karaoke options.



Here is a screen shot of the fields being displayed in the browser:



[Typical ID3 tags + Key field]



## ADDITIONAL CUE/VIRTUAL VINYL DATA FIELDS

The CUE/Virtual Vinyl database now stores additional data about each track for additional search features and Filter Folders.

- **Key and Key (Number)** – Stores the analyzed key value of a song.
- **Play Count** – Stores the running play count of the track.
- **First Seen** – Stores the date of when the track was first added to the database.
- **First Play** – Stores the date of when track was first ever played.
- **Last Play** – Stores the date of when track was last played.
- **Drive, Filepath, Filename, Filetype, Filesize, Filedate** – Shows the current known Drive, Filepath, Filename, Filetype (extension), Filesize, and Filedate for the track.
- **LinkedVideo** – Shows the filename of the video file linked to the track.
- **Composer** – Used for storing the Composer information for a track.
- **BPM Diff** – Dynamically displays the BPM difference compared to the currently playing track.
- **Key Diff** – Dynamically displays the Key difference compared to the currently playing track.

## KEY VISUAL INDICATORS DISPLAYED IN THE BROWSER

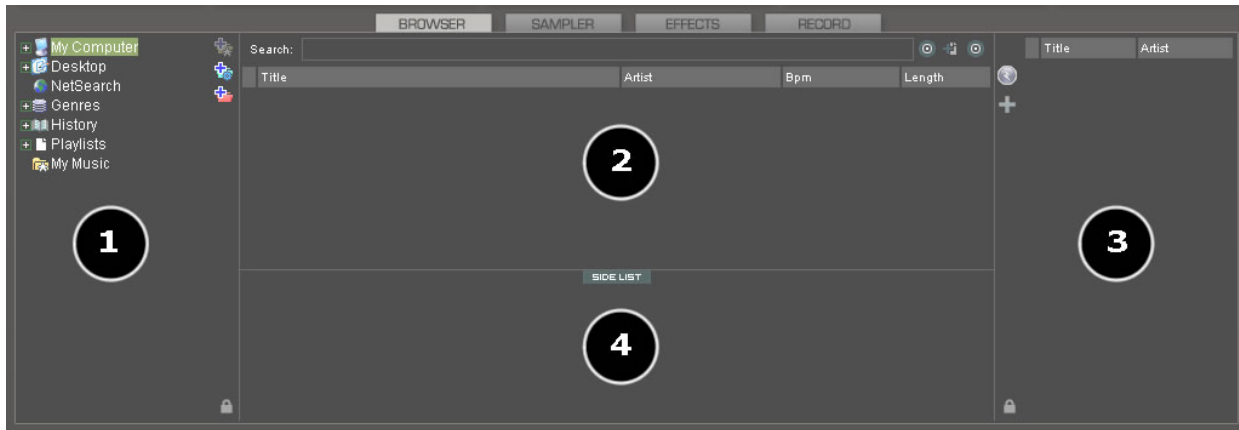
**Asterisk ( \* ) in BPM column** – Identifies tracks that have a pronounced beats per minute (BPM) rhythm for use with Beatlock and Tempo Automix features.

**Exclamation ( ! ) in Time column** – Indicates that the file is corrupted (probably following a bad copy) and that it may finish abruptly or there may be excessive noise in the track.




## PLAYLIST AND AUTOMIX (3)

The Automix feature works from a single deck. By default it is Deck 1; however, prior to starting the Automix if Deck 2 is selected as the active deck then Deck 2 is used. By utilizing 1 deck this frees the opposite deck for staging the first song to be used once you decide to stop the Automix process.

In addition to drag and drop, playlists can be created. Playlists are groups of tracks prearranged in a desired order of play. To Access the playlist, move your mouse or drag songs over the "Playlist" panel (3) on the right side of the browser. The window automatically expands to show the working area and current list if populated.



## PLAYLIST CONTROLS

	Activates/deactivates the Automix mode.
	Accesses the Playlist management menu.
	Locks the Playlist panel to a set width and block the auto-shut of the panel. <i>*You can also lock it and reduce its size to zero if you do not wish for it open automatically or be seen.</i>

## PLAYLIST SETUP

Tracks to be auto-mixed can be placed into the Playlist panel from the File Browser panel (2) by using a drag and drop method. Also, predefined playlists can be used and auto loaded.


In the **Config ► Options** tab there is an option for "AutoLoad Playlists."

The available values have the following functionality:



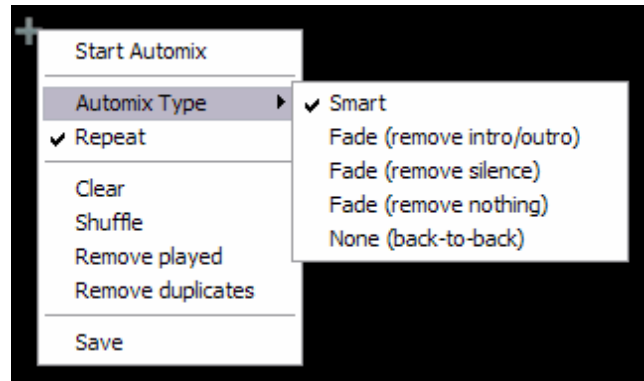
- **Disabled** – Contents of the playlist are displayed in the center File Browser panel only.
- **Always** – When a playlist is selected in the browser, the contents are immediately loaded to the playlist.
- **Smart** – Doesn't change the playlist when you click on a playlist folder if the actual playlist has been manually edited.

## PLAYLIST & AUTOMIX MANAGEMENT

Using the Playlist management menu by clicking on the "+" icon, choose from the options how the Automix functions and tracks are managed in the playlist. 

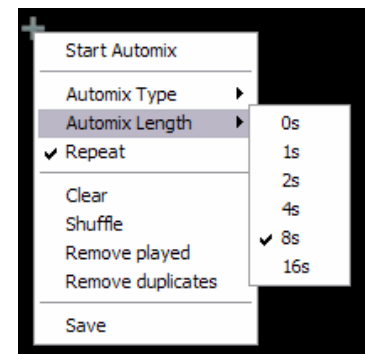
### Automix Types – 5 modes

- **SMART** – CUE/Virtual Vinyl attempts to determine the optimal mix point based on the outro of the current track and intro of the upcoming track – mix time varies from ~4 to ~8 secs depending on the tracks.
- **FADE (remove intro/outro)** – Attempts to remove the dead air intro or outro segments and creates a crossfade point based on the settings of the Automix Length.
- **FADE (remove silence)** – Keeps the entire track from beginning to end while removing any "dead air" or "silence" that may be present in the track and creates a crossfade point based on the settings of the Automix Length.
- **FADE (remove nothing)** – Keeps the entire track from beginning to end and creates a crossfade point based on the settings of the Automix Length.
- **NONE (back-to-back)** – This is a simple CUT mix that plays the files from complete from start to finish including any air gaps at the beginning or end.



### Automix Length

Length used for the Automix FADE types. Lengths are 0 seconds (CUT), or 1, 2, 4, 8, or 16 seconds fades using the FULL crossfade.



### Repeat

Two different "Repeat" options are available. When clicking on the options button ("+") the "Repeat" option lets you repeat the whole Automix Playlist. Once all tracks have been played, the Automix will start over again with the first track in the list.

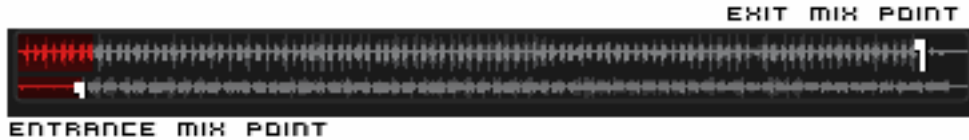
Prior to or during the Automix, right click on a song and select "Repeat" to have that song continuously repeat until the 'Repeat' is deselected.

- **Clear** – Clears the entire playlist of all tracks.
- **Shuffle** – Shuffles the contents of the playlist for play.
- **Remove played** – Removes any already played tracks from the playlist.
- **Remove duplicates** – Removes any possible duplicates from the playlist.
- **Save** – Provides function to save the playlist for future use. Saved playlists can be loaded from the Playlist option found on the left Navigation panel. Saved playlists are stored to the My Documents/CUE/Virtual Vinyl/Playlists folder

# Numark

## Deck Waveform Display – Mix Point Markers

When Automix is active, the deck being used for Automix play will show both the current track (top) playing and the next track (bottom) to be played. The currently playing track will display an EXIT mix point marker. The track to be played next will show an ENTRANCE mix point marker. Based on the Automix Type settings the markers can be moved within the tolerance of the type and time selections made. To change a mix point marker's position, left-click on the marker and slide it along the waveform to the desired position.



## Sequential Order Play Display

The playlist navigation during Automix play of what is playing and what is next is sequential from top to bottom (like most media players). The currently playing track is always highlighted. With the repeat option on for the entire playlist the navigation will return to the top after the last track is played in the list.

## Add, Move or Remove Track

Reordering tracks by adding more, moving their order, or removing them can be done at any time. To include adding a new track as next, moving a track into the next play, or removing the next track with the following track now becoming the new next track.

## Jump and MIX NOW

While in the Automix ACTIVE mode, double-click on any track in the Playlist and CUE/Virtual Vinyl will use the assigned crossfade Automix settings and mix that track immediately. Also the playlist will pickup from that point forward. It does not return to the left order location.

## Keyboard Shortcut Actions for use with Playlists

"Put in Sidelist / Get from Sidelist" – a keyboard shortcut action "switch\_sidelist\_playlist" provides the function for moving track lists between the two panels.

"Make Virtual Folder" – a keyboard shortcut action "vfolder\_fromplaylist" provides the function for creating a Virtual Folder from the current playlist contents.

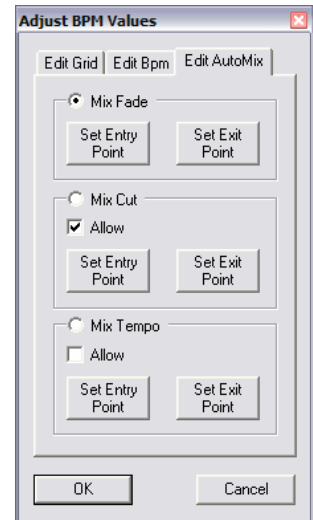
## EDITING AUTOMIX MIX POINTS

Even with the mix point markers available for on-the-fly adjustments, the mix points for a track can be set prior to using that track as part of an Automix playlist. The adjusted mix points are only utilized when using the SMART Automix type.

To edit a track's Automix mix points, load a track to a deck, then select the respective BPM button for that deck. In the "Edit BPM" dialog select the "Edit Automix" tab. Then select which kind of mix point to edit (Mix Fade, Mix Cut, Mix Tempo). Move the track to the position to use as the entry point, and click on the button "Set Entry," then bring it to the position of exit point, then click "Set Exit."

Repeat for Mix Cut and Mix Tempo if wanting to set those entry points. To give CUE/Virtual Vinyl the option of using the Mix Cut and Mix Tempo mix points place a check in the "Allow" box for each mix type.

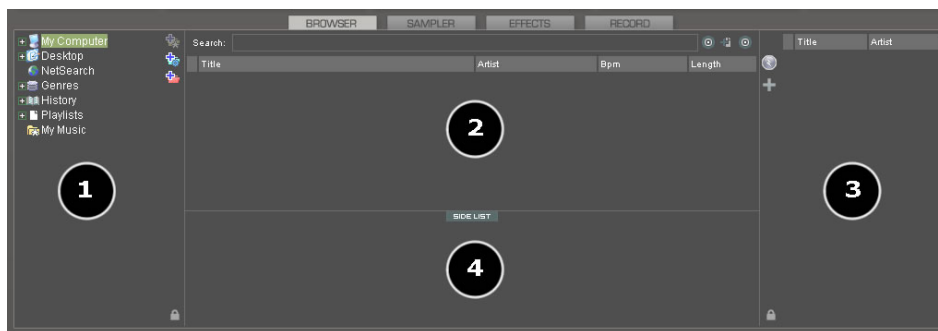
If the "Allow" for Mix Tempo is checked on both songs the Mix Tempo points are used by the SMART Automix when it determines if the two songs can be beat mixed. A song with Mix Tempo allowed has an asterisk (\*) next to its BPM value in the browser.



If the "Allow" for Mix Temp is not checked, the SMART Automix will then check if both "Allow" for Mix Cut are checked. If yes it will do a cut mix (using the cut entry/exit points), otherwise the SMART Automix mode will do a standard fade using the Mix Fade entry/exit points.

## SIDELIST (4)

CUE/Virtual Vinyl incorporates its own version of a waitlist called the Sidelist. The Sidelist panel (4) can be used to hold tracks that the DJ knows they will play sometime during their session. It also provides a location for CUE/Virtual Vinyl to moved tracks that were loaded but never played because the DJ loaded a new track to the deck. The Sidelist can also be use to stage and construct Playlists and Virtual Folders by drag-and-drop of tracks to the panel.



## AutoSave Unplayed

When the option "AutoSave Unplayed" is enabled in the **Configuration ► Options** tab, all tracks added to a deck but then never played are added to the SideList when a track replaces it on a deck. There are several Mapper commands for use with Keyboard Shortcuts that provide easy access to the Sidelist tracks for loading to a deck, clearing the entire list, and other actions.

- sidelist\_clear
- sidelist\_add
- sidelist\_load\_and\_keep
- sidelist\_load\_and\_remove
- mix\_next\_sidelist
- switch\_sidelist\_playlist

## FILE SYSTEM / FOLDER STRUCTURE ORGANIZATION

In order to simplify browsing and provide better and robust file management capability, CUE/Virtual Vinyl provides 3 methods for the user to organize the database.

On the left panel's border are 3 folder options:



Create Favorite Folder (monitored folder)

– pick a folder from the drive to always display in the browser



Create Virtual Folder (unmonitored folders)

– create a folder for manually populating with specific files



Create Filter Folder (monitored folder)

– create a folder based on a filter string that is run every time the folder is selected

Right-clicking on any of these folders provides access to various operations. For Favorite Folders options include Add or Remove contents of favorite to Search DB, and BPM Analyze options. Filter Folders contain an option for accessing the filter dialog for changing the filter string. Virtual Folders have a Rename option. All folders have options for moving the order of the folders up and down in the tree and for removing or deleting the folder.

A DJ may want to define a collection of directories which are most frequently used – for example, "Hits of 2006" or "My Music." The best solution is using the Favorite Folders. Think of Favorite Folders as Shortcuts to a folder in the operating system.

