VirtualDJ
version 5.0

User Guide
(Updated and NEW Features ONLY)

What's New

- ➢ NEW Installation Paths for Microsoft VISTA compliance
- ➢ NEW Database Management
- ➢ NEW Global Search
- ➢ NEW Browser
- ➢ NEW Track/Album Cover browser
- ➢ NEW ID3Tag Support
- ➢ NEW Auto-MIX PlayList
- ➢ NEW SideList
- ➢ NEW Play History Management
- ➢ NEW Genre Filtering
- ➢ NEW Filter Folders
- ➢ NEW Integration with Third-Party Applications (Crates and iTunes Play lists)
- ➢ NEW Video Plugins
- ➢ NEW Video Sampler
- ➢ NEW Timecode Engine
- ➢ NEW TimeCode Plugins
- ➢ NEW AutoGain Fine Tuning Control
- ➢ Enhanced Karaoke CDG File Detection

INSTALLATION / UPGRADE NOTES

If installing VirtualDJ v5 as a fresh clean install please make the following notes:

Default application path provided during the install -
C:\Program Files\VirtualDJ\

All Application Configuration, Plug-in, Skins and Support Files are stored in –
C:\MyDocuments\VirtualDJ

VERY IMPORTANT – EXTERNAL DRIVE USERS
You should have your COMPLETE gig ready computer setup connected before launching V5 for the first time.
VERY IMPORTANT – EXTERNAL DRIVE USERS

When upgrading to VirtualDJ v5 the default application path stays the same and the new application configuration, plug-in, skins, and support files are copied to C:\MyDocuments\VirtualDJ. Since VISTA does not like applications writing data to the Program Files folders, the Development Team moved these entries to a more accessible location so they wouldn't be placed in the Microsoft managed hidden folders profile environment.

For Power Users who have changed the location of their MyDocuments from the default Microsoft setting (C:\MyDocuments), your new/copied files are stored there in the VirtualDJ folder.

The NEW core VirtualDJ Database is now titled - VirtualDJ Database v5.xml and is stored
In Windows XP: C:\MyDocuments\VirtualDJ
In Windows VISTA   C:_UserName\Documents\VirtualDJ

The NEW VirtualDJ Database system segments the database to each drive attached to the system. Each additional database file will be found on the ROOT of that drive and is titled – VirtualDJ Local Database.xml

Because of the 'split' database files and depending on the size of the v4.x database XML, the FIRST LAUNCH of VirtualDJ after upgrading may act like it has stopped at the applications splash screen. Please be patient and look for activity on the hard drive(s). VirtualDJ is reading the v4.x database and splitting the various entries across the respective hard drives of the system.

What is stored in the NEW Database files?

➢ Path to the file
➢ Analyzed data about the tracks
➢ ID3Tag Display Information
➢ Automix Information

Example of a database entry –

```
<Song FilePath="D:\CD_Rip\Soul Street - Compilation\Batson &amp; Chase - TLC.mp3" FileSize="4766328">
 <Display Author="Batson &amp; Chase" Title="TLC" Album="Soul Street - Compilation" Color="16695026" Cover="2050" Flag="7" />
 <Infos SongLength="8756352" FirstSeen="707300830" FirstPlay="708020745" LastPlay="708020745" Bitrate="192" />
 <BPM Bpm="23003" Phase="805" />
 <FAME IsScanned="1" Volume="6743" />
 <Automix FadeStart="75776" FadeEnd="8516096" RealStart="0" RealEnd="8755712" />
</Song>
```
(this is not representative of all information stored)

The 'split' database files provide users of external hard drives the ability to COLD or HOT SWAP drives between single or multiple systems. This allows for multiple DJs of a club or venue to utilize 1 VirtualDJ installation and not have different OS logins in order to maintain separate databases unique to each DJ. Now, the DJ just walks in plugs in the external device and begins playing.

DATABASE MANAGEMENT

The NEW Database management system comes with additional tools as part of the VirtualDJ Configuration Browser tab.

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

VirtualDJ now saves the database immediately when additions or updates are required. VirtualDJ also validates the integrity of all database files at the launch of the application. If a problem is detected a message box will be displayed identifying which database has the problem and what to do to correct the problem.

