Contents

1. **System requirements** .................................................................................................................. 3
2. **Installation** .................................................................................................................................. 4
3. **First Steps in UltraMixer** ............................................................................................................ 5
   3.1 UltraMixer Modes & Views ..................................................................................................... 6
   3.2 Brief Introduction ...................................................................................................................... 9
4. **What is what?** ............................................................................................................................ 11
   4.1 Mixing-Waveform .................................................................................................................... 11
   4.2 Soundplayer ............................................................................................................................. 12
   4.3 Playlists .................................................................................................................................. 22
   4.4 Mixer ....................................................................................................................................... 25
   4.5 Master ...................................................................................................................................... 34
   4.6 Inputs ....................................................................................................................................... 39
   4.7 FileArchive ............................................................................................................................... 40
   4.8 Navigationbar ........................................................................................................................... 49
   4.9 Widget areas ............................................................................................................................ 54
   4.10 Video functions ...................................................................................................................... 59
5. **How it works in UltraMixer** ........................................................................................................ 62
   5.1 General operating concept ....................................................................................................... 62
   5.2 Toolbar .................................................................................................................................... 63
   5.3 Search for titles in UltraMixer .................................................................................................... 66
   5.4 Pre-listen titles ........................................................................................................................ 70
   5.5 Streaming / Broadcasting ......................................................................................................... 72
   5.6 How can I mix two titles so that they have the same beat? ...................................................... 75
   5.7 About beats and mixes .............................................................................................................. 77
   5.8 Tray mode ................................................................................................................................ 78
6. **Options and adjustments** ............................................................................................................. 79
   6.1 Audio ....................................................................................................................................... 80
   6.2 Appearance ............................................................................................................................... 81
   6.3 Skinning .................................................................................................................................... 87
   6.4 Mixing ..................................................................................................................................... 88
   6.5 Keyboard .................................................................................................................................. 93
   6.6 Microphone ............................................................................................................................... 94
   6.7 MIDI Controller ......................................................................................................................... 95
   6.8 Light (Light Controller) ............................................................................................................. 96
   6.9 Additional ................................................................................................................................ 96
7. **Using the keyboard** ..................................................................................................................... 98
   7.1 Shortcuts ................................................................................................................................... 99
8. **MIDI-Controller** .......................................................................................................................... 102
9. **Further information** .................................................................................................................. 104
1. System requirements

For a smooth operation of UltraMixer 5, the following minimum system requirements are required:

- Processor: Intel Pentium IV or AMD with 2.0 GHz+
- Memory: 1024 MB (2048 MB or higher recommended)
- Operating system: Windows XP, Vista, Windows 7, 8, 8.1, 10 or Mac OS X 10.6 (or higher)
- Sound card (two sound cards or multi-channel sound card recommended)
- Recommendation: MIDI-Controller with soundcard (see "8. MIDI-Controller")

for UltraMixer Pro Entertain:

- Video card: Nvidia GT 650M or higher, ATI HD 4800 or higher
- Beamer or Flatscreen
2. Installation

To install UltraMixer 5, please open the installation file:

- Windows: Click twice on the EXE file.
- Mac OS X: Click twice on the installation file.

1. Choose a language and confirm your selection by clicking on the “OK” button. It is possible to change the chosen language later on. Further language options are available on the UltraMixer website.
2. In the following window, please accept the license agreement, so you can continue the installation.
3. Choose the hard disk, on which you want to install UltraMixer.
4. Decide whether and where UltraMixer shall appear in the Start menu.
5. Determine whether a link shall appear on your desktop or in the tray.
6. Check your settings.
7. Start installation by clicking on “Install”.
3. First Steps in UltraMixer

The 2-Playlist-Mixer mode is the mode in which UltraMixer is opened by default.

(1) Soundplayer
(2) Playlist
(3) Waveform
(4) Mixer
(5) Navigation bar
(6) Widgets

The Soundplayer (1) is the central element of the software. Among this the playlists (2) are positioned. They contain the desired tracks. On the top there is the Waveform which visualizes the dynamic of the track (3). In the middle of the Soundplayer the Widgets (6) are placed and underneath the mixer is located (4). And finally beneath everything is the navigation bar (5).