## FAVORITE FOLDERS

To setup a Favorite Folder, browse the Desktop navigation item from the File System/Folder Structure panel to the desired folder location. Click and highlight the desired folder, then click the yellow favorite folder icon.



The directory selected will be added to the end of the list, on the same level as the "Desktop" folder. To remove a favorite folder reference, select it and click the icon again.

The same actions can be taken by right-clicking on the desired folder and choosing "Set as favorite" from the menu. And, to remove a favorite folder simply right-click on the favorite and choose "Remove from favorite."

## VIRTUAL FOLDERS

Virtual Folders also aid in quick access to tracks. A virtual folder holds a collection of shortcuts to tracks. Create a virtual folder by clicking on the red Virtual Folder icon and giving the new folder a title.



Now browse the database or run various searches looking for tracks that are being grouped together. Drag and drop the tracks into the new Virtual Folder and next time you want to play these tracks refer to the virtual folder.

Please note that dragging tracks into a virtual folder will not physically move the files into that folder — it will only create a shortcut to where the files are located.

To remove a virtual folder, right-click on it and select "remove."

## FILTER FOLDERS

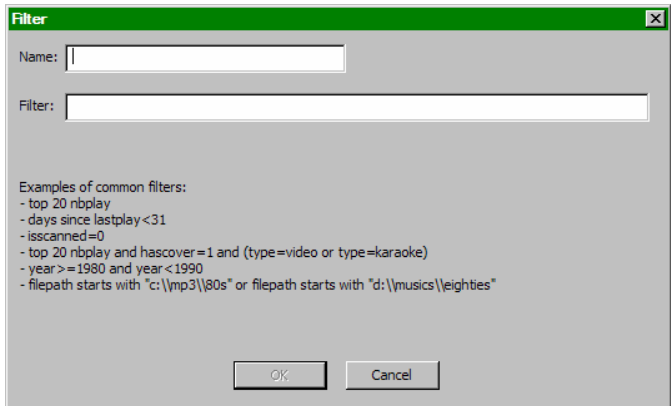
A highly dynamic and creative way to organize a collection of tracks is to apply conditions that automatically filter (search) the database for tracks that match the criteria outlined. CUE/Virtual Vinyl calls these types of folders Filter Folders.

### Create a Filter Folder

Click on the blue Filter Folder icon and a Filter creation dialog is displayed. Give the NEW filter folder a name. For example, **Top 100 Played**.



Now enter the Filter to be used for creating the results desired. This is where it can be complicated or simple. This example is simple, use the keyword "top" with the number "100" and the element "nbplay." "nbplay" looks at the Play Count data field. As the filter statement is entered CUE/Virtual Vinyl evaluates that the statement is properly created. The OK button will remain grayed out if the statement is not well-formed.



So the entire filter statement would look like **top 100 nbplay**. What CUE/Virtual Vinyl will do each time this folder is selected with sort the entire database on the Play Count field in Descending order and then display the first 100 entries or the top 100.

The filter dialog provides some great examples but to get its real power, you need to know the appropriate elements, operators, and a few keywords that are used:

- **Elements** – "title," "author," "artist," "album," "genre," "year," "bpm," "key," "bitrate," "songlen," "filesize," "filepath," "filename," "extension," "hascover," "isscanned," "alreadyplayed," "lastplay," "firstplay," "firstseen," "nbplay," "type," "days since firstseen," "days since firstplay," "days since lastplay," "LinkedVideo," "HasLinkedVideo," "BPMDiff," "KeyDiff," "ispresent," "inSearchDB"
- **Operators** – "=", ">", ">=", "<=", "!=", "<>," ">," "<," "is not," "is," "equals," "equal," "contains," "contain," "doesn't contain," "starts with," "start with," "ends with," "end with," "and," "or," "&&," "||," "&," "||"
- **Keywords** – "top," "[inverted]"

#### Filter Folder Examples

Filter	Expected Result
isscanned=0 or isscanned=1	Local Database
top 100 nbplay	Top 100 list
top 100 firstseen	recently added
top 100 lastplay	recently played
bpm>120 and bpm<130	bpm range from 120 to 130
year>=1980 and year<1990	80s music
days since lastplay<7	songs played last week
days since lastplay<31	songs played last month
days since lastplay<365	songs played last year
lastplay=0	never played songs
isscanned=0	files not scanned
type=video	video group
type=audio	audio group
type=karaoke	karaoke group
hascover=1	has cover picture
hascover=0	doesn't have cover picture
top 20 nbplay and hascover=1 and (type=video or type=karaoke)	Top 20 most played that have a cover and are Video or Karaoke files
filepath start with "c:\mp3\80s" or filepath start with "d:\music\80s"	Show all 80s files stored on two separate drives in a folder titled 80s
extension is "mp3" and title doesn't contain "madona"	Any mp3 file that does not contain "madona" in the title

## DATABASE MANAGEMENT

The database management system comes with additional tools found on the **Config ► Browser** tab.

- Save "On the Fly" during each session use
- Automatic check of database integrity at start
- Manually check the database integrity
- Fix database error(s)
- Clean out database entries for missing/moved files

CUE/Virtual Vinyl updates and saves the database immediately when changes are made. At start of the application the integrity of the database file(s) are validated. If a problem is detected a message box will be displayed identifying which database has the problem with a recommendation of how to fix the problem.

Usually the database only needs a Fix. Here are the steps:

1. Open the configuration dialog.
2. Go to the Browser tab.
3. Select the Drive from the drop-down.
4. Click the **FIX** button.

Other options for managing the database(s) are:

**CHECK** – This runs a validation of the database to ensure that all database file references are still valid and existing stored files on that drive. The process simply re-labels the FilePath entry for the file if it can not be found. Data about that file is not lost.

**CLEAN** – This process will REMOVE any database information about files that are no longer valid. This is necessary for cleaning up the Global Search capabilities.

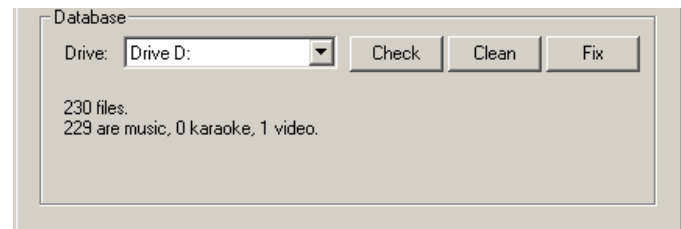
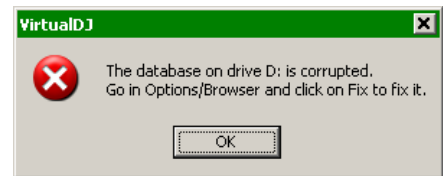
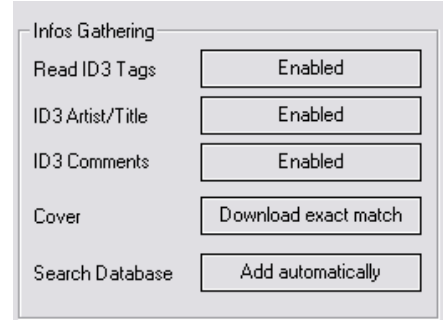
## GLOBAL SEARCH

CUE/Virtual Vinyl provides an intuitive on the fly search capability. Adding files to the global search is quite easy and can be done in two ways.

First is by setting the "Search Database" property in the Configuration's Browser tab to "Add automatically." This will add any files not already part of the search (new additions) when browsing the folder structure of your collection.

The other option is "Add manually," requires using the "Add to Search DB" option to be selected on the actual entry in the main browser interface and then right-clicking and selecting "Add to Search DB."

In either scenario, once added to the Global Search, the ability to find the file is always available when doing a search. The difference is that the results display of the search determines if it is in the currently selected folder or elsewhere in the system.

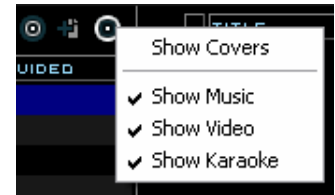





## SEARCHING

The search field is located at the top of the browser panel. To search the files listed in the database, left-click on the search field then type your search text.

Searching is instant and it is generally not necessary to type the text in its entirety — a few letters are enough to reduce the list to the single title.



If you want to limit the search results to specific types of file, click on the second bull's eye circle to the right of the search box and chose from the Show Music, Show Videos, and Show Karaoke options.

If your search does not produce any results you can "save" the search criteria to a special text file. Click on the  graphic between the 2 bull's eyes. This allows for a list to be created that can be used as a 'need to buy' list for improving your collection. This file is called "SearchLog.txt" and can be found in your **My Documents ► CUE** or **My Documents ► Virtual Vinyl** folder.

In the following example, a search on "ba" is entered into the search box. The center file browser panel displays the results of the search. The file(s) listed above the dividing line represent the file(s) found in the folder that is currently highlighted in the left folder browser panel. All other files below the dividing line are files that exist elsewhere in the database.



### What can be searched?

Just to the right of the search box there is a "search fields" selection button. Click on the bull's eye circle and a list of searchable fields is presented.

Depending on what fields are selected the search results will vary. To ensure maximum results for all searches, select all the fields and the maximum search capabilities are available (however, it may also produce more than what you want).

To view your entire collection contents just enter an asterisk ( \* ) as the search string and now the entire database is displayed.

To search based on BPM, enter a beginning and ending range (110-120) and with the BPM column selected, the displayed results are tracks in the range of 110 to 120 BPM.



## NETSEARCH

When using the "Key" as a searchable field both the Key and Key (Number) fields are searched.

NetSearch is an online searching capability that can provide the user with access to tracks not currently in their collection. NetSearch also leverages CUE/Virtual Vinyl's MusicGroup service for providing suggestions of other tracks that one could play based on the current track playing.

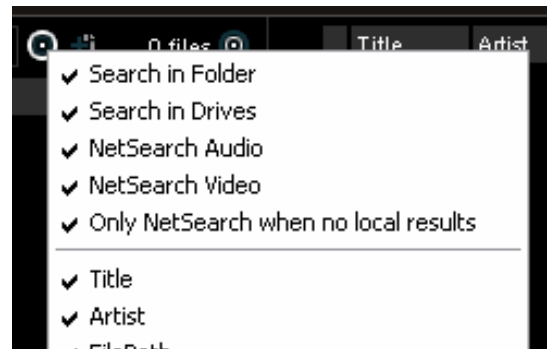


NetSearch can be used by either selecting the NetSearch option from the left navigation panel or by having the NetSearch options activated in for the entire database.

In the figure above, the NetSearch option is selected on the left with the options to search both Audio and Video using the search options button to the right of the search box.

Alternatively, when any other item is selected from the left navigation panel, you can adjust the NetSearch options for when **not** on the NetSearch entry.

Note the option for using NetSearch when there are no results for your current collection. With the "Only NetSearch when no local results" is selected, then CUE/Virtual Vinyl will reach out to its search service and provide you with results from the net. If unchecked, the results will be displayed in the following order – Local Selected folder results, Entire collection results, and NetSearch results. Each separated by a dividing line as mentioned on the previous page.



The options "Search in Folder" and "Search in Drives" is a quick way of removing your local database collection from the potential search results.

If "Search in Drive" is selected but not "Search in Folder," there is no distinction whether the files are in currently browsed folder or not, it just displays the result from the search database.

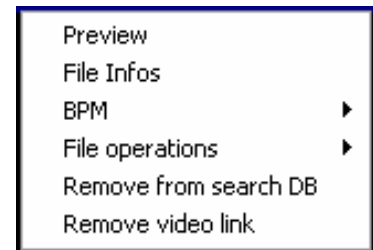
If "Search in Folder" is selected but not "Search in Drive," it shows only the files from the current folder.

With both selected, the search show with a separation line between folder results and drive results.

## TRACK OPTIONS

Right-clicking on a track displays many options:

- Preview – for launching the separate track preview interface
- File Info – for launching the File Info dialog to modify data field content
- File Operations like - copy, move, and delete files
  - When selecting Delete a warning is displayed about deleting the file(s) from your system
- BPM analyze track options – Re-Analyze or Manual Edit
- Add OR Remove songs from the search database
- Remove the link to a video file for audio tracks



## BPM ANALYSIS AND KEY DETECTION

The BPM Engine analyzes the audio to determine the tempo of the track. Analyzing a track can be performed 2 ways: load the track to a deck, or right-click on the track in the Browser panel and select **BPM ► Re-Analyze**. You can also analyze a group of tracks contained in a folder from the left Navigation panel, right-click on the folder and select Scan for BPMs.

If the tracks have been analyzed by an external application prior to being loaded into CUE/Virtual Vinyl and that value is stored in the BPM tag, the BPM Engine will use the stored value as a reference when analyzing the track. CUE/Virtual Vinyl will calculate a more precise value to a 0.05 BPM precision not more than +/- 1 beat per minute away from the value of the tag.

Part of the BPM Engine is also a Key Detection Engine. Determining the "musical key" of a track provides the ability to harmonically mix tracks. The Key Detection Engine strongly favors minor keys, as most studio production songs are in minor key. But if the key is strongly major, it will be reported as a major key.

If you wish to manually tap out the beats per minute of a song, you can left-click to the beat on the BPM button of the appropriate deck playing your track. If you would like to assign a keyboard shortcut or assign a button on a controller, the mapping action beat\_tap action can be assigned.

Last, if the BPM (or the Key) is manually entered using the File Info dialog, then CUE/Virtual Vinyl will use the entered value and will not analyze the BPM or Key. If forced by selecting the **BPM ► Re-Analyze** function the track is re-analyzed without regard to existing data or how the data was entered.

## DECK CONTROLS

CUE/Virtual Vinyl's interface provides access to two virtual "decks." To load a track to a deck, drag and drop files into each of the decks spinning virtual platters.