To correct the problem - 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
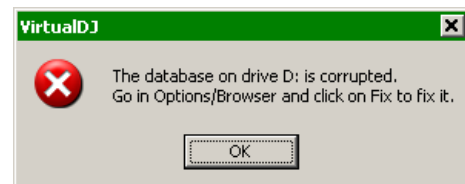
The other options for managing the databases are -

CHECK – this runs a validation of the database to ensure the entries are still relevant to files stored 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.
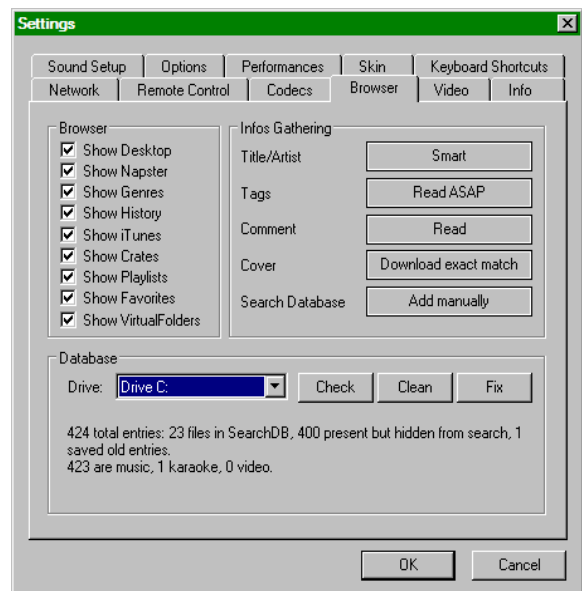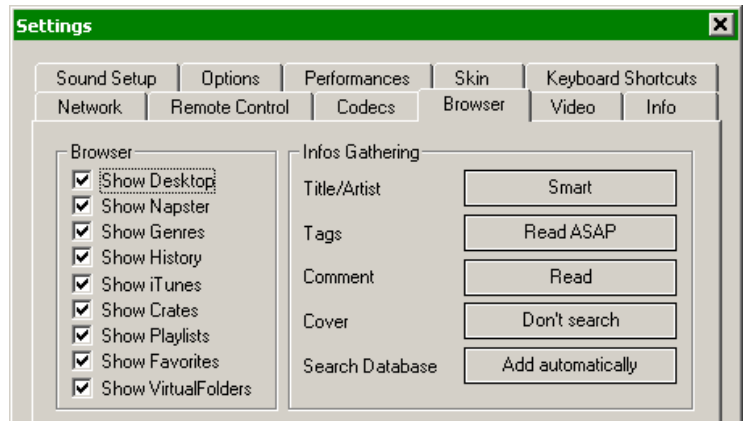
GLOBAL SEARCH

Local Database is no longer an option from the browser. Previous versions used the Local Database (mp3database.txt) as the search pool for all tracks. VirtualDJ v5 now provides an intuitive on the fly search capability. Adding files for using the need global search can be done two (2) ways.

First is by setting the 'Search Database' property in the Configuration Browser tab to 'Add automatically'. This will add all files when browsing the folder structures to the search.

The other option is 'Add manually'. This requires using the 'Add to Search DB' option to be selected when right clicking on a file or folder in the main browser interface.

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 in the results display of the search determines if it is in the currently selected folder or elsewhere in the system.

In the below 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.

Also if you want to limit the results to specific types of files, click 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.

5
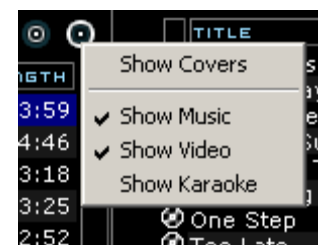
SEARCHING

What can be searched? Searching in VirtualDJ is now versatile a variable. What is meant by that? Just to the right of the search box there is a "search fields" selection button. Click on the bull's eye circle and you are presented with a list of 10 searchable fields.

Depending on what fields are selected your search results will very. So if you want to ensure maximum results for all your searches, select all the fields and you will be able to search anything all the time.

To browse the entire database just enter an asterisk - ***** - as the search string and now the entire database is displayed.
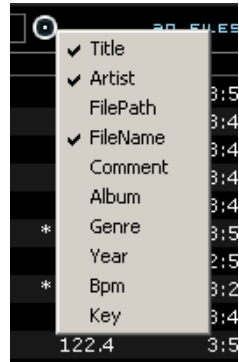
Because of the expanded search fields you are able to get more creative. One way of being more creative is when searching on BPM. You can now enter 110-120 and if the BPM column is selected the results displayed will be tracks in the range of 110 to 120 BPM.

If this type of creative search is something you would do on a routine basis then VirtualDJ v5 has a NEW Filter Folder feature that can be used. This is explained later in the guide in the Filter Folders section.

BROWSER

From the first look it is not much different from previous versions. What has been seen, in the Configuration Browser tab; are entries that determine what will be displayed in the left browser panel.

NEW Options

Genres – provides a generated tree of Genre types based on the imported ID3Tag Genre field. But selecting on the various listed genres the file browser only shows those entries that match the tag.