In the following section the aforementioned areas will be described briefly to give an overview of the entire software. Afterwards a brief introduction is served, that shows the first steps to play music with UltraMixer.
3.1 UltraMixer Modes & Views
Mixing Waveform

The waveform visualizes the audio signal of the current played titles. You can remove the waveform by using the menu item „Preferences“ (lower right corner). If you uncheck the box the waveform will disappear. For further information see „4.1 Mixing-Waveform“.

Sound players

In the sound players songs can be loaded and played out of the playlist. The sound players are the central area of the software and can not be hidden (see „4.2 Soundplayer“).

Playlists

The playlists contain all titles that once will be played in the sound players. From here the tracks are loaded into the player. For further information see „4.3 Playlists“.

Waitlist & Wishlist

The waitlist contains the prospective titles of both Soundplayer in one list. You can always switch between the 1-playlist-mode (waitlist) to the 2-playlists-mode. The wishlist is a list of requested songs. This gives the opportunity to save wished titles and later load them into the playlist when needed.

Mixer

Together with the sound player the Mixer is the main working surface of UltraMixer. With help of the Mixer the volume, timbre and tone color of the title can be varied. The area of the Mixer can be replaced by the Master or the FileArchive (see „4.4 Mixer“).
Master

The Master section is used for acoustic correction of the output signal of the sound card(s) to the sound system (PA system) and the spatial environment. Each room and each hardware equipment can have undesirable properties that negatively affect the acoustic sound dispersion. This section also contains the recording device and AGC (Automatic Gain Control). This area can be exchanged by the Mixer and the FileArchive (see „4.5 Master“).

Inputs

This area allow you to control an other input source e.g. cd-player or microphone. More information in “4.6 Inputs”

FileArchive

The FileArchive is a database that is used to organize your audio files. This area can be exchanged by the Mixer and Master (see „4.7 FileArchive“).

Navigation bar

The navigation bar is another important part of the UltraMixer interface. Here the user can adjust the displayed areas. The user may choose between the fields of Playlist and Waitlist or Master, Mixer and FileArchive (see „4.8 Navigationbar“).
3.2 Brief Introduction

A brief introduction is following. In order to play back your own music right after the first start. The figure below shows particular areas that are addressed in the following.

(1) With the „+“ button at the lower left corner of the playlist either a track or an entire folder can be added.
(2) After adding the titles, they appear in the playlist.
(3) To play a title, it has to be dragged into the LCD display (hold down the title and move it with pressed mouse button). Alternatively you can load the title with a right click into the player, by using the context menu.
(4) The title is loaded as soon as the title is displayed in the LCD display. Now the title can be started by pressing the Play button.
(5) This can be done equally in the other playlist.
(6) Two titles can be played simultaneously on the right and left player. These titles can be cross-faded into each other by moving the crossfader.
(7) By pressing the Archive-Button you get into the „FileArchive“ mode. Here the music can be added and managed.

(8) With the „+“ button at the bottom on the left side of the playlist either a track or an entire folder can be added.

(9) If music was added to the FileArchive, those titles can be added to the Playlists or directly into the Player by drag & drop.

Through these few simple steps music titles can be played in UltraMixer. Nevertheless, UltraMixer offers much more than only playing music. Therefore it is recommended to read on. UltraMixer offers an amount of features that allows to work very seamlessly and professional.
4. What is what?

4.1 Mixing-Waveform

The Waveform represents the visual audio signal of the current title. With the help of the Waveform the structure and the volume of the title can be seen. The upper half of the Waveform represents the title of the left player and the lower half the right player. The white line at about one third of the whole area shows the current playback position of the title.

The left side displays the already played area and the right side shows the following music sequence. The red lines show the beats of the title and the green region shows a loop area. The two waveforms have different colors from the start. These can be changed any time in the UltraMixer settings (see „4.2 Soundplayer“).

Change pitch settings on the Waveform:

- By pulling the waveform with the left mouse button pressed and hold the pitch can be changed. After the release of the mouse button the title resumes its original speed. This is called „pitch bend“. If the Shift key is hold, the Waveform scratches the sound.
- If the Ctrl key is pressed instead of the Shift key, the pitch is changed permanently. If both buttons are pressed, the change happens faster.
- In addition there is the possibility to change the pitch by the mouse wheel. For this the mouse pointer has to be on the Waveform. Scrolling to the front makes the pitch faster and backwards makes it slower.

At the right edge of the Waveform band there are three buttons to zoom the waveform in the play direction.