The two decks are equipped with the following controls and displays:



1. **Information about track currently loaded** – Provides key information about the currently loaded track. Artist, Title, Elapse Time, Remaining Time, Gain level, Key of Track, Current Pitch position.
2. **BPM** – Current BPM of the track based on Pitch changes. BPM button for manually tapping out the beats per minute of a song, you can left-click to the beat on the BPM button of the appropriate deck playing your track. Right-click the button to access the "Edit BPM and Automix" dialog.
3. **Hot Cues** – Use the 3 buttons to set cue points. The first time that a left-click on one of these buttons, a cue point will be set. At any time left-clicking on the corresponding button and the track jumps back to that cue point. To set a new cue point for the hot cue, right-click the corresponding hot cue button. If wanting to delete a cue point, right-click on its icon in the waveform display, and select "delete." Lock image shows that the Smart Cue feature is activated. When smart cue is activated, songs are automatically re-synchronized when jumped to a new position or cue.
4. **Waveform display for currently** – This view shows the visual waveform of the entire track, allows for viewing the remaining duration of the audio, as well as what has already been played. When highlighted in blue or red (using the default skins), that area of the waveform indicates what has been played and the current position of the audio. The remaining grey area of the waveform shows the length of the audio remaining. Inside the waveform itself, the lighter part indicates the presence of beats whereas the darker part indicates the presence of vocals.
5. **Effects**
  - **Effects Selection Dropdown arrow** – Select which effect to apply.
  - **Effects Selection Dropdown window** – When clicked, this will apply the effect selected.
  - **Parameter 1 & 2 knobs** – These two knobs adjust parameters of the effect selected in the dropdown window, although not all effects require or make use of these knobs.
6. **Loop Sampler**
  - **Sample Selection Drop-down arrow** – Choose which sample to use. There are 12 slots which are available to record, load, and play samples.
  - **Sample Selection window** – When clicked, this will play the sample listed in the selection window.
  - **VOL** – Controls the level of gain applied to the loop sample.
  - **REC button** – When initiated, this function records the loop to the sample slot selected. If no loop is currently set on this deck, a 4 bar loop will be recorded by default.
  - **Sampler Loop controls** – Used to halve or double the sample's length.

## 7. Loop Set /Control

- **Loop In/Out** – A loop is any area of a track that repeats seamlessly. Press "Loop In" at the point where the loop is to start. Press "Loop Out" when the desired point to mark the end point of the loop. The audio between the two points will begin to loop continuously. To release the loop and continue play of the track press "Loop Out" again and the audio will continue from the end point of the loop. To set a new loop, just press "Loop In" again while the loop is disengaged, and then press "Loop Out" to begin the new loop.
- **Shift Knob** – Adjusts the loop length by half-length or double-length increments.
- **Smart Lock button** – Allows the loop buttons to work together to create loops synchronized to BPM.
- **Loop Length** – This indicates the length of the loop according to beat measures. Increase or decrease the length of the loop from 1/4 to 16 measures.

8. **Virtual Turntable** – Can be used with the mouse to scratch, back cue, and pause a playing track. The virtual table also has a position marker on it for visualizing a scratch position. Around the outer edge of the virtual table is a position ring that gives a reference to percentage of a tracks completion.

9. **Pitch slider / Pitch buttons** – Controls the speed/pitch of the music. By moving the slider downward, the speed of the music speeds up. By moving it upward, the music slows down. The "Zero" button lets you smoothly bring the pitch back to 100%. Double click on it to bring it back instantly.

The two Pitch buttons are used to temporarily change the speed of the track playing. This is useful when you want to make a quick adjustment to a track if the beat of the track is not exactly matching up with the beat of the track playing on the other deck. The speed will be affected as long as you are pressing down "+" or "-."

**KeyLock** – When enabled, changing the pitch of the song does not change the tone of the track. Keylock can be enabled at any point along the pitch range to maintain the desired tone at that pitch while still being able to further adjust the pitch. When disabled, the tone will change based on the pitch used – slower pitch = slower deeper tone, faster pitch = faster higher sounding tone.

## 10. Transport

- **Cue** – Returns and pauses the music at the default Cue Point. To set a Cue Point, pause the song, seek to the desired position (for example by rotating the virtual turntable), and then click on "Cue." Also, a right-click on the "Cue" button will set a Cue Point while the track is playing. Once on the Cue Point, pressing and holding down "Cue" allows for temporary play of this point. To delete a Cue Point, right-click on its icon on the Waveform display, and select "delete."
- **Stutter/Play** – Starts the music. Pressing "Stutter/Play" while the song is already playing will restart the music from the last position where you pressed "Play," creating a "stutter" effect.
- **Pause** – Stops the audio where it is currently playing. Subsequent clicks on the button (while the track is stopped) will cycle through the beginning of the song and all the Cue Points. Right-clicking while stopped automatically goes to the first detected beat in the song.
- **Sync** – When clicking "Sync," CUE/Virtual Vinyl will sync the tempo of the deck to the opposite deck's tempo.
  - Press "Sync" while the song is paused, only the pitch will be adjusted.
  - Press "Sync" while the song is playing, the beats will be smoothly aligned too.
  - Right-click on "Sync," the song will align on beat while the button is pressed.

## INTERNAL MIXER CONTROLS

CUE/Virtual Vinyl features an internal mixer section as part of the Mixer panel.

It can be used just like a regular DJ mixer.

The controls on the mixer include:

1. **Panel selection buttons**
2. **Master and Headphone Cue volume knobs**
3. **Channel Gain** – This knob sets the gain level for the corresponding channel (deck). (Right clicking will bring it to the value that matches the other deck level. Double clicking brings it back to 0.)

**Key Adjust** – Adjust the key of the playing track without adjusting its pitch/tempo.

4. **EQ** – These knobs allow you to adjust the low, mid, and high frequencies of the audio playing on the desired channel of the mixer. Each frequency range can also be cut by right-clicking on the respective knob.
5. **Channel Faders** – These vertical faders allow you to adjust the audio signal of the desired channel.
6. **PFL and VU Meters** – Sends the pre-fader level of the audio to the cue section for headphone monitoring. VU Meters show the current output of the respective deck.
7. **Crossfader** – The crossfader blends audio or video between the two decks. By sliding this fader from channel to channel you can isolate the left and right deck or blend them together.



## TOP TOOLBAR CONTROLS

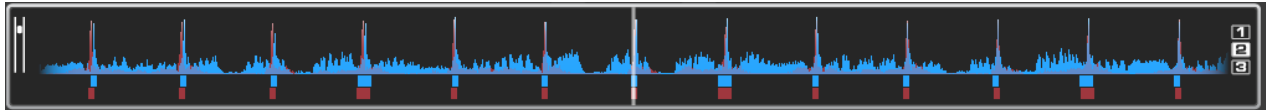


1. **CPU** – Usage graph of the CPU.
2. **4/4 CBG Sync bars**
3. **Clock** – Displays time, and when clicked with mouse can act as a counter.
4. **Config** – Provides access to the configuration settings dialog. See "Configuration Settings" section of this manual for more information.
5. **Window controls** – Windows controls provide the Minimize, Maximize, and Close application options.

## RHYTHM WINDOW

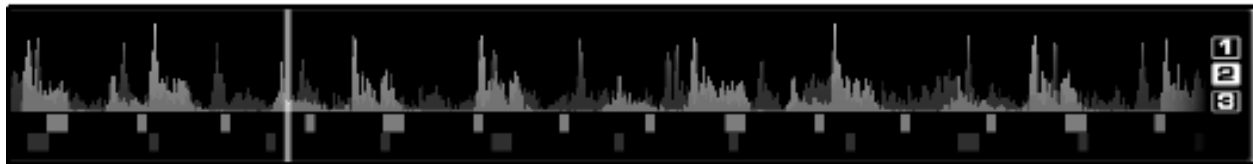
Above the players, a window posts curves corresponding to the two rates/rhythms of the music. These curves are represented in a waveform, allowing you to see your music. The peaks in the curve represent beats. In order to synchronize the music, these peaks should occur at the same time. The current audio is represented by the feature in the middle of the screen. All on the left was already played, while what is on the right represents the next seconds of the track.

You can zoom in or zoom out the display using the slider on the left or the three preset buttons (1, 2, 3) on the right side of the rhythm window.



Below the curves there are small squares, named CBG (Computed Beat Grid), which represent the position of measures. The large squares represent the beginning of a measure 4:4 time. The CBG is particularly useful, for example, when mixing a track at the time of an intro where the beat is not yet present.

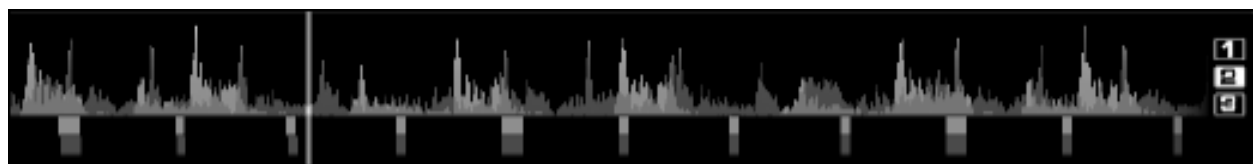
In the picture above, you can see that the beats are completely synchronized – it is easy to see that the peaks (beats) of the music are lined up. However, some music does not have the very obvious single beat peaks that most house and techno music has. This is when the CBG is very useful. If you look at the following graphics, it is not exactly clear where the beats should sync up by just observing the waveform visually. However, with the help of the CBG, it becomes much easier to synchronize the two tracks:



**NOT BEAT MATCHED – CBG NOT ALIGNED**



**BEAT MATCHED – CBG NOT ALIGNED**



**BEAT MATCHED – CBG ALIGNED**

## COMPUTER BEAT GRID (CBG) AND MANUAL BPM CORRECTION

Part of CUE/Virtual Vinyl's BPM Engine is to calculate the Computer Beat Grid (CBG) of the track. The computer beat grid is a 4/4 beat measure indicator for identifying the timing gap of the track. This becomes helpful when manually beat mixing a track or using CUE/Virtual Vinyl's synchronized play (SYNC), Beat Lock, or Automix Tempo Mix features.

### Adjusting the BPM and CBG:

In rare cases, when the BPM and the CBG is not correctly calculated, you can easily correct both manually by right-clicking on the appropriate BPM button of the appropriate deck for the track.

With the "Adjust BPM Values" dialog, you are provided several options to make the adjustments.

### EDIT BPM tab

**BPM** – Manually move the value up or down in .1 increments with the arrow buttons. You can also quickly halve or double the shown value with the /2 and x2 buttons.

**Phase** – Used to adjust the CBG markers. The left and right arrows make very fine adjustments, where the 1/4 +/- buttons provide 1/4 beat adjustments.

**Re-Analyze** – Forces the re-analysis of the track regardless of any manual adjustments or settings.

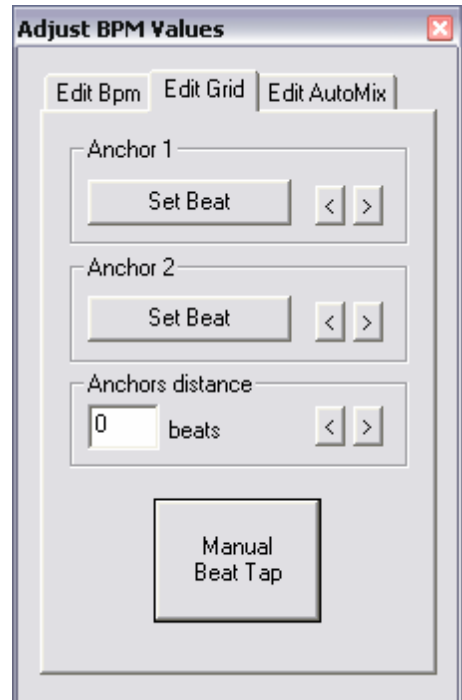
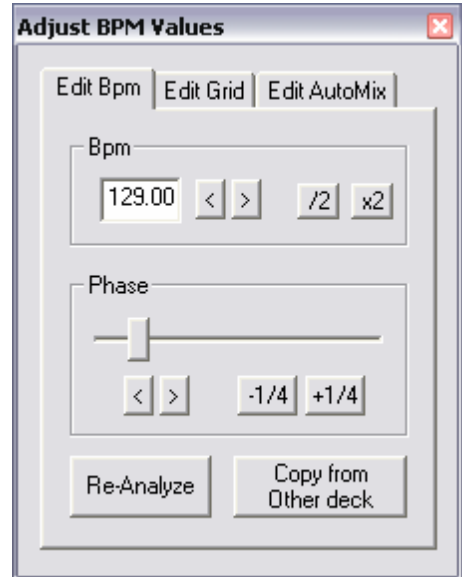
**Copy from other deck** – Copy the BPM of the track on the opposing deck to be use for the track being modified.

### EDIT GRID tab

Alternatively, an anchor method can be used. First, tap-out the beat using the "Manual Beat Tap" button while the track playing.

Second, pause the track and move the track to the first downbeat (first beat), and click on "First anchor." Advance to the upbeat (second beat), and click on "Second anchor." Check that the number of beats displayed corresponds well to the number of beats between the two anchors.

Then go further in the music and repeat the "second anchor" operation. If you notice that the beats and the CBG shift then repeat the placing of the second anchor a couple more times. Normally two or three anchors should be enough to obtain an accurate CBG.



\*\* For more information on how the CBG is used for beat matching, sync, and Automix Tempo mixing, see the section about the Rhythm Window later in the manual.



## CONFIGURATION SETTINGS

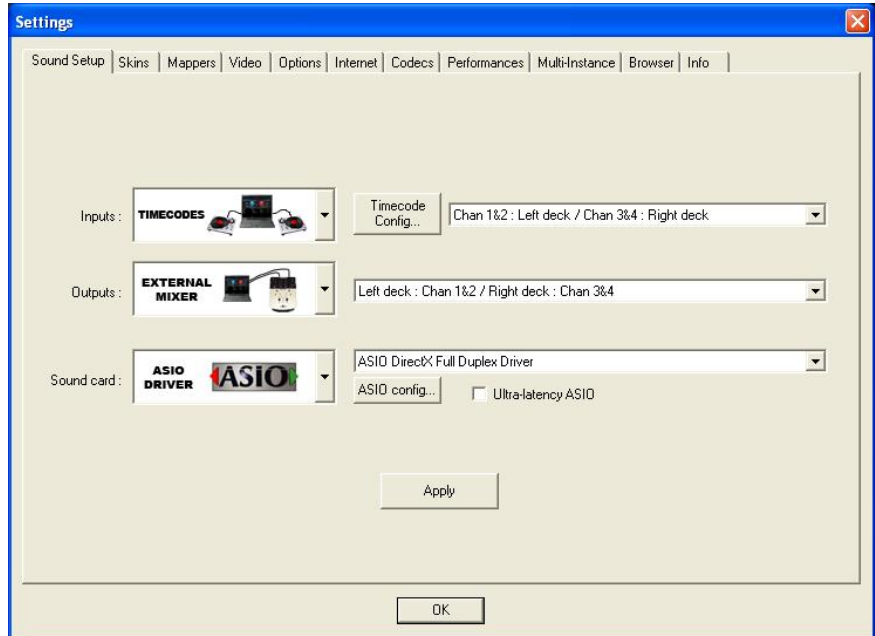
CUE/Virtual Vinyl is designed to be very simple and easy to use but it is also fully customizable to match your preferred system performance.