*POWER USERS – typically only one genre is stored in the ID3Tag; however, since VirtualDJ imports and stores this data in it's own database multiple genres can be assigned to a single file by separating each genre with a semi-colon ';' . This action is performed in the File Info dialog the Genre field for the file.
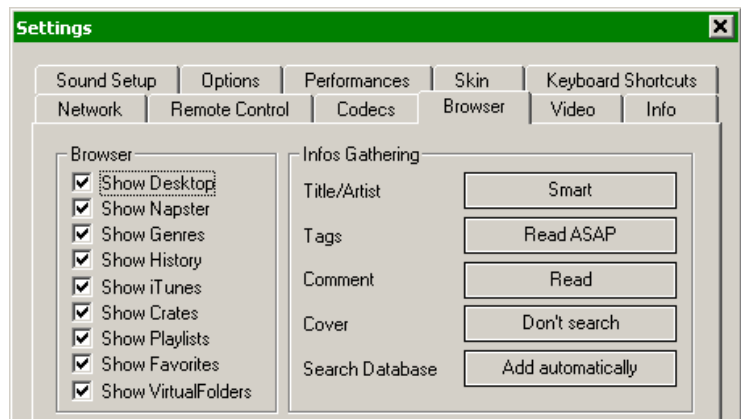
NEW Options (cont'd)

History – provides access to data stored about each session use of VirtualDJ. The data is stored as .m3u Playlist files and it is now stored in the MyDocuments\VirtualDJ\TrackHistory folder instead of in the MyDocuments\VirtualDJ\Playlists folder. Only the 'Saved Playlists' created from the playlist panel are now stored in the Playlist folder. Also, the History data is saved on the fly so a running history is always available.

> *POWER USERS – by default VirtualDJ will separate the history play lists at 9AM this is based on a registry entry titled TrackCutHour – change this value to have your history play lists split at a different time. Time is based on a 24-hour clock, so 9PM would be 21.*

iTunes – will display iTunes playlists and use the information in the playlist for accessing those files. If the files don't exist per the playlists path, you will see 'Error' show up in the deck's display.

Crates – allows access to the crates structure created and utilized by the Serato ScratchLive application

The rest of the choices are items available in previous versions and should not require explanation.

ID3Tag Support

Yes, one big improvement is the adding of ID3Tag support. However; it is not the same support that other applications implement. VirtualDJ has always provided the fasts information access about the tracks in the database. Adding direct ID3Tag access to every file would have considerably SLOWED VirtualDJ's ability to for browsing and search as experienced in other applications.

VirtualDJ stores identified ID3Tag fields as part of its own database. This stored data can be updated at anytime. And because it is not direct access any of the information can be changed using the File Info dialog and it not affect the core ID3Tag info of the file. Also, since video type files don't have ID3Tags, VirtualDJ is able to make these fields available for storing information about the video.

Retrieving ID3Tag Data

This can be accomplished in several methods at different points in time. The first and what will be the most common is using the Configuration Browser tab's Infos Gathering options.

Title/Artist
- **SMART** – used for allowing VirtualDJ to determine what it should retrieve. If a field is missing from the traditional parsing of the filename and data resides in the ID3Tag then VirtualDJ retrieves the data

- **Only from Filename** – traditional parsing of the filename data

- **Only from Tag** – only use the data stored in the ID3Tag
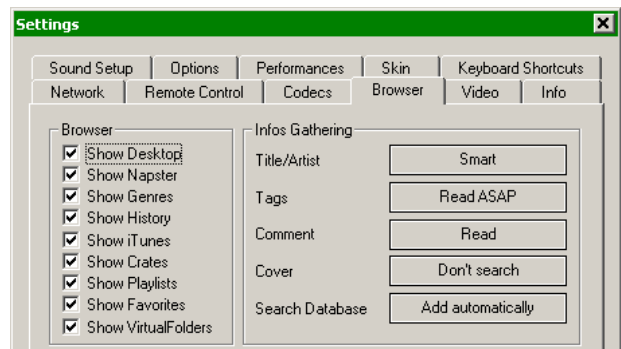
Retrieving ID3Tag Data (cont'd)

TAGS
- **Never Read –** Disables reading ID3Tags
- **Read on Load –** Read the tags once a file is loaded to a deck
- **Read ASAP –** Read the ID3Tags immediately on seeing the file in the browser