Zoom Waveform:

- By pressing the „+“ the view of the waveform increases or rather the next bars will be shown in more detail.
- By pressing the „-“ the waveform will be minimized.
- By pressing „0“ the original settings are restored.
4.2 Soundplayer

The Soundplayer imports titles from the Playlist, plays and processes them. The look and the handling are related to a real double CD-player, which is often used by DJs and entertainers. The Soundplayer contains the display with the title information, a Play, Loop, Search and Pitch section.

The controls of the soundplayer will be explained in detail.
4.2.1 Display
The Display shows the most important information about the loaded title.

(1) The lower part of the display shows the name of the loaded title.
(2) The Track number shows the current position of the title in the Playlist.
(3) “+ Time” shows the time of the title which has already passed, the form is minutes:seconds:milliseconds.
(4) “-Time” shows the time of the title which still remains.
(5) Pitch shows the difference to the original speed of the title in +/- percent (relative speed). You can adjust the speed with the Pitch slider.
(6) BPM shows the absolute speed in “beats per minute”. UltraMixer calculates this data, which is important for beginners, automatically and in dependence of the position of the pitch slider.

4.2.1.1 BPM Settings-Menu

UltraMixer includes a very exact automatic BPM-Calculator. Maybe in some cases it will be better to determine the beats per minute manually. With a mouse right click on the BPM label in the display, the BPM settings menu will open. Across this menu you can double up the calculated beats or halve them, adjust the Calculator range or open the BPM Tapper Menu.
This Dialog allow you to determine the BPM manually.

Tap into the middle of the dialog in the rhythm of the music to get the beats per minute manually. After you get the right BPM value you can save it to the music file.

4.2.2 Play Button

The Play button starts or interrupts a title loaded. After a title was loaded in the sound player, which means that its name appears in the display, the Play button is used in the following way:

**Play-Button Function:**
- The first left click (Play) starts the title loaded.
- The second left click (Pause) interrupts the title playing.

**HINT:**
Similar to a turntable, a title can be slowed down or started slowly. A title loaded starts slowly with a right click. A second right click makes the title slower and slower until it stops.
4.2.3 Stop and Cue Button

The Stop or Cue button is used to stop a title (not to be confused with Pause). The title is set back to the time index 0. With the cue functions, it is possible to change the „null“ position. The cue point is the position of a title at which it starts to play. DJs use this function for example to save the first beat or baseline hit of a title. This enables the very precise start of a title.

**Stop and Cue Function: Stop Function:**
1. You can stop the title playing with a left click. The display shows +Time 00:00:00.

**Cue Function:**
2. In the desired time, interrupt the title playing with a left click on the playback to enable pause mode.
3. Save this position with a left click on to the cue button.
4. This position (cue point) is the new end and start of the title.
5. The cue point can be deleted by setting a new cue point (follow the steps from 1. on) or by a double click on the position will be set to 00:00:00.

In addition to the procedure described above, up to six cue points can be saved in the FileArchive and afterwards retrieved. A right click on opens the appropriate context menu:

- **Load Cue Point**
- **Save Cue Point**
- **Delete Cue Point**

After the interruption of the title playing and a right click on the cue button, the current position of the title can be saved as one of the six cue points. Please choose the option “Save Cue Point”. The function “Load Cue Point” enables you to load the saved cue points into the sound player and remove the cue point across the „Delete“ item.
4.2.4 Cue-Play-Button

The Cue-Play button combines the functionality of the Cue and Play buttons. If this button is pressed, the position of the title jumps to the last loaded Cue-point position and the title plays right away. Cue-Play allows the user to start at short intervals several times from the last Cue-point until the right moment is reached.

4.2.5 Track-Buttons

The Track buttons are used to page through the Playlist. The titles are loaded automatically. In case, a title playing is already in the Soundplayer, a confirmation dialog has to be answered. This question can be deactivated.

**Track-Button Function:**

- A left click on \( \text{\text{\textsuperscript{\text{\textcircled{}}} \text{\text{\textsuperscript{\text{\textcircled{}}}}}} \text{\text{\textsuperscript{\text{\textcircled{}}} \text{\text{\textsuperscript{\text{\textcircled{}}}}}}}} \) will import the following title into the display. When the last title of the Playlist is reached, the procedure starts from track 1 again.
- A left click on \( \text{\text{\textsuperscript{\text{\textcircled{}}} \text{\text{\textsuperscript{\text{\textcircled{}}}}}} \text{\text{\textsuperscript{\text{\textcircled{}}} \text{\text{\textsuperscript{\text{\textcircled{}}}}}}}} \) will import the preceding title into the display. When track 1 is reached, the selection will go on with the last title of the Playlist.