To make changes to CUE/Virtual Vinyl's configuration, click on the CONFIG button. This will bring you to the "Settings" dialog. The options in the "Settings" dialog can be viewed and edited by clicking on the corresponding tab on top of the "Settings" window and include:

## SOUND SETUP

**Inputs** – If using timecoded vinyl or CDs to control CUE/Virtual Vinyl, select the appropriate input configuration from this drop-down menu. Choices are "NONE," "Single Timcode" for Single control, and "Timecodes" for Dual Control. Setting up CUE/Virtual Vinyl for Timecode use is covered in detail in the "Timecode" section of this guide.

**Outputs** – Select the preferred output configuration from this drop-down menu. Please note that, depending on your sound card, some output options may not be available for use. Choices are "Single Output," "Headphones," "External Mixer" (2 channel output), or "3-Lines Mixer" (3 channel output).



**Sound card(s)** – Select the sound card driver which you would like to use with the CUE/Virtual Vinyl software.

**Sound card** (not shown) – Select the sound card in this pull-down list.

**ASIO Driver** – Select the ASIO driver to use.

**Ultra-latency ASIO** – There is two ASIO engines available for CUE/Virtual Vinyl to provide better latency support. Checked is the original ASIO engine that is optimized for very low latency (renamed "ultra-latency") and is still considered the default engine. Some computers have problems with this optimization. Unchecked is the NEW 'safer' performance level ASIO engine which has less optimization for environments that have difficulty with the Ultra-Latency engine.

**Output Channels** – Select the routing of outputs on soundcard when the Outputs dropdown is set to one of the following choices - "Headphones," "External Mixer" (2 channel output), or "3-Lines Mixer" (3 channel output).

## OPTIONS

The Options settings control the multiple features and actions to accommodate the DJ's style for using the CUE/Virtual Vinyl application.

**Crossfader** – This option allows you to select the crossfader curve. There are four different options including: Full, Cut, Scratch, and Smooth. (other curves can be set through plug-ins).

**Pitch Range** – Allows you to change the pitch range of the pitch slider. Reducing the range of pitch can increase the precision with which you are able to control the pitch (speed) of the records. Available ranges are 6, 8, 10, 12, 15, 20, 25, 33, 50, and 100% pitch control.

**Allow BPM <80** – Allows adjustment to the BPM Engine's value range. Disabled the range is set between 80 and 240. A setting of Smart sets the range for values between 60 and 240.

**Max Load** – Specifies the duration maximum beyond which the track will not be loaded in memory. Loading tracks which are too long in memory may put a strain on your system performance and cause CUE/Virtual Vinyl to not function properly. This function makes it possible to play long tracks without overloading the memory of your computer.

**Jogwheel Sensitivity** – Adjust the amount of jogwheel sensitivity in processing a controller's jogwheel movement data (Does not affect the touch sensitivity of jogwheels with touch control).

**Scrolling** – Allows reversing the direction of the scrolling rhythm window.

**Disc** – Allows selecting the spinning rate of the virtual turntables (default: 33 1/3 turns).

**Security** – This setting prevents you from loading a track on a deck while it is playing. If you select "Ask," CUE/Virtual Vinyl will prompt you to verify that you, indeed, want to load a track while the deck is playing. If you select "Always," CUE/Virtual Vinyl will not allow you to load a track to a deck that is already playing. If you select "None," the security feature will be disabled.

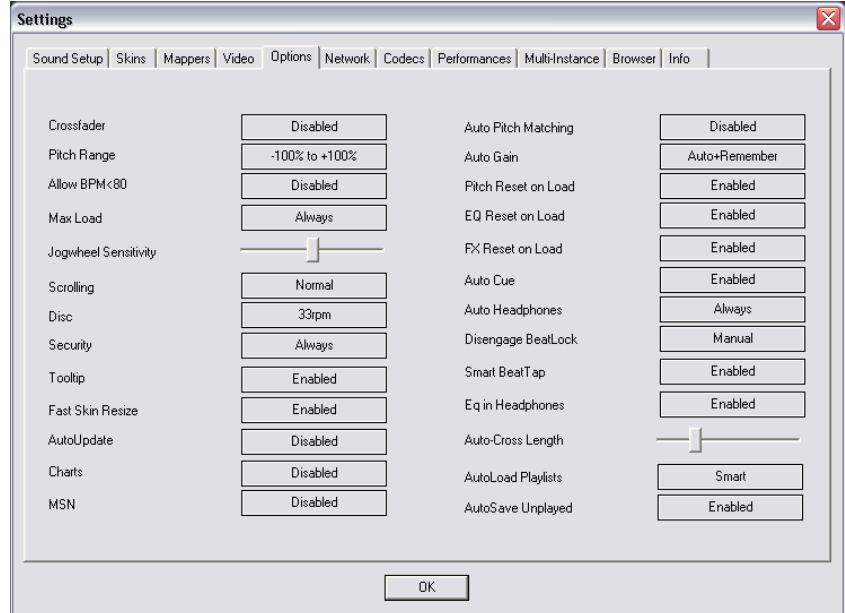
**Tooltips** – Enable or disable the tooltip window. These tips appear when you hover the mouse cursor over the buttons of the software.

**Fast Skin Resize** – Performance setting to help the refresh of the screen when the skin is maximized.

**AutoUpdate** – Automatically checks for new versions of CUE/Virtual Vinyl (internet connection required).

**Charts** – Authorizes CUE/Virtual Vinyl to send anonymous statistics about your sessions, compile charts of the most played tracks all over the world. These statistics are available on [www.virtualdj.com/charts.html](http://www.virtualdj.com/charts.html). No personal information will be collected.

**MSN** – When activated, this option will allow your MSN Messenger to show the music you are playing. To take advantage of this feature, you need to make sure that the "what I am listening" option is on in your MSN Messenger.



**Auto Pitch Matching** – When loading a song, automatically adjusts the pitch so that the BPM matches the BPM of the song currently playing.

**Auto Gain** – This is the auto gain adjustment setting for CUE/Virtual Vinyl. The values are:

- **Disabled** – Use the raw db level of the track as it was recorded, ripped, or normalized.
- **Auto** – Normalize the track to a 0db level for play.
- **Auto + Remember** – Normalize the track to a 0db level for play if loaded for first time, then remember the last db gain adjust for next loading of the track.
- **Remember** – Loads the track the first time using the Disabled setting then remember the last db gain adjust for next loading of the track.

**Pitch Reset on Load** – If you enable this option, the pitch slider will be reset to 0% every time you load a track.

**EQ Reset on Load** – If enabled, this option will reset the equalizer on the deck when you load a new track to the deck.

**FX Reset on Load** – If enabled, this option will reset (turn off) the FX on the deck when you load a new track to the deck.

**Auto Cue** – If enabled, will advance track position to the first cue point if one exists (or with the first beat of the song if no cue exists and if "always" is selected) when loading a track.

**Auto Headphones** – This option allows for automatic switching of headphone cues. If you select "on load," the headphone cue will switch the headphone cue when you load a new track. If you select "always," the headphone cue will switch when you load a new track or scratch a track that is already playing.

**Disengage Beatlock** – Once engaged, the Beatlock feature will keep the deck locked to the beat on the other deck, no matter if you are scratching or changing the pitch on the other deck. Disengage "on load" or "on switch" will automatically disengage the Beatlock feature when the deck is loaded/switched.

**Smart BeatTap** – When enabled and using the beat\_tap action, it will automatically "snap" to the nearest plausible BPM and phase. This allows for very accurate BPM by just tapping 3 or 4 beats, the first tap will set the phase only, snapping to the nearest beat (you can tap only once to change the phase or the 4:4 strong beat, for example). One tap will not change the bpm. Subsequent taps will not change the phase, but change the bpm to the nearest plausible bpm value.

**EQ in Headphones** – When using the Headphones soundcard configuration, any EQ changes made with CUE/Virtual Vinyl's internal EQ mixer will be heard via the headphones channel.

**Auto-Cross Length** – Use this slider to specify the duration of the fade during automatic mixing. If this is set to 0 (left side), the tracks will play from start to finish.

**AutoLoad Playlists** – See "Playlist Setup."

**AutoSave Unplayed** – See "AutoSave Unplayed."

## PERFORMANCE SETTINGS

CUE/Virtual Vinyl provides a simple yet thorough interface for optimizing performance to the capabilities of the computer based on its specifications. Depending on the system's resources, some settings will work better than others.

*It is recommended that you take time to experiment with the settings in order to achieve the best performance of your system prior to using CUE/Virtual Vinyl in a live performance.*

**NOTE:** When new components (controllers, soundcards, external drive, and software) are added to the system, performance options may require changing to achieve a new best possible performance based on the additions or changes to the system.



### Presets

Use this slider to select different preset configurations for the parameters below. Shift the "Presets" slider to the right for "Best Quality" of sound, or shift the slider to the left for "Fastest" performance.

**NOTE:** Not all systems are able to handle the HIGHEST setting for "Best Quality." It is highly recommended to start at the "Fastest" preset and work towards the "Best Quality" setting testing each setting.

### Soundcard

**Latency** – The amount of time it takes for a device to respond to a command. Latency makes a significant difference when using timecoded vinyl, CDs, MIDI or external control devices. The lower the latency setting the more instantly the software will respond, but the more likely the DJ will hear glitches and pops if your computer is not fast enough to process the audio.

**NOTE:** In ASIO mode, some soundcard drivers don't work well with a latency forced by the software. In such case, use the "Auto" value (as pictured), and set the latency in the soundcard's control panel.

**Safe Mode** – When using a DirectX mode setting (like Simple, Dual, Mono or 4.1), CUE/Virtual Vinyl is less likely to produce glitches and pops if your CPU is momentarily busy. The performance trade off is scratching and pitch adjustments will use more CPU, especially with advanced algorithms. So, if using advanced Master Tempo this will probably need to be disabled, unless the computer is very fast.

**NOTE:** This option has no effect on ASIO or Low-Latency modes.

**Overclock** – This setting can make your computer run faster (especially on laptops) and therefore be compatible with lower latencies.

## Scratch

Allows for adjustment to how CUE/Virtual Vinyl reacts to scratch motions.

### **Optimize for:**

**Quality** – CUE/Virtual Vinyl will more accurately represent how a scratch sounds when moving the virtual record back and forth

**Latency** – CUE/Virtual Vinyl reacts as quickly as possible but might result in a somewhat more metallic sound.

### **Scratch algorithm:**

**Simple Algorithm** – Adds no computational overhead and will use a simple interpolation algorithm to compute the scratch sound.

**Enhanced Algorithm** – Uses an advanced algorithm that mimics the movement of the needle on the grooves to obtain the best scratch sound possible. A filter size of 11 gives the best quality/CPU ratio, producing a very good quality while keeping a low computational overhead.

## 48kHz <-> 44kHz

Describes how CUE/Virtual Vinyl will interpolate between the 48kHz and 44.1kHz sample rates. Choosing "Basic Interpolation" will save some system resources and could improve performance. For better quality interpolation, choose "Lowpass Filter." 11 taps is the best quality/CPU ratio.

**NOTE:** Most commercially available music is recorded at 44.1kHz (including MP3s) so it is a good idea to set your soundcard's output to 44.1kHz. This will prevent your soundcard from having to interpolate to different sample rates and will improve performance. Unless you have worked with different sample rates before, the 44.1kHz setting should be default for your soundcard)

## Master Tempo

The master tempo is the algorithm controls how CUE/Virtual Vinyl changes the pitch of the song without changing its tone ("KeyLock feature").

The default "Fast" algorithm takes only a small percentage of the CPU power, and produces good results at pitches in the range of -10% to +10%. For more extreme pitching, the fast algorithm can produce some choppiness. If your system is strong enough, this can be corrected by using the Advanced algorithm option.

With the Advance option, the algorithm can be scaled to provide good time or good frequency localization, or both. High time localization means that CUE/Virtual Vinyl produces results similar to the time domain pitch-synchronized overlap-add (PSOLA) methods, high frequency localization produces results that are closer to what you get from an improved phase vocoder.

**Complexity** – This parameter is used to set the *processing quality* and determines the quality/speed tradeoff, ranging from very fast/realtime preview to full quality for very high end applications. A low quality setting provides excellent performance at a slightly lower algorithm quality, while higher values render the results in more time but at a significantly higher resolution. (Acceptable values – 0 thru 3.)

**Spatialization** – Determines the time-frequency localization trade-off, ranging from a very localized setting to very smooth. As a rule of thumb, a low value provides good time localization (good for voice and single instrument recordings) while a high value is good for entire mixes. High values take more time to process but are not considerably slower. (Acceptable values: 0 thru 5.)

**NOTE:** Disable safe-mode for better performance with the Advance algorithm.

## SKINS

CUE/Virtual Vinyl allows you to choose between several different interface designs called "skins."

By default, CUE/Virtual Vinyl provides you with several skin options. This manual references the CUE/Virtual Vinyl6 Pro skin within the text. But you can choose from the pre-installed skins or visit our website and download other user created skins.

**Pro** – 1024x768 resolution of the skin referenced throughout this manual.

**Pro (Hi-Res Wide)** – same as Pro skin (v6), but in 1280x1024 resolution

**Pro (Wide)** – same as Pro skin (v6), but in 1280x800 resolution.

**Language:** You can also change CUE/Virtual Vinyl's Language support by selecting the appropriate Language from the drop-down.

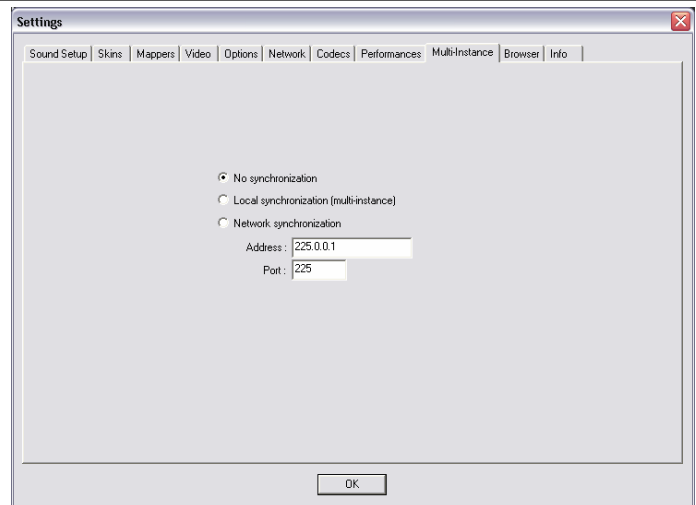
## MULTI-INSTANCE

CUE/Virtual Vinyl can be synchronized between multiple instances and/or synchronize multiple computers running CUE/Virtual Vinyl.