COMMENT
- **Read –** Read the ID3Tag Comment field based on the TAGS setting
- **Never Read –** Never Read the ID3Tag Comment field
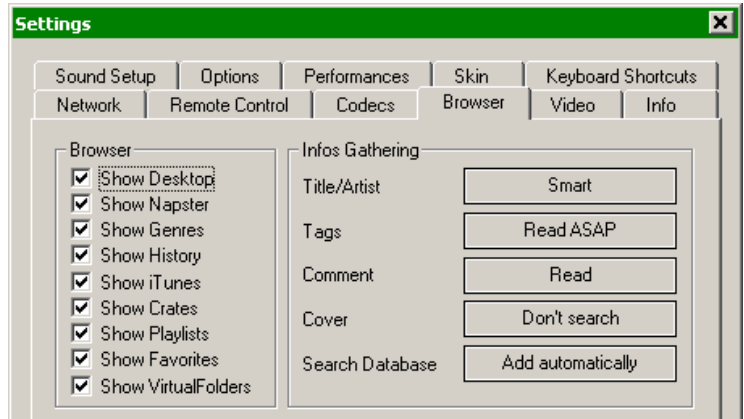
COVERS
- **Local Search Only –** for the CoverFlow viewer files already locally stored will be used (to include ID3Tag embedded)

- **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 –** don't ever look for covers if no cover exists

Next possible way of retrieving ID3Tag information is by right clicking on a file in the browser and selecting File Info. The below dialog displays the database stored information along with the ID3Tag information that is retrievable.
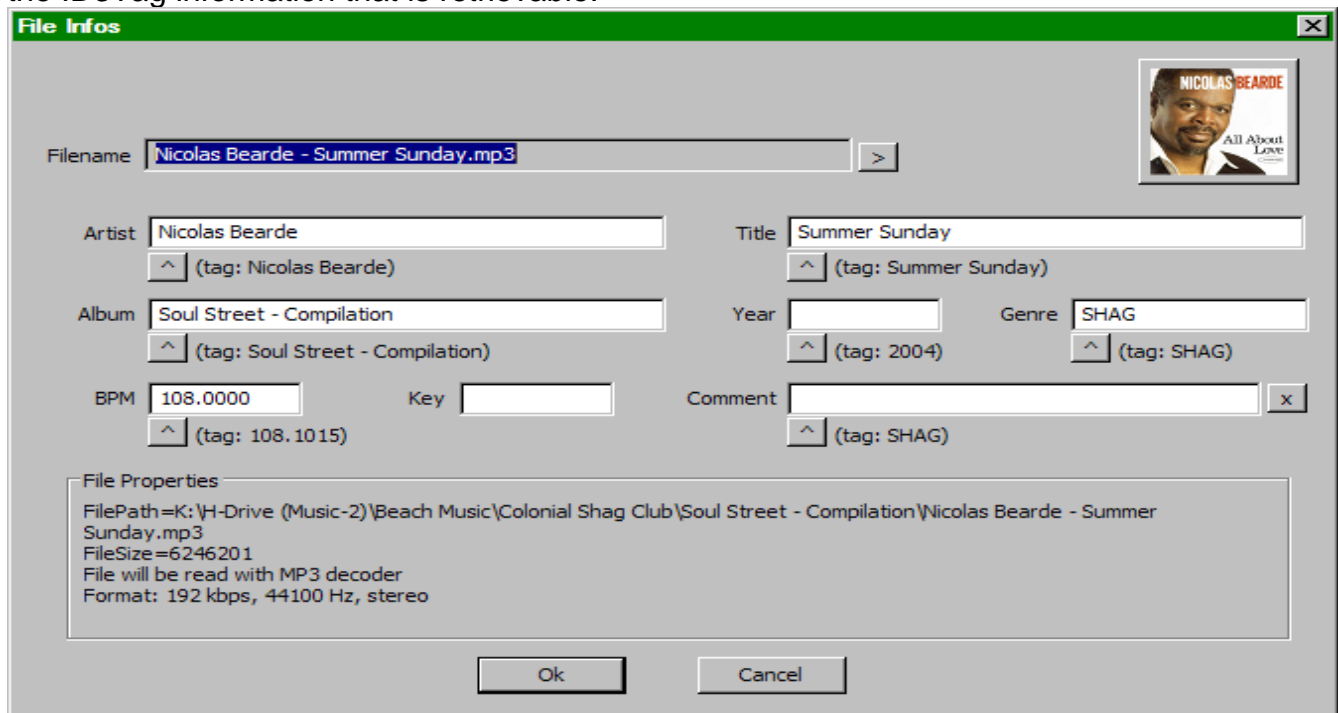

Under each field with a ⌃ button will have the read ID3Tag info next to it. Click on the button to copy that data into the VirtualDJ data field. This data will be stored and used by the VirtualDJ database. The ⌄ next to the FileName field is used to parse the file name into the Artist and Title.