4.2.6 Frame-Search Buttons

With the help of the Frame-Search buttons, it is possible to search for start points with millisecond precision. This function is mainly used for the precise definition of cue points and loops.
4.2.7 Loop-Section

The Loop function enables you to define an endless loop, which is played again and again between the marks for loop-in and loop-out. Techno and HipHop DJs use this function to alter a track or to make a mix more interesting. It requires some training to set and use a loop perfectly.

Basically UltraMixer offers two ways to set a loop. On the one hand a start (Loop-In) and an end point (Loop-Out) can be set. On the other hand a loop with a fixed length can be set with one click on the loop button.

4.2.7.1 Loop-Settings-Menu

A mouse right click on off the loop buttons open a context menu which allow you to save a current loop or load or delete a currently saved loop.
**4.2.7.2 Loop-Button**

A loop with a fixed length can be set with one touch on this button. The length can be selected with the two arrow buttons (left and right of the loop buttons). Adjustable is a length in whole beats, e.g. 4 or 8 beats but also in beat-parts, e.g. 1/2 beat or 1/4 beat.

Once the desired length is set, the loop can be set any time, only by pressing the Loop button (number-button). The Loop is played repeatedly from now, until it is again turned off by pressing the Loop button.

**HINT:**
If the title is playing, the loop starts exactly to the next beat (beat matching). If the title isn’t playing the loop can be set free in milliseconds.

**4.2.7.3 Loop-In & Out**

Besides the possibility to set a loop with a fixed length UltraMixer offers also the possibility to define a loop manually. Define the starting point of the loop with a left click on „IN“ and the end with a left click on „OUT“. By pressing the „OUT“ button again, the loop is terminated and the title continues to play normally.

In order that the loop succeeds and the crossover between the IN and OUT point is acoustically as harmonic as possible, the following was defined in UltraMixer:
Press Loop-Out in the first or second beat and Loop-Out occurs to the next bar line. The Loop-Out point is set to the next full beat. Example: After 7 and 1/2 beats the Loop-Out is pressed and thus the Loop-Out is set to the end of the 8th beat.

**HINT:**
If a part of the title is already looped, the loop will be moved in it’s whole length when setting a new Loop-IN point.

**4.2.8 Pitch-Section**
The Pitch section enables you to alter the speed of a title. This function is used to adapt the speed of one title to that of another title. Mainly Techno DJs use this function to mix many titles without altering the number of BPM.

4.2.8.1 Pitch-Slider

Moving the Pitch-Slider upwards or downwards with the left mouse button pressed will speed up the title or slow it down. The Pitch field in the display shows the change of speed in percent (relative speed). If the Pitch slider is used while a title is playing, the absolute change of speed will be shown in the BPM field on the display.

**Pitch slider functions:**
- Moving the Pitch slider upwards or downwards with the left mouse button pressed, will speed up the title or slow it down.
- It is also possible to change the speed of a title by pointing the mouse on the pitch slider and using the scroll wheel. If you press Shift at the same time, the slider will move more quickly.
- With a right click on the slider former settings will reset.
4.2.8.2 Pitch-Buttons

To change the speed of the title step by step use the Pitch-Buttons

**Pitch button functions:**
- A left click on \( \uparrow \) respectively \( \downarrow \) increases or decreases the speed in steps of 0.1 per cent.
- A right click on \( \uparrow \) respectively \( \downarrow \) increases or decreases the speed in steps of 2 per cent.

4.2.8.3 Pitch-Reset-Button

**Pitch reset button Funktionen:**
- A left click on \( \uparrow \) sets the slider back to the standard value 0%.
- A right click sets the slider slowly back to the standard value 0%.

**HINT:**
A right click in the area of the slider will also set the slider back.

4.2.8.4 Pitch-Bend-Buttons

In combination with the Pitch slider and the Pitch buttons, the Pitch-bend buttons enable you to adjust the speed of a title to the title playing. The title can be sped up or slowed down, like turn tables.