**No synchronization** – Turns synchronization off.

**Local synchronization** – Allows multiple instances of the CUE/Virtual Vinyl software to run and synchronize together on the same computer.

**Network synchronization** – Allows several computers running CUE/Virtual Vinyl to synchronize over a network.

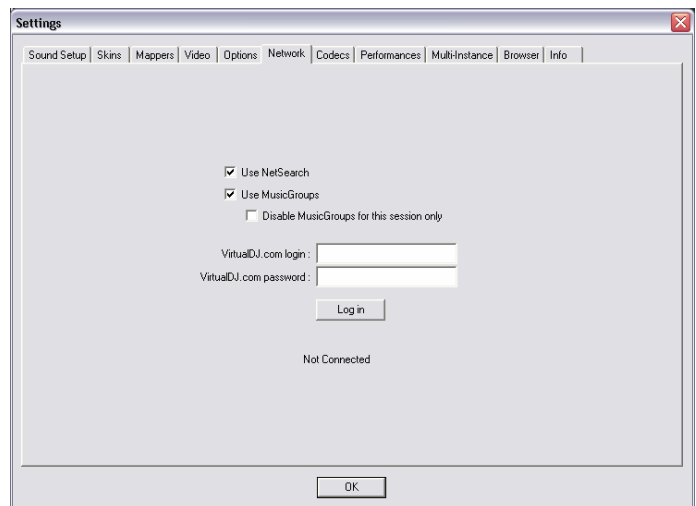


## NETWORK

CUE/Virtual Vinyl can now take advantage of many features while connected to the Internet. These features (MusicGroups, NetSearch, etc.) require you to have an active Membership on this website, and to provide your login and password on this tab.

The MusicGroups feature is the ability for a DJ to show their playlists to other DJs, and help new DJs improve their music selection. You can create your own MusicGroup to display your own playlist, or one can ask to join more general MusicGroups in order to contribute to a larger group.

Atomix provides two kinds of Memberships: Premium Membership and Free Membership.



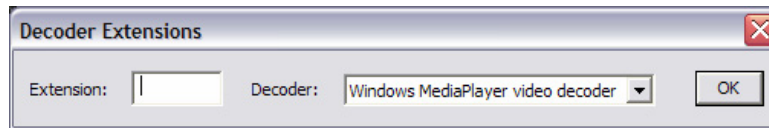
The Premium Membership brings the user access to all the online features, access to all the add-ons, premium technical support, developer access, and recognition from the CUE/Virtual Vinyl community.

The Free Membership brings the user access to all the online features and access to all the add-ons.

## CODECS

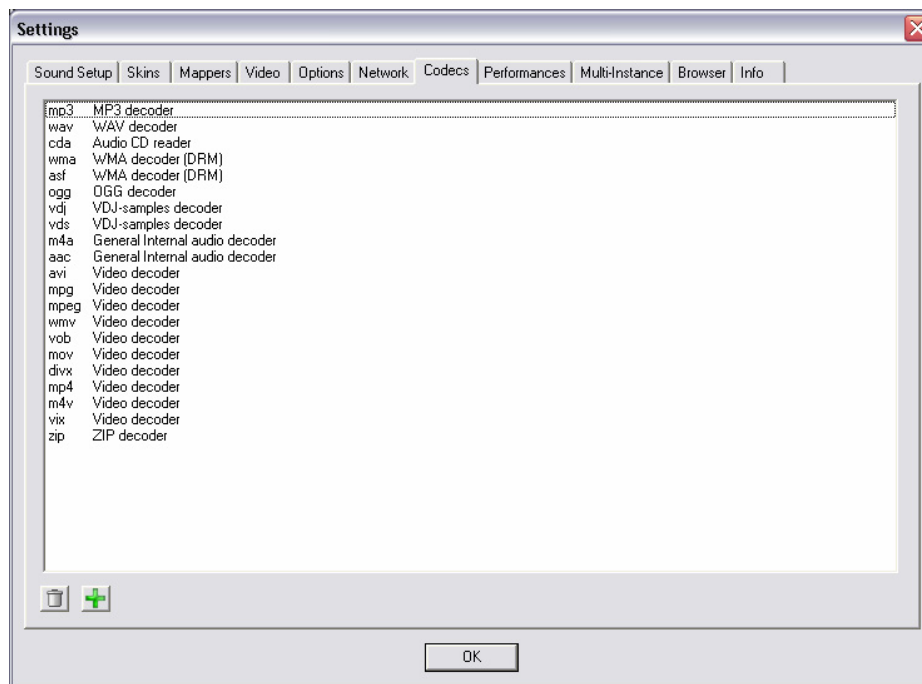
CUE/Virtual Vinyl is able to decode several formats natively with its audio and video decoders. The Codec tab identifies what file types (by extension) use what specific decoder for play in CUE/Virtual Vinyl.

At install, CUE/Virtual Vinyl includes the some of the common sound and video file extensions. If, CUE/Virtual Vinyl is not already associated with a specific extension for an audio or video codec then select the "Add" button. Enter the extension and then select from the several available decoder engines that CUE/Virtual Vinyl is able to use as a decoding engine.



### Determining Appropriate Selection for a Unique codec

If the CUE/Virtual Vinyl MP3 or Video decoder is unable process a certain file then that unique encoded format (codec) can be assigned to one of the other supported decoders. Ensure the appropriate CODEC for that audio or video type is installed to the operating system and the file is playable in one of the supported decoder applications listed in the CUE/Virtual Vinyl Decoder drop-down. Then assigned that file extension type to that decoder.



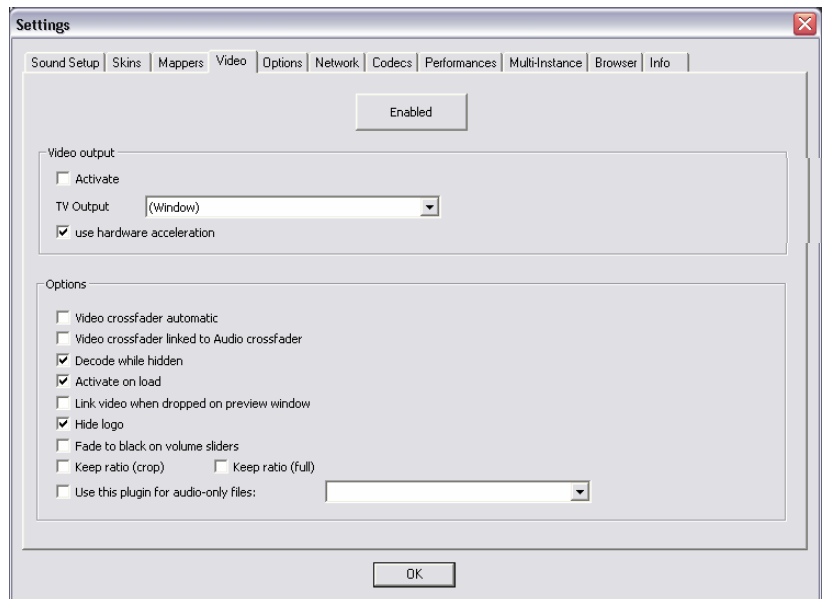
## VIDEO

**ENABLE / DISABLE** – Provides the ability to have the application's video engine enabled or disabled. By disabling the video engine ALL video features of the application are not usable and may increase performance for DJ's using only the AUDIO features of the application.

**Activate** – Turn the video engine on or off.

**TV Output** – Select the monitor that will display the video master output.

**NOTE:** Only Monitors which are part of the windows desktop can be selected. If the monitor is not in the list, Open Windows' display settings and activate the 'Extend desktop on this monitor' for the desired monitor.



**Use Hardware Acceleration** – Use DirectX to compute and display the video.

**NOTE:** unless you are using a video card that is fairly old, you shouldn't turn this off.

**Video crossfader automatic** – Let CUE/Virtual Vinyl move the video crossfader automatically according to your mixing.

**Video crossfader linked to Audio crossfader** – This option allows CUE/Virtual Vinyl to link to the audio crossfader for controlling video crossfades. If unlinked (unchecked) the video crossfade can be controlled using the video crossfader knob labeled "Cross" underneath the video screen in FullVideo skin.

**Decode while hidden** – Provided with a strong performance computer, CUE/Virtual Vinyl can decode video content even when it is hidden. This will prevent some jolts that may occur when video content is brought into the mix with the crossfader.

**Activate on load** – If a video file is loaded on either deck the video engine is automatically activated. If wanting to play just the audio track of a video, uncheck this feature so the video engine will not be activated.

**Link video when dropped on Preview Window** – Checking this option will utilize the deck's video preview window for linking a video to an audio track.

**Hide logo** – Checking this option will hide the application logo from the video mix window.

**Fade to black on volume sliders** – Deck will FADE to BLACK when the volume fader is moved to 0. And will fade up in intensity as the fader is moved towards FULL level.

**Keep ratio (crop) / (full)** – When "Keep ratio (crop)" is selected, CUE/Virtual Vinyl will crop the sides of your videos so their ratios will remain at 16/9 or 4/3 regardless of the screen. When "Keep ratio (full)" is selected, CUE/Virtual Vinyl will add black bars to the sides of your videos so their ratios will remain at 16/9 or 4/3 regardless of the screen.

**Audio Only Plug-in** – Check this option and select the desired plug-in from the drop-down box. When playing audio-only files, this option will activate the plug-in to act as a visual. Example plug-in selection is the Sonique visuals.



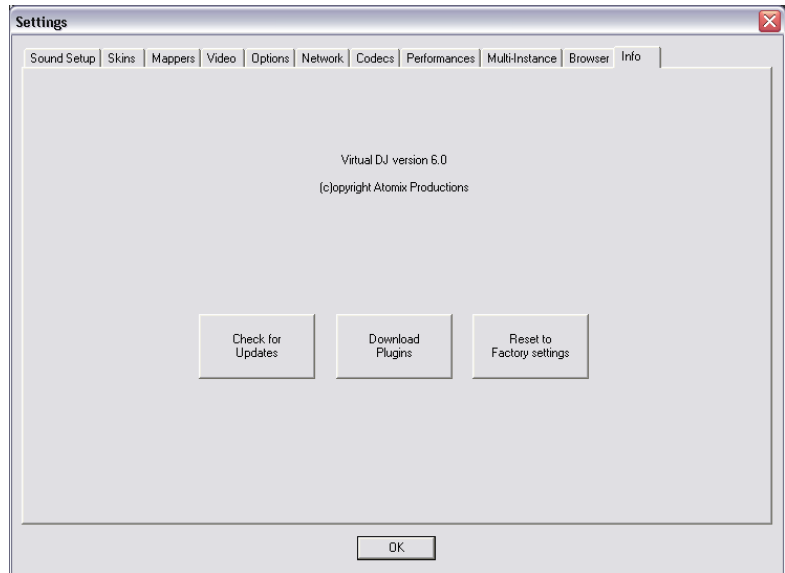
## INFO

The CUE/Virtual Vinyl Info tab provides the version number along with copyright statement for the application. There are three useful buttons:

**Check for Updates:** makes an internet query to the CUE/Virtual Vinyl Download Center and checks to see if any updates are available. [Internet Connection required]

**Download Plug-ins:** Launches the browser associated with http request and directs the browser to the 'Add-ons' section of the website.

**Reset to Factory settings:** Reset CUE/Virtual Vinyl's settings back to the recommended defaults. All configuration tabs are affected by the change.



## TIMECODE SETUP

In addition to using external controllers, CUE/Virtual Vinyl also provides the ability to control each deck via time-sequenced control vinyl. CUE/Virtual Vinyl support most Digital Vinyl System (DVS) signals, including Numark's Virtual Vinyl.

To use a DVS with CUE/Virtual Vinyl, start by referencing the CUE/Virtual Vinyl Quickstart Guide to set up your computer's soundcard within CUE/Virtual Vinyl. By default, once you select the appropriate DVS signal, there should be minimal manipulation of CUE/Virtual Vinyl's settings.

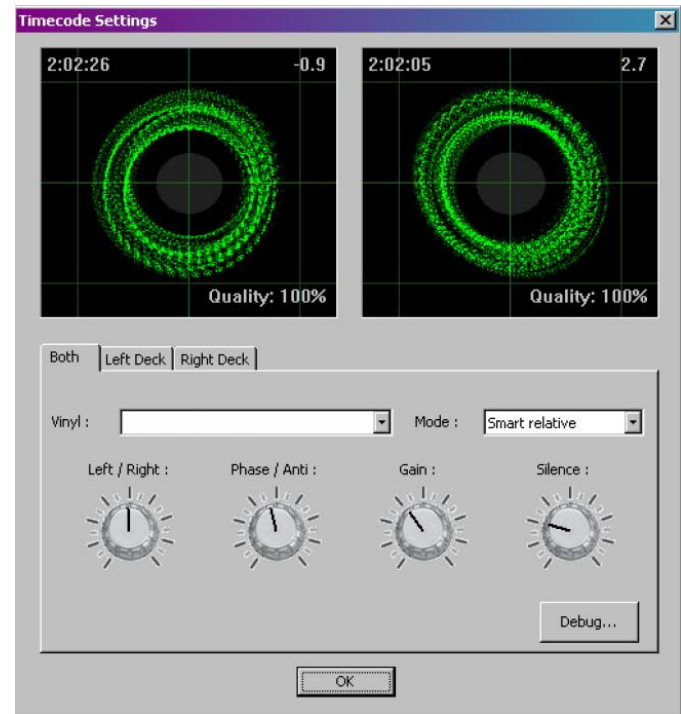
If necessary, the following instructions will help you adjust your timecode configuration. After clicking on the Timecode Config button in the Sound Setup tab, you will see the window shown on the right.

Start playing your DVS vinyl or CD to see the signal level information (the green figures) in the configuration display.