Retrieving ID3Tag Data (cont'd)

Another method of retrieving ID3Tag info is through the browser directly with multiple files selected.

The options from File Infos are –

- Title from tag
- Title from filename
- Genre/year/etc from tag
- Comment from tag
- Erase comment
- Download cover
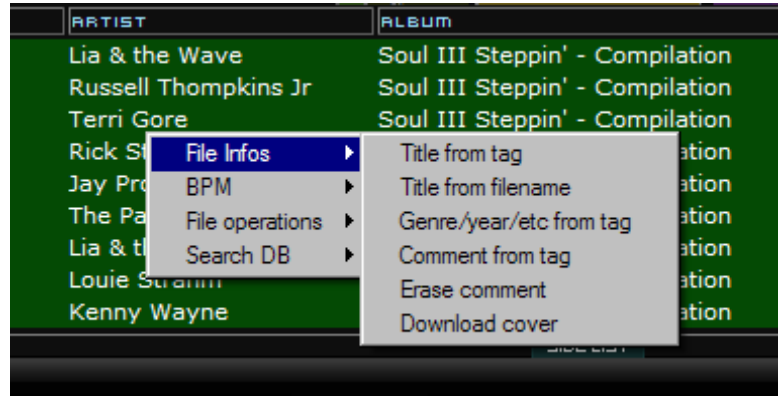
All pretty self explanatory.

Displaying VirtualDJ data fields (ID3Tag) Columns

In the browser or playlist panels right clicking on any column and choose from the pop-up list any or all of the available data fields now stored in theVirtualDJ 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 –

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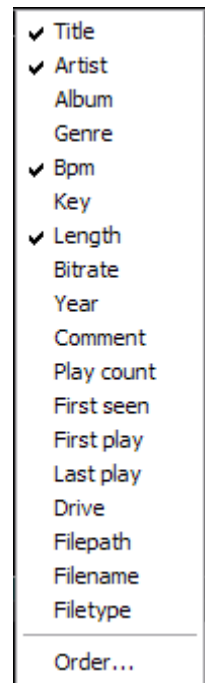
You can also select what you want displayed in the browser by clicking on the second bull's eye circle to the right of the search box and chose from the Show Covers, Show Music, Show Videos, and Show Karaoke options.

Displaying VirtualDJ data fields (ID3Tag) Columns (cont'd)

Here are some screen shots of the fields being displayed in the browser -

[Typical ID3Tags + Key field]

[Additional VirtualDJ Fields]

Additional VirtualDJ Data Fields

The VirtualDJ database now stores additional data about each track for additional search features and the NEW Filter folders.

Key – stores the key value of a song for use doing Harmonic Mixing.
*** VirtualDJ does not analyze and populate this field. Manual entry using the File Info.**

Play Count – stores the running play count of the track

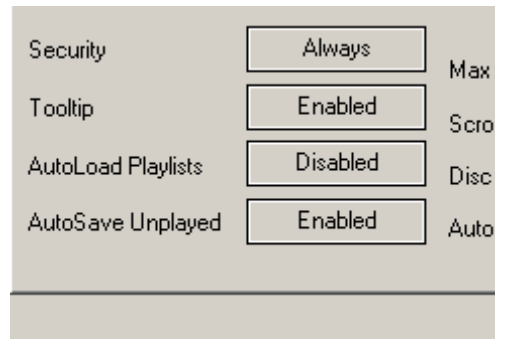**First Seen** – stores the date of when the track was first added to the database

First Play – stores the date of when track was first ever played

Last Play – stores the date of when the track was last played

Drive, Filepath, Filename, Filetype – stores the current known Drive, Filepath, Filename, and Filetype for the track

SIDELIST

The SideList now takes on a NEW purpose in VirtualDJ v5. Because the re-design of the Playlist is dedicated to the Automix, all tracks added to a deck but then never played are added to the SideList when a track replaces it on a deck. This feature can be Enabled/Disabled in the Configuration -> Options -> AutoSave Unplayed.

Security	Always	Max
Tooltip	Enabled	Scro
AutoLoad Playlists	Disabled	Disc
AutoSave Unplayed	Enabled	Auto

There are a collection of new shortcuts now available for the Sidelist. Please see the section Shortcut Actions for Keyboards and Skins for explanations on how to use the new shortcuts.

FILTER FOLDERS

A new additional to better file management is the introduction of Filter Folders. On the left panel's border are three (3) folder options now.

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

Create Virtual Folder – create a folder for manually populating with specific files

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

Create a Filter Folder

Click on the blue icon and a Filter Folder 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.