For a 100% quality signal, you may need to adjust the following options:

- **Vinyl** – Select what kind of timecode control record you will be using.
- **Mode** – Select what timecode mode you want to use. When in doubt, use "Smart Relative", which is the default and should be used unless you have specific needs.
- **Left/Right** – Use this knob if the graphic shows an ellipse instead of a concentric circle
- **Phase/Anti** – Use this knob if the graphic shows a tilted ellipse instead of a concentric circle
- **Gain** – Adjust this knob if the graphic is too small or too big for the window. (This does not change the level of the signal being received by CUE/Virtual Vinyl from the DVS vinyl or CD.)
- **Silence** – Adjust this knob to adjust the gray zone on the graphic, so that it doesn't touch the green circle while in normal operation, but completely covers the green lines when you stop the turntable.

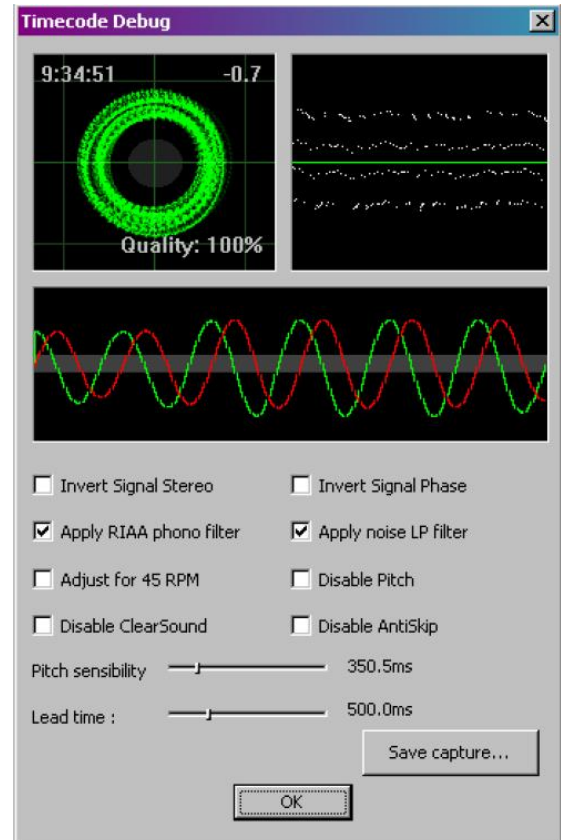
If necessary you can select the individual deck tabs ("Left Deck" or "Right Deck") to fine-tune each deck with the same options.



## DEBUG

The Debug button provides access to additional fine-tuning options for gaining a better quality signal of your DVS and its control of the CUE/Virtual Vinyl interface. The following visuals are available and features that can be adjusted to obtain better DVS performance.

- **Signal Grid** – This upper left-hand box displays the DVS signal being read by CUE/Virtual Vinyl. By adjusting the various settings, you should see green concentric circles displayed in this area.
- **Data Stream** – When properly configured the display should show four dotted, horizontal lines of data stream, two above and two below the green line. (They should not cross the center line.)
- **Stereo Waves** – Shows a received signal from the DVS in a sine wave with the silence zone in the center. If either channel is not properly sending a signal, you may see a flat line, or one sine wave may be smaller than the other.
- **Invert Signal Stereo** – Check this box if the input cables are crossed and the track moves in reverse when the DVS signal is played.
- **Invert Signal Phase** – Check this box if the cables are correctly connected but the phasing of the signal is reversed.
- **Apply RIAA phono filter** – If your soundcard does not provide a RIAA pre-amp capability, use CUE/Virtual Vinyl's software RIAA pre-amp to attain a stronger signal when using a vinyl record for the DVS. (If using a CD DVS signal this should not be checked.)
- **Apply noise LP filter** – Use CUE/Virtual Vinyl's Low Pass filter for removing the low-end signals that disrupt the DVS signal's quality.
- **Adjust for 45 RPM** – When checked, CUE/Virtual Vinyl will compensate reading of the control signal if a speed of 45 RPM is used.
- **Disable Pitch** – If you disable SmartPitch, the pitch slider inside CUE/Virtual Vinyl will not move to reflect the pitch on your turntable and the BPM of your song will not reflect the pitch change on the skin's interface.
- **Disable ClearSound** – ClearSound is a feature that gives a better sound when you don't scratch, at the expense of a very small delay when you scratch. When playing certain types of music with lots of tremolo or pitch changes, the DVS can cause artifacts in the sound quality. This feature can be disabled by checking the box.
- **Disable AntiSkip** – AntiSkip is a feature that will ensure that CUE/Virtual Vinyl will not skip even if your needle skips on your record. Skipping of a DVS control vinyl can occur due to various reasons. If minor skips occur while using the DVS control vinyl, CUE/Virtual Vinyl will compensate for these minor occurrences. This feature can typically be disabled if using DVS control CDs by checking the box.
- **Pitch Sensibility** – The Pitch Sensibility is used to adjust how much the pitch slider in CUE/Virtual Vinyl should follow the turntable speed. If set too low, the pitch slider will take some time to adjust. If set too high, the pitch slider will move when you just want to scratch. (Remember, with the Timecode technology, software has no clear way to know the difference between a disc turning faster because of the turntable's pitch being moved or a disc being nudged or scratched. Both result in the timecode signal speeding up.)
- **Lead Time** – Adjusts how much lead time is used on the vinyl before the start of the song. This is used so that CUE/Virtual Vinyl can track timecode movement before the actual start of the song.
- **Save capture ...** – Use this button to save a .bmp file of your configuration. You can then upload this image on [www.virtualdj.com](http://www.virtualdj.com) forums if you need to ask for help to configure/optimize your timecode signal.



## SAMPLER



CUE/Virtual Vinyl features a powerful sampler, which provides the ability to record, load, save and play samples on the fly. The sampler can be accessed by clicking on the "Sampler" tab in the lower window and features 12 slots for samples which are available to use at any given point in time.

There are two types of samples that are supported – linear (one shot), and circular (looping) samples.

**Linear** samples are samples which are played beginning to end. Typically, linear samples do not have an intrinsic rhythm, and are often sound effects (applause, sirens, etc).

**Circular** samples are played in a looping fashion. Most often, these samples have an intrinsic rhythm, which can be repeated forever.

However, there is no rule about how to use samples – it is all up to you whether you will use a sample in a linear or circular fashion.

## PLAYING SAMPLES

To play a sample you can simply click on the "Play" button associated with the sample cell.

If the sample is a linear (one shot) sample, the sample cell will play alongside the mix until the end of the sample.

If the sample is circular (looping) sample, the sample cell will play alongside the mix and will continue to loop until the play of the sample is stopped when "Play" is pressed a second time.

The speed of the sample is modified in order to synchronize with the active deck at the nearest possible aligned beat when played. This ensures that the rhythm of the sample will be beat-matched and aligned with the active deck, resulting in a smooth, natural sample playback.

Samples can be played from the loop sampler menu found as part of the controls for each deck. Simply select the sample from the pull-down menu, and then click on the sample title to begin play. The frame around the title will light up during playback. If the sample is a loop, then click the sample title again to stop the loop. Linear samples will stop when the end is reached. The play volume of the sample can also be controlled using the Volume knob.



## RECORDING SAMPLES

CUE/Virtual Vinyl can easily record samples which are then instantly ready to play.

To record a linear (one shot) sample, click the "Jingle" button on the bottom of the sample cell to begin recording. Click on "Jingle" once again to stop recording. The sample is recorded from the deck that is currently in use (the Active Deck).

To record a circular (looping) sample, use the deck's loop control to set the loop then click the "Loop" button on the bottom of the sample cell. The loop is automatically recorded to that sample cell and ready for immediate use.

If the "Loop" button is clicked without defining a loop using the deck controls, a 4 beat loop is automatically recorded.

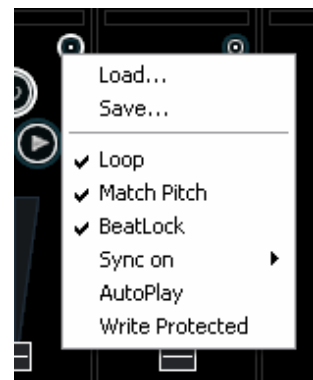
### CAUTION

Recorded samples **are not** saved for use in subsequent sessions. To save the sample, use the "Sample Options" menu and select the "Save..." option.

## SAMPLE OPTIONS

For each sample cell, there is a sample options menu available by clicking on the small button in the top right of the sample cell.

- **Load** – Loads a sample from the hard drive.
- **Save** – Saves the sample to the hard drive.
- **Beatlock** – Turns Beatlocking on and off. This way a linear sample is able to be synchronized with the active deck, or prevent a looping sample from synchronizing to the active deck.
- **AutoPlay** – When checked, begins playing the sample as soon as the volume is adjusted.
- **Write Protected** – Write-protect the sample cell so it cannot be recorded over.



## EFFECTS



CUE/Virtual Vinyl features a comprehensive set of audio and video effects and transitions which can be accessed by clicking the "Effects" tab on the lower window. The effects list is displayed on the left side of the window and each of these effects can be activated for both decks. Multiple effects, both audio and video, can be applied.

To use an effect, select the effect and activate it on whichever deck the effect should be applied. This is done by clicking on one of the two "Activate" buttons in the middle panel of the window. The button will light up showing activated. Deactivate the effect by clicking on the "Activate" button again. The parameters for the selected effect are displayed on the right panel of the window. The parameters will change depending on which effect is selected. Adjust the parameters by moving the faders of the associated parameters.

Effects can also be used from the effects panel on the deck controls. Different effects can be selected using the pop-up menu. Enable and disable effects by clicking on the displayed effect title. If using the effects panel on the deck control, multiple effects can not be activated for that deck – this panel only allows activation of one effect at a time.

In addition to mixing traditional audio, CUE/Virtual Vinyl makes it possible to mix video content with the ease and familiarity of a DJ interface. Instead of audio files (.mp3, .wma, .m4a, etc.), video files (.avi, .mpg, .wmv, .vob, etc.) can be played. CUE/Virtual Vinyl's interface provides all the same features to mix, scratch, effect, and transition video content, just as with audio content.

Also, you can link video files to audio files to produce a video enhanced audio combination. Using either the drag-and-drop preview windows, keyboard shortcut action, or a skin provided link object any type of supported video file can now be linked with an audio track.



Video files are distinguished in the Browser with a small, blue "V" on their icon. And, audio files with linked videos are distinguished in the Browser with a small, blue "L" on their icon. When playing a video/linked audio file, a video window will open in CUE/Virtual Vinyl.

If the installed video card has a TV output or a second output screen, the secondary output can be specified as the output for full-screen display, instead of the windowed output. The desired output is specified by using settings in the Configuration dialog on the Video tab.

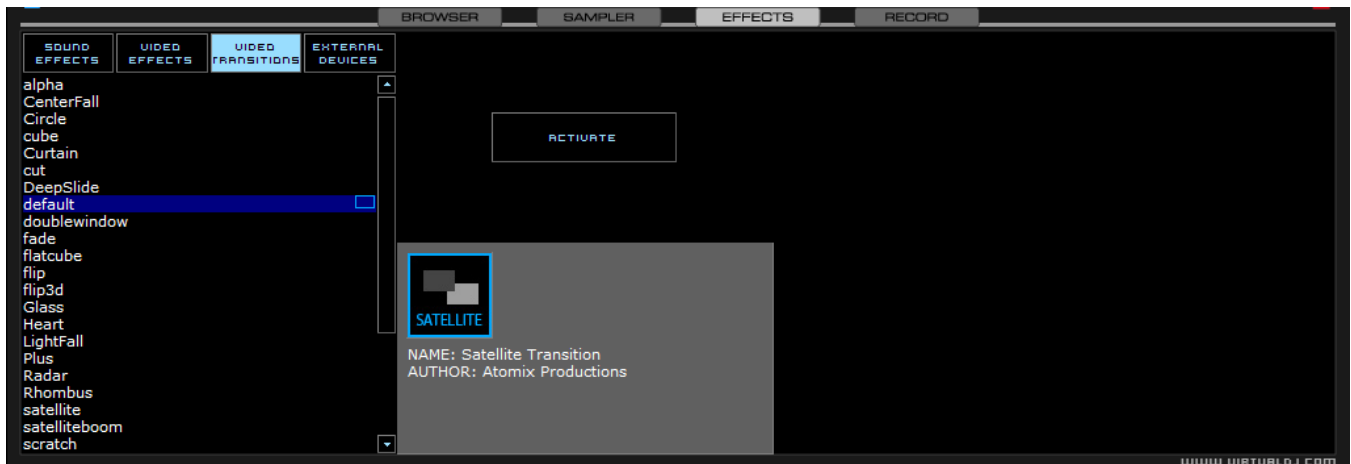
If full-screen output does not appear, check that the output is recognized in Windows display properties, and that Windows is in a dual monitor mode (not clone). For more information, see the video card manufacturer's instruction manual.

CUE/Virtual Vinyl provides an installed Rip DVD utility for ripping the video files from a DVD to the computer's hard disk in a high-quality .VOB format.

## TRANSITION EFFECTS

CUE/Virtual Vinyl features many different transitions effects for transitioning the mix from one video clip to another.

From the Effects panel, select the "Video Transitions" section, then select the desired transition. Click on the "Activate" button to have CUE/Virtual Vinyl to perform automatically the selected transition when the mix from one deck to the other occurs.

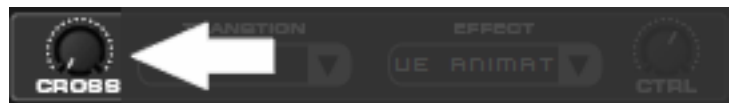


If using the FullVideo skin, the desired transition effect can be selected and activated from the "Transition" button found in the "Effects" zone just below the video preview windows.

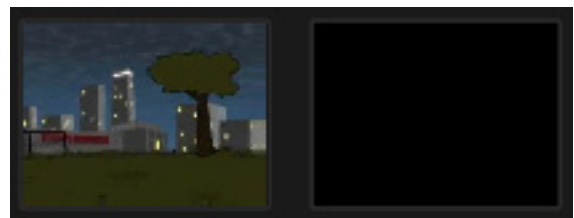
There are two ways to mix video clips: automatically or manually.



To mix manually, use the video crossfader to go from one video to another.



Or just click on one of the video preview windows to smoothly crossfade to that deck.



And, if the "Link the Video crossfader" is checked in the Video configuration tab, the skin's audio crossfader will crossfade the video when it is move from one deck to the other.

Alternatively, CUE/Virtual Vinyl will do the video mixing automatically. Most transition effects feature a powerful "intelligent" algorithm that will process the transition of the video by analyzing what is being done with the sound (cueing, scratching, crossfading, etc).