So the entire filter statement would look like '**top 100 nbplay**'. What VirtualDJ 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.
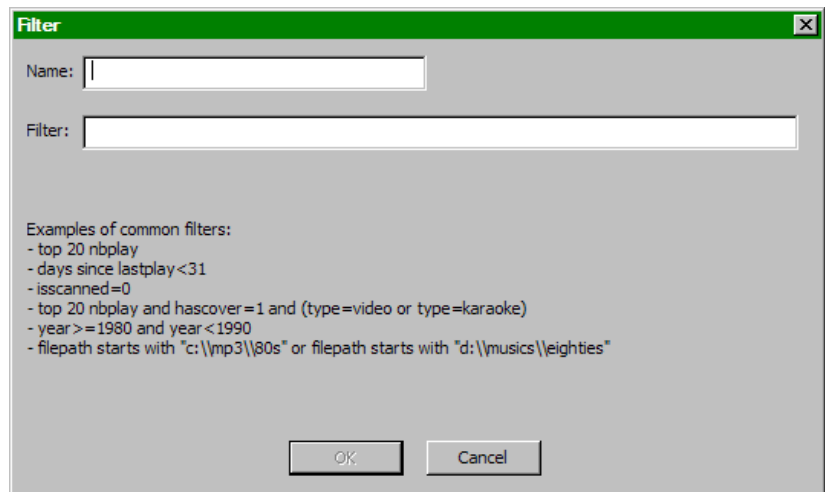
The filter dialog provides some great examples but to get it's real power need to now what are the appropriate elements, operators, and a few keywords that are used.

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"

Operators –

"==", "=", ">=", "<=", "!=", "<>", ">", "<", "is not", "is", "equals", "equal", "contains", "contain", "doesnt contain", "doesn't contain", "don't contain", "starts with", "start with", "ends with", "end with ", "and ",
"or ", "&&", "||", "&", "|"

Keywords –

"top", "[inverted]"

Filter Folder Examples

FILTER	Expected Result
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

PLAYLIST & AUTOMIX

The Playlist with Automix functionality in VirtualDJ v5 has been completely overhauled from prior versions.

Automix now works from one 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.

PLAYLIST SETUP

As in prior versions, simply drag and drop the desired tracks into the PLAYLIST panel. Click on the options button (**+** : on default skin) below the activate/deactive automix button.

Automix Type – 4 modes
- **NONE** – 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

- **SMART** – VirtualDJ 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 (skip 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 (keep intro/outro)** – keeps the entire track from beginning to end and creates a crossfade point based on the settings of the Automix Length
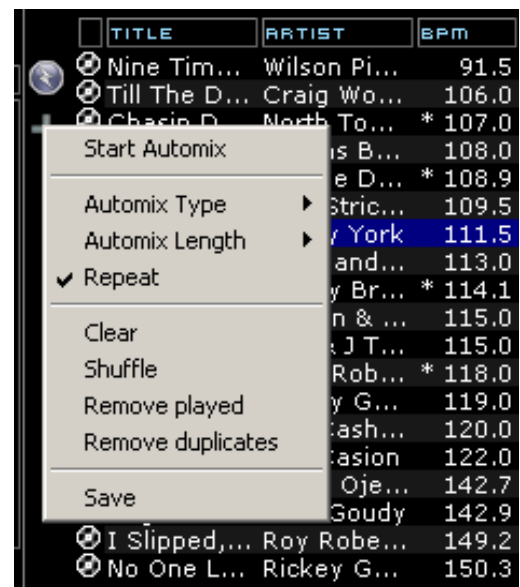
Automix Length

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.

All other options functions are from previous versions and have not changed.

Repeat

Two different 'Repeat' options appear in the Automix panel.
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.

Sequential Order Play Display

Tracks no longer disappear from the top and go to the bottom. The playlist navigation of what is playing and what is next is sequential from top to bottom (like most media players). The currently playing track is highlighted.

Add, Move or Remove Track

Reordering tracks by adding more, moving their order, or removing 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 VirtualDJ 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.

** SKIN FEATURE NOTE **

The AUTOMIX button traditionally found at the top center of most skins NO LONGER performs a MIXNOW type of function when the AUTOMIX is disengaged. This feature has been replaced with a new action called auto_crossfade. See more at the end of this guide for further explanation.

Menu Features Replaced as Shortcut Actions

The "Put in Sidelist", "Get from Sidelist", and "Make Virtual Folder" have been removed from the menu choices.   The functionality is now accessible via shortcut actions – switch_sidelist_playlist and vfolder_fromplaylist

Auto Load tracks from a Playlist

In the Configuration -> Options tab there is an option for AutoLoad Playlists. The available values are Disabled, Smart, and Always.

- Disabled – a contents of the play list are displayed in the center File Browser panel only

- Always – when a play list 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
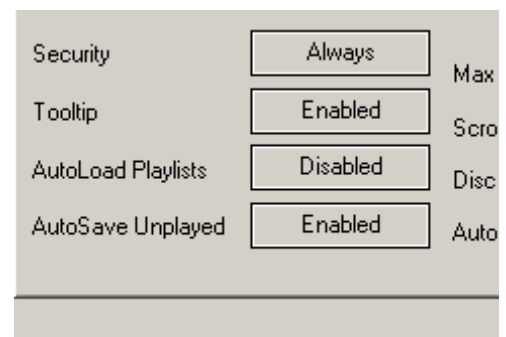
There are new and revised plug-ins released with VirtualDJ v5. Some plug-ins are replacing options removed from the Configuration – Video tab.

Titler – replaces the Show Title/Artist option in the Video tab. This plug-in allows different font selections and provides that MTV style bottom left flag on the screen showing the Title and Artist of the currently playing track

ClipBank (Video) – provides 12 sample slots for video files/animations to be played as ambient or fillers at any time. Samples played can be influenced by other video effect plug-ins. To load a video right click on any empty or used panel and select Load Movie. Browse to the video location and select file. To play a sample click on the appropriate panel and also right click to set a LOOP option so the sample will play continuous until deactivated.
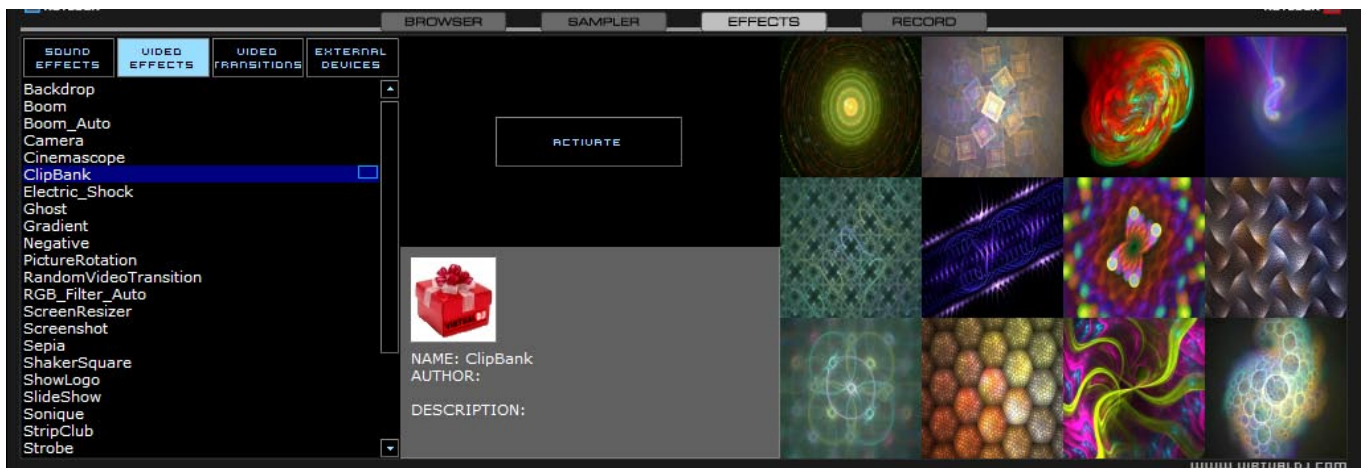
Camera – plugin re-written to support a wider range of camera types. This is not limited to web cam type cameras. Also, digital and regular video connected cameras can be used; with a Firewire, S-Video or Composite connection (a Video Capture card can be necessary).

Throughout the guide there have been a few 'Power User' info items provided. Here is a straight comprehensive list of those items plus items that didn't fit in the original context.

HISTORY – [Registry: TrackCutHour] – by default VirtualDJ will separate the history play lists at 9AM this is based on a registry entry titled TrackCutHour – change this value to have your history play lists split at a different time. Time is based on a 24-hour clock, so 9PM would be 21.

HISTORY – [Registry: HistoryTimer] – allows the setting of when a track gets marked/flagged as a played track. Changing the registry entry HistoryTimer using increments in seconds controls how long a track must be played for it to be marked as played. Default is 5 (5 secs) a nominal value would be 20 or 30, so tracks played longer than 20 or 30 seconds then get marked as played and recorded to the History Play list.