In order to use the automatic behavior "Activate" the video transition effect. Do this either by clicking on "Activate" in the "Effects" page, or by clicking on the transition title on the FullVideo skin.

## VIDEO EFFECTS

Similarly to audio effects, video effects are used to transform the video on either deck.

Use the "Video Effects" in the "Effects" panel and activate the desired effect on the specific deck. Or, select and activate the video effect from the video controls underneath the preview video windows in the FullVideo skin.



Select the desired effect using the pull-down menu under "Effect" and then click on the box to activate it.

## OPTIMIZATION

In general, video mixing is much heavier in computer resources than audio mixing so certain optimization may help performance, especially when dealing with full frame rate video (such as DVD in high definition).

There are several parameters which determine the speed with which CUE/Virtual Vinyl decompresses and displays video content – the size of memory present on your video card, the speed of the graphics processor (GPU), the speed of the main central processor (CPU), and the access speed of the hard disk.

Another parameter which largely influences performance is the type of file. An MPEG1 format file is much faster to decompress than a VOB format file. In a similar way, a file with a 320x240 resolution is much faster to decompress than a file with a 720x576 resolution.

By default, CUE/Virtual Vinyl decompresses only the content which is visible in the video mix window. This means that if there are two clips which are playing but only one is visible, CUE/Virtual Vinyl will only decompress the video which is visible. If both video files are shown in the mix window, then CUE/Virtual Vinyl will decompress both. This makes the software perform quicker and also allows it to perform better on slower machines. However, this may result in small jolts at the time of transitions. If the computer configuration is sufficiently powerful, we recommend checking the "Decode while hidden" box in the "Video" settings in the "Config" menu to obtain more fluid transitions.

Also, if using a full-screen output to display the video mix, it is more effective to use a graphics card which has two outputs, than using two separate cards.


And finally, we recommend the use of an output resolution no greater than the resolution of the video files. If using higher resolutions, low-resolution content will not look any better but will be using more computer resources. A resolution of 800x600 should be sufficient if using high-quality DVD video.



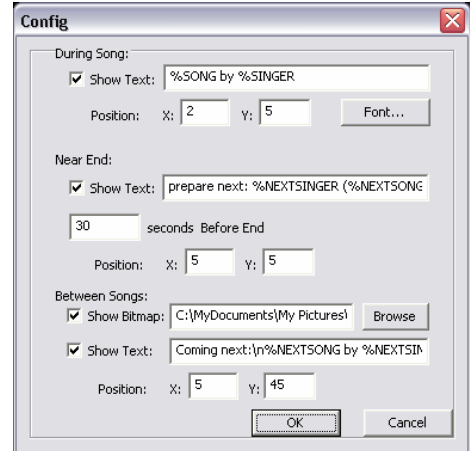
## KARAOKE

In addition to being able to play music and other video content, CUE/Virtual Vinyl allows provides support to play and mix karaoke files.

CUE/Virtual Vinyl is compatible with MP3+G, WAV+G, WMA+G, OGG+G, and .ZIP files.

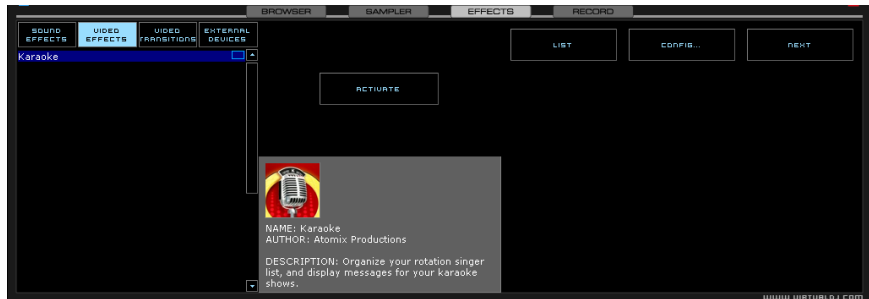
The tracks will appear with a "K" in its icon. When loaded on the deck, CUE/Virtual Vinyl will load the audio track on the deck and display the CDG file in the video mixer. 

CUE/Virtual Vinyl supports the binding of the CDG files with its MP3 counter parts as one single .ZIP file.



## KARAOKE ROTATION PLUG-IN

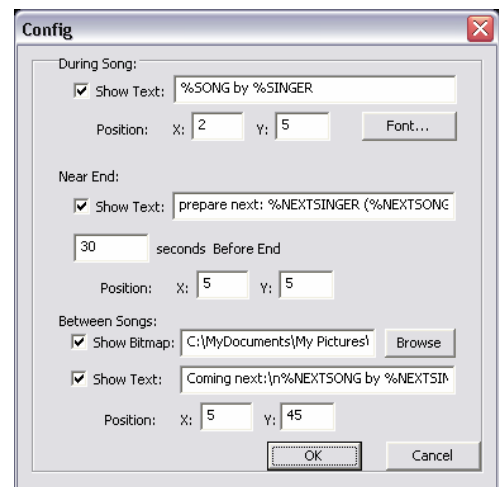
CUE/Virtual Vinyl can assist in managing a Karaoke event and post messages to the video output with it's Karaoke Rotation Plug-in found in the Video Effects section. The plug-in uses Deck 1 as the Karaoke Deck. Deck 2 can be used for between song fillers, if necessary.



To activate the plug-in, highlight and select the ACTIVATE button. This will launch the rotation list and send the designated Bitmap image to the main video output. The LIST button will display the rotation list if it is closed. The CONFIG button displays the configuration dialog. And, the NEXT button is used for starting the next song/singer selection.

## PLUG-IN CONFIGURATION

- **During Song: Show Text** – designate the text to be displayed during the song by placing a check in the box and desired text in the text box. Set the screen positioning of the text by supplying an X and Y coordinate. Set the font to use by selecting the Font button.
- **Near End: Show Text** – same as the During Song: Show Text. Set a timeframe that CUE/Virtual Vinyl will use to begin showing the designated text before the current song ends. Again, an X and Y coordinate for displaying the text on the screen can be entered.
- **Between Songs**
  - **Show Bitmap** – a Bitmap can be used to display a background in between each song played
  - **Show Text** – use to show information about specials or next song/singer between the songs. Use the X and Y coordinates for where to display the text.



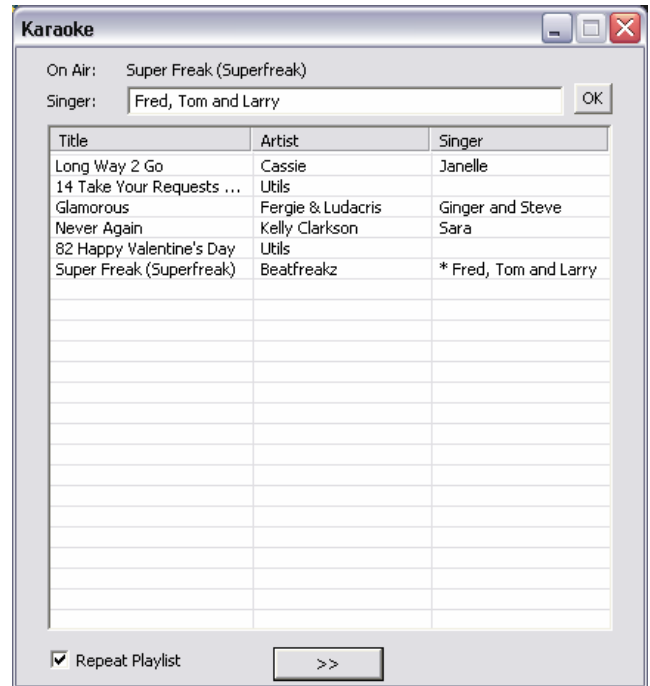
Available variables to be used with the displayed text are %SONG, %SINGER, %NEXTSONG, and %NEXTSINGER.

## ROTATION LIST MANAGER

To use the rotation list manager, simply drag and drop the karaoke track from the CUE/Virtual Vinyl Browser onto the list. The plug-in will ask for a Singer's name each time a song is added to the list. If a singer's name needs to be changed or added, then update the Singer text box and pressing OK to update the Singer information on the video output.

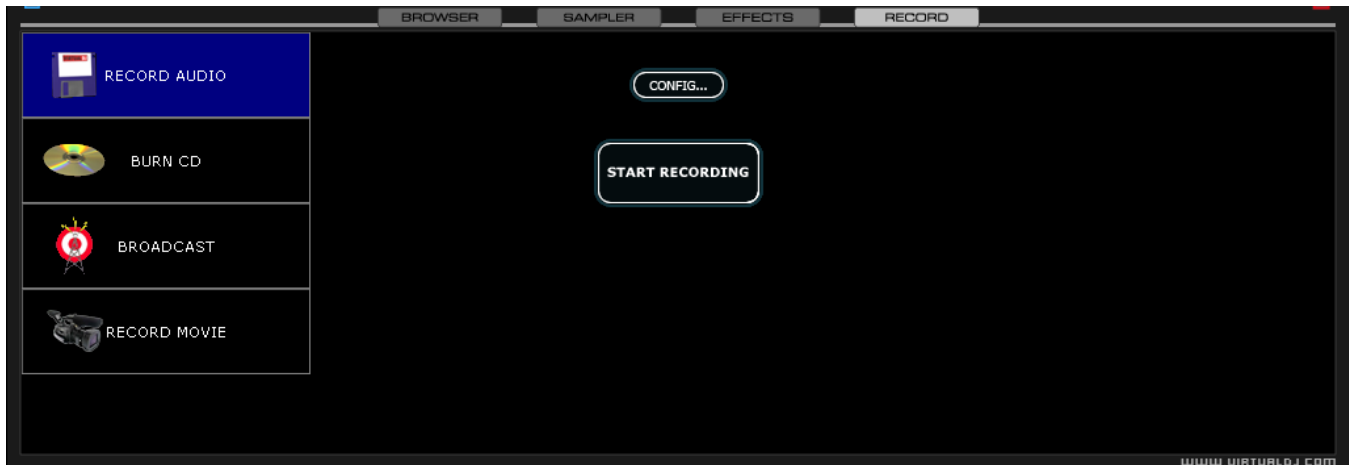
The songs are displayed by Title, Artist, and Singer. You can change the order of the list at any time by drag-n-drop of the track to a new location in the list. Songs already sung by the singer are indicated with an asterisk ( \* ) by their name. And an asterisk is added for each time that song has gone through the rotation.

At the bottom of the list is a check box for activating the Repeat Playlist option. This allows for the list manager to keep as a 'rotation' list or unchecked the list items will disappear once added to the deck. The [ >> ] button will send the selected (highlighted) track to the deck and immediately begin playing the track.



## BROADCASTING AND RECORDING

CUE/Virtual Vinyl provides an additional ability to record or broadcast the output. To access the recording and broadcasting features click on the "Record" tab. The following interface is displayed.



The following methods are available:

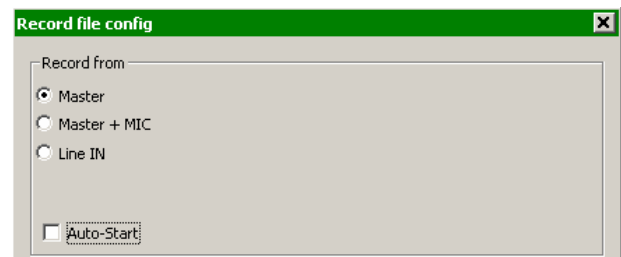
- Record Audio
- Burn CD
- Broadcast
- Record Movie

To access the recording settings click on the "Config" button at the top center of the interface.

## RECORD FROM

In the "Config" dialog, three different sources for recording are available. These options are available for all three methods.

- **Master** – Record the mix from the session.
- **Master + MIC** – Record the mix and another audio source (such as a microphone).
- **Line IN** – Record only from the Line input of the soundcard or I/O interface. For example, if using an external mixer to mix the output of the mixer can be connected to the Line input of the soundcard or I/O device. The recording will feature all of the manipulations and cross fading performed on the external mixer.



There are additional configuration adjustments associated with each of the methods.

## RECORD AUDIO

"Record Audio" provides recording a mix session to a .WAV or .MP3 file direct to the system's hard drive. When the recording is completed, it can then be listened to in CUE/Virtual Vinyl, edited with an audio editing application, or written to a CD using a CD burning software.

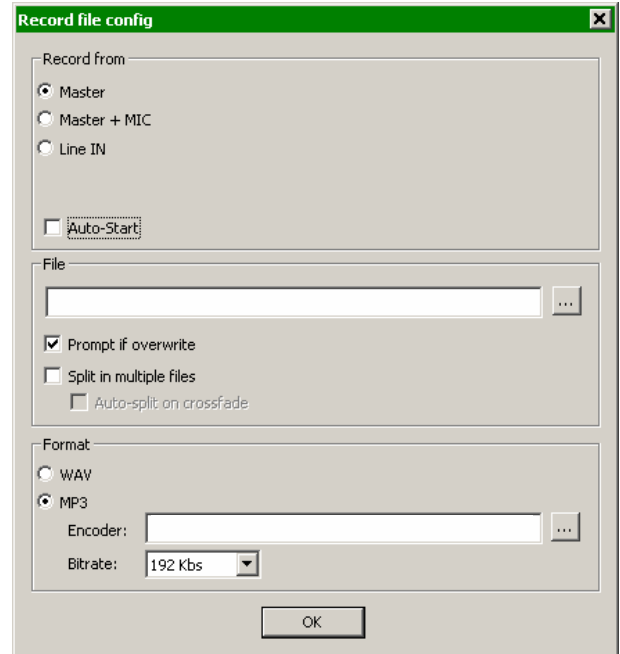
To setup the "Record Audio," click on "Config" to access the configuration settings for recording a file.

**Record From** – Chooses the recording source.

- **Auto-Start** – Checking this box will automatically begin the recording when the first track begins playing. If not checked then manual activation of the recording will need to be activated using the "Start Recording" button.

**File** –

- **Path** – Provide the path and name of the file where the recording is going to be saved.
- **Prompt if overwrite** – Checked will prompt to overwrite when trying to record to a file that already exists.
- **Split in multiple files** – Checked will split the session as separate tracks, instead of one large audio file. When splitting to separate tracks, a "Cut" button appears next to the "Start Recording" button to demarcate tracks. The "Auto-split on crossfade" option will automatically demarcate tracks when the crossfader in the CUE/Virtual Vinyl interface begins to move to the deck being mixed in.



**Format** – Select the audio file format to be used when recording.

- **WAV** – Will record a .WAV audio file.
- **MP3** – Will record an .MP3 audio file.
- **Encoder** – This is the path to the MP3 encoder for use in recording the MP3. If the encoder to use is in a different folder than the CUE/Virtual Vinyl folder, use the browse button ("...") to navigate and select the encoder's location.
- **Bitrate** – Select the bitrate to use in recording the MP3. A bitrate of 192Kbps is recommended for CD-quality recording.

Once the choices are set, click "OK" and then "Start Recording" when ready. Press "Stop Recording" when finished with the session.

## BURN CD

CUE/Virtual Vinyl can record the session in a CD image format for quick burning of a session to CD.

Select "Burn CD" for CUE/Virtual Vinyl to record the session as a .BIN/.CUE file type which contains all the necessary information for burning software that supports image types of BIN and CUE.

Click on "Config" to access the configuration settings for CD recording.

**Record From** – Chooses the recording source.

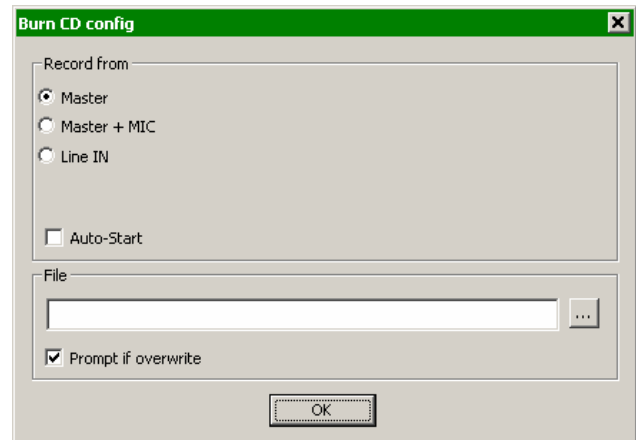
- **Auto-Start** – Checking this box will automatically begin the recording when the first track begins playing. If not checked then manual activation of the recording will need to be activated using the "Start Recording" button.

**File** –

- **Path** – Provide the path and name of the file where the recording is going to be saved.
- **Prompt if overwrite** – Checked will prompt to overwrite when trying to record to a file that already exists.

Once the choices are set, click "OK" and then "Start Recording" when ready. Press "Stop Recording" when finished with the session. And, to demarcate tracks use the "Cut" button found next to the "Start Recording" button.

When finished recording the .BIN/.CUE file specified in the File Path field can be burned with a .BIN/.CUE supported CD-burning application. For more information about burning .BIN/.CUE files, consult the documentation of provided by the CD burning software.



## BROADCASTING TO THE INTERNET ("BROADCAST")

CUE/Virtual Vinyl provides a method for broadcasting the session in realtime on the Internet as a "webcast.." This way people around the world can listen to the mix session.

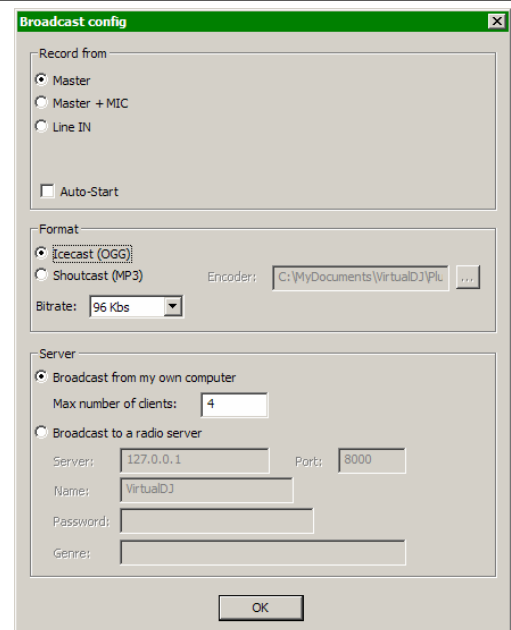
Click on "Config" to access the configuration settings for recording a file.

**Record From** – Chooses the recording source.

- **Auto-Start** – Checking this box will automatically begin the recording when the first track begins playing. If not checked then manual activation of the recording will need to be activated using the "Start Recording" button

**Format** –

- **Icecast** – OGG format streaming.
- **Shoutcast** – MP3 format streaming Shoutcast will also need to know which MP3 Encoder will be used.
- **Encoder** – Use the browse button ("...") to navigate the computer folder structure and select the encoder file to use.
- **Bitrate** – Select the desired bitrate for the encoding. (**NOTE:** Higher bitrates will consume a large bandwidth in the internet connection to stream and listen to MP3 audio.)



# Numark

**Server** – There are two ways to broadcast the mix session. Broadcast using a dedicated radio server, or broadcast direct the computer.

- **Broadcast from my own computer** – this option turns the computer into a webcast station. This way once the "Start Recording" button is clicked the webcast will begin.
- **Max number of clients** – this is the maximum listeners that the webcast may have.

**NOTE:** Please remember that the bandwidth of the Internet connection needs to be able to accommodate the number of listeners. Decreasing the quality of the audio signal (the bitrate) makes it possible to accommodate a greater number of listeners.

When ready to broadcast click on "Start Recording." CUE/Virtual Vinyl will indicate the address of the webcast (for example <http://123.45.67.89/Virtual.ogg>). The address then can be sent to the intended listeners so they can connect and listen to the webcast using their favorite Internet audio players.

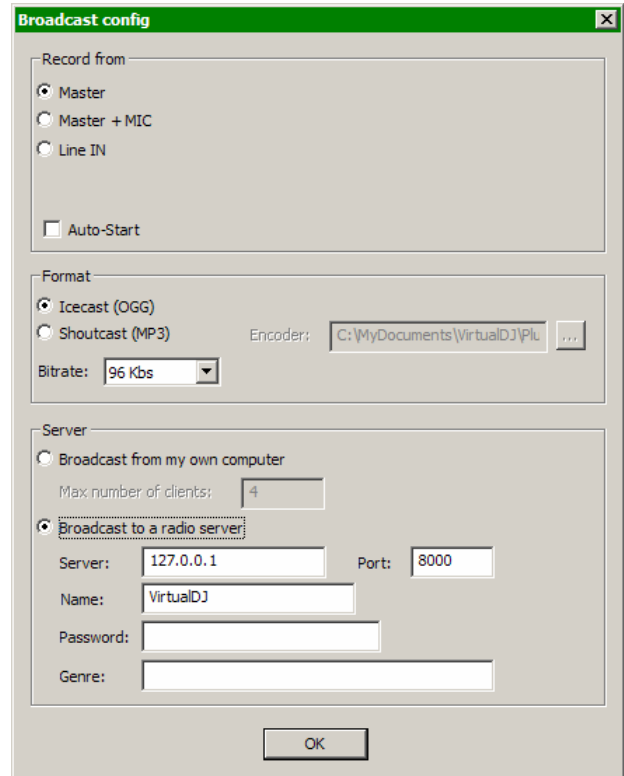
**Caution:** If using a floating Internet connection, the address of the webcast could change from session to session. In this case, the broadcasting address should be communicated each time to the listeners.

**Caution:** To listen to the mix, the software used by the listeners must be able to communicate with the broadcasting computer via the webcast server. This means that the broadcasting computer may need additional configurations and/or any software firewalls protecting the broadcasting Internet connection be set to authorize incoming and outgoing connections to and from the broadcasting computer.

**NOTE:** If using a router, port forwarding maybe required for connection to the webcast server on the broadcasting computer.

**Broadcast to a radio server** – This option allows setup of broadcasting the mix session to an existing web radio server.

Enter the address of the web radio server, login, and password, and CUE/Virtual Vinyl will automatically broadcast the mix to the server using the format in set in the Format section.



## RECORD MOVIE

CUE/Virtual Vinyl can record the session using the Microsoft MPEG4 codec installed on the computer as part of the Windows Media Player install. The Microsoft MPEG4 codec is used by default because it's the best codec to be used in live scenarios. For example, with the Divx codec a video can not record if the size is greater than 320x320 whereas Microsoft MPEG4 codec can record at least at 1024x768 and more.

Click on "Config" to access the configuration settings for video recording.

**Record From** – Selects the recording source for the audio layer, video layer is always the Master Output of CUE/Virtual Vinyl's video engine.

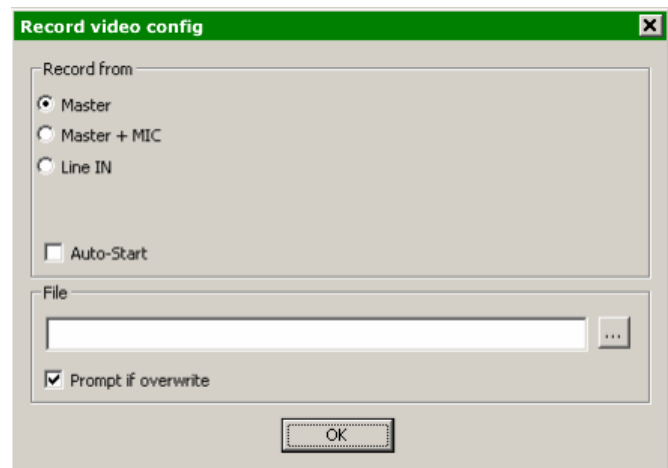
- **Auto-Start** – Checking this box will automatically begin the recording when the first track begins playing. If not checked then manual activation of the recording will need to be activated using the "Start Recording" button.

**File** –

- **Path** – Provide the path and name of the file where the recording is going to be saved.
- **Prompt if overwrite** – If checked, you will be prompted to overwrite when trying to record to a file that already exists.

Once the choices are set, click "OK" and then "Start Recording" when ready. Press "Stop Recording" when finished with the session.

When finished recording the file specified in the File Path field can now be burned to a CD/DVD or immediately used as a track in CUE/Virtual Vinyl.



## LEGAL INFORMATION

<http://www.atomixproductions.com>

<http://www.virtualdj.com>

<http://www.numark.com>

### **Atomix Productions Inc.**

Los Angeles CA 90036, USA

### **CUE/Virtual Vinyl Copyright:**

Copyright 1997-2007 Atomix Productions

All Rights Reserved

Number IDDN.FR.001.040012.01.R.C.2000.000.31400.

### **Trademarks:**

The Logo is a registered trademark of Atomix Productions

VirtualDJ is a registered trademark of Atomix Productions

The Camelot Sound EasyMix is a registered trademark of Camelot Sound, Los Angeles, CA.

The Numark logo is a registered trademark of Numark, Inc.

Windows and DirectX are registered trademarks of the Microsoft Corporation.

### **License and restrictions:**

According to the EULA (End User License Agreement) accepted by every user upon installation of CUE/Virtual Vinyl:

You **MAY NOT** make or distribute copies of CUE/Virtual Vinyl, or electronically transfer CUE/Virtual Vinyl from one computer to another over a network.

You **MAY NOT** decompile, reverse engineer, disassemble, or otherwise reduce CUE/Virtual Vinyl to less than human perceivable form.

You **MAY NOT** modify or create derivative works from CUE/Virtual Vinyl.

You **MAY NOT** sell, to rent, to transfer or sublicense the software. You may not sell, to rent, to transfer or sublicense hardware on which the software is installed, without written prior agreement of Atomix Productions.

**Reproduction of this manual in full or in part without the express written permission from Atomix Productions is prohibited.**



## **EULA SUMMARY**

- This license gives you the right to install and use the software on a maximum of two computers, by one person.
- It does not give you the right to rent or sell computer systems on which the software is installed, or to rent or sell the software or part of it.
- The software is distributed "as-is" and no warranty of any kind is expressed.
- Atomix Productions and its suppliers retain all intellectual property rights in the software.

## **CUE/VIRTUAL VINYL END USER LICENSE AGREEMENT**

By clicking on "I accept" you agree to be bound by the following terms. If you don't, please click on "cancel."

### **1. PERMITTED USE AND RESTRICTIONS**

You are granted one license to:

- install and use the Software on one computer.
- install and use the Software on a second computer, if this computer is normally used by the same person and the Software will not be used on both computers at the same time.
- make back-up copies of the Software for archival purposes.

This license does NOT allow you to:

- rent, lease, sell, lend, distribute, publish, bundle or sublicense the Software or any part of it.
- rent, lease, sell, lend or distribute hardware on which the Software is installed, unless specifically authorised by Atomix.
- electronically transfer the Software from one computer to another or over a network.
- decompile, reverse engineer, disassemble, or otherwise reduce the Software to a human-perceivable form.
- modify the Software or create derivative works based upon the Software.

### **2. OWNERSHIP**

The foregoing license gives you limited rights to use the Software.

Atomix and its suppliers retain all right, title and interest, including all copyrights, in and to the Software and all copies thereof. All rights not specifically granted in this EULA, including International Copyrights, are reserved by Atomix and its suppliers.

### **3. COPYRIGHT INFRINGEMENT**

Unauthorized copying, distribution, modification, public display, or public performance of copyrighted works is an infringement of the copyright holders' rights. As a condition to your agreement with Atomix, you agree that you will not use the Software to infringe the intellectual property rights of others in any way.

### **4. WARRANTY**

Atomix warrants that the media on which the Software is furnished, if any, will be free from defects in materials and workmanship.

Atomix offers no warranty of performance, express or implied, with regard to the licensed software and all accompanying materials. Atomix further disclaims all other warranties, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, with regard to the licensed software and all accompanying materials.

### **5. CUSTOMER REMEDY**

Your exclusive remedy under the above limited warranty shall be, at Atomix option, either a full refund of the purchase price or correction of the defective software or media.

### **6. DISCLAIMER OF DAMAGES**

You assume responsibility for, among other things, (i) the selection of the Licensed Software to achieve your intended results, (ii) the acquisition of other software (including any programming or operating system software) and/or equipment compatible with the Licensed Software, and (iii) the installation, use and results obtained from the Licensed Software. Further, for the express purpose of limiting the liability against Atomix, you agree that, to the maximum extent permitted by law, ATOMIX SHALL IN NO EVENT BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OR INABILITY TO USE THE LICENSED SOFTWARE, WHETHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR OTHERWISE, REGARDLESS OF THE FORM OF ACTION, EVEN IF ATOMIX HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

### **7. GENERAL PROVISIONS**

The software is protected by the copyright laws of the U.S. and other countries.

If any part of this agreement is found to be invalid or unenforceable, the remaining terms will stay in effect.

This agreement shall be governed by the laws of the state of Delaware, USA.

[www.numark.com](http://www.numark.com)