DATABASE – [Registry: IgnoreDrives] – by default if VirtualDJ recognizes a viable track on a drive it will create and use the database on that drive to represent that tracks information. The ability to restrict access to specific drives from VirtualDJ was created so drives with 'junk' or 'undesirable' data will be ignored. The registry entry IgnoreDrives is used to ignore drives from VirtualDJ creating a DB on those drives. The registry entry is a DWORD value and using the HEX value grid below you can determine which drives to restrict from VirtualDJ.

A	B	C	D	E	F	G
1	2	4	8	16	32	64
H	**I**	**J**	**K**	**L**	**M**	**N**
128	256	512	1024	2048	4096	8192
N	**O**	**P**	**Q**	**R**	**S**	**T**
8192	16384	32768	65536	131072	262144	524288
U	**V**	**W**	**X**	**Y**	**Z**	**Default**
1048576	2097152	4194304	8388608	16777216	33554432	0

To restrict drive D: you would use a registry value of 8.
To restrict multiple drives sum their values – drives D:,F:, and I: 8+32+256 = 296

NOTE You CAN NOT restrict access to the drive containing the MASTER Core database file in the MyDocuments\VirtualDJ folder

SORTING – [Registry: SortOrderDefault] –"AutoSort" has been removed and replaced with "SortOrderDefault" in the registry. SortOrderDefault provides a 'default' type setting that VirtualDJ will use to sort browsed folders or search result before a column sort changes the sort order. A value of SortOrderDefault=1 sorts on the "smart" icon column which provides organization of the files typically found in past versions – common played songs at top, already played songs at the bottom, and everything else in-between. The following column order represents the sequential values 2-19 –
Title, Artist, Album, Genre, Bpm, Key, Length, Bitrate, Year, Comment, Play Count, First Seen, First Play, Last Play, Drive, Filepath, Filename, Filetype
** If you reorder columns in the browser it will not change the meaning of the numbers in the registry

SORTING – [Registry: SortOrderForce] – Force the order to be set again to a specific column each time you change folder. (0 means keep previous, 1 is smart, etc...)
** The same values for SortOrderDefault are used here in representing the various columns

SHORTCUT ACTIONS FOR KEYBOARD AND SKINS

- Action – mix – is now – auto_crossfade :: does not start the other deck only moves the crossfader from active deck to opposite deck.

- Can now access 5 video_fx_param and 5 video_trans_param values via shortcut or midi configuration

- Side List panel - load_fromsidelist and free_sidelist

- add_filterfolder – opens the dialog window to create a new 'Filter Folder'.

- file_info – opens the 'File Info' dialog window for the selected track in the Browser.

- noduplicates – removes all duplicate files from the PlayList.

- playlist_options – opens the options menu for the PlayList.

- randomize – this action already existed but has been updated. It enables the randomization of the files in the PlayList. The update is that the function now depends on the current time to have a better randomization.

- switch_sidelist_playlist – puts the content of the SideList in the PlayList and opposite.

- timecode_bypass – good news for the TimeCode users. This action lets you bypass the TimeCode engine, and play a regular vinyl. You can prelisten the vinyl, and mix it without using stereo Y cable splitters.

- vfolder_fromplaylist – creates a new Virtual Folder from the Playlist.

- view_options – opens the view options of the Browser (Show Covers, Show Music, etc).

REMOVED SHORTCUT ACTIONS

- The "Put in Sidelist", "Get from Sidelist", and "Make Virtual Folder" have been removed from the Automix menu choices. The functionality is now accessible via shortcut actions – switch_sidelist_playlist and vfolder_fromplaylist

- Action – savedatabase – removed because database is updated and saved in real time

NOTES OF INTEREST

- Unloading a track – When the Security option is enabled to Always it prevents loading and unloading a track on a deck while it is playing. If you select "Ask", a prompt is displayed to verify a load or unload of a track while the deck is playing. If "None", the security feature will be disabled.

- Covers are stored as hidden .jpg files that have a filename the same as the file associated with the cover :
  e.g MP3 filename : Michael Jackson – Thriller.mp3
  Cover filename : Michael Jackson – Thriller.mp3.jpg

- Plugin SDK contains new Query commands – see the SDK for further info

- NEW CustomIcons and CustomButtons area available for skins

- CDG files are automatically recognized as valid files and not necessary in Codecs

- NEW MIDI interface providing better support for MIDI controllers like BCD3000, Vestax VCI-100 controllers, and others

- mp3database.txt – no longer exists as search uses the actual DB XML files now

- Database Protection – if a drive reaches capacity and can no longer store data in it's local database, VirtualDJ will use the CORE MyDocuments\VirtualDJ database XML file.