**Pitch-bend button Funktionen:**
- A left click on \( \uparrow \) respectively \( \downarrow \) slows or speeds the current title down or up. The longer you hold the button down, the stronger the effect. After releasing the title returns abruptly to the original speed.
4.2.8.5 Pitch and Tempo Stretching switch

By using the Pitch and Tempo Stretching switch, it is possible to alter the functionality of the Pitch slider. If „Tempo“ is chosen, moving the Pitch slider will only affect the speed of a title and not its tone pitch.

4.2.8.6 Pitch Setup Menu

![Pitch Configuration](image)

This menu allows to set the maximum control range of the pitch control (as a percentage of original speed). Also in this menu, you have the possibility to set the fine and coarse step size of the slider.

4.2.8.7 Sync-Button

The „Beats Per Minute“ (BPM) of the titles can be synchronized by the button [SYNC]. This will automatically change the pitch slider of the sound player and also slightly move the playing track similar to the Pitch-Bend buttons.

4.2.9 Mini-Waveform

![Mini-Waveform](image)

The search bar (forward/backward bar) is used for the rough search of certain positions in a title. The width of the whole slider resembles the duration of the title loaded. The mini waveform is also used to identify quiet areas in the song. The white line within the mini waveform shows the current position and the blue lines all stored cue points and green lines Loop areas.
4.2.9.1 Miniwaveform-Menu

A right mouse click on the mini waveform open a context menu which allow you to save, load or delete cue points and loop ranges.

4.3 Playlists

The Playlist contains all titles, which shall be used during a mixing session. The titles are imported in the Player from here. The columns of the table can be shown or hidden. The button for this is located right next to the top of the table headers. Hold down the shift or ctrl key while using the columns selection to quickly add and remove multiple columns.
The columns are individually movable and resizeable. To move a column, it is necessary to click with the left mouse on the column header and move the column.

<table>
<thead>
<tr>
<th>Nr</th>
<th>Position of the title in the playlist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos</td>
<td>Play position</td>
</tr>
<tr>
<td>PP</td>
<td>Preview player column allows to pre-listen a title directly in the FileArchive (see chapter „5.4 Pre-Listen Titles“)</td>
</tr>
<tr>
<td>Artist</td>
<td>Name of the artist</td>
</tr>
<tr>
<td>Title</td>
<td>Name of the title</td>
</tr>
<tr>
<td>Album</td>
<td>Name of the album</td>
</tr>
<tr>
<td>BPM</td>
<td>Speed of the title in beats per minute, if it was saved</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>Duration of the title when played with its original speed (Pitch 0 %)</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Counter</strong></td>
<td>The number increases each time you played a title in the sound player</td>
</tr>
<tr>
<td><strong>File name</strong></td>
<td>Storage place of the title on your hard disk</td>
</tr>
<tr>
<td><strong>Genre</strong></td>
<td>Style of the title</td>
</tr>
<tr>
<td><strong>Track</strong></td>
<td>Track number of the title on the CD</td>
</tr>
<tr>
<td><strong>Rating</strong></td>
<td>Opportunity to benchmark a title individually (0 to 5 stars)</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Comments</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td>Release year of the title</td>
</tr>
<tr>
<td><strong>Bitrate</strong></td>
<td>Bitrate in kilobit/s of the title</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td>Name of the title</td>
</tr>
<tr>
<td><strong>Track</strong></td>
<td>Track-Number in an Album</td>
</tr>
<tr>
<td><strong>Typ</strong></td>
<td>Show the type of the music file e.g. audiofile</td>
</tr>
<tr>
<td><strong>Dancestyle</strong></td>
<td>Contains the typical dance of the track</td>
</tr>
<tr>
<td><strong>Meter</strong></td>
<td>Show the Meter of the track</td>
</tr>
<tr>
<td><strong>MPM</strong></td>
<td>Show the Meter per Minute of the track</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td>Show the time when the track will be played</td>
</tr>
<tr>
<td><strong>Last Played</strong></td>
<td>Show the Last Played Time</td>
</tr>
</tbody>
</table>

In the Navigationbar you can switch between the 2-Playlist and Waitlist view. More information you get in the following chapter.

### 4.3.1 2-Playlist-View

In the 2-Playlist-View has each Player its own Playlist, which can be controlled independently from the other Playlist.

The Single/Continuous Button allow you to play only one single title or the whole playlist in a row. The function of the Party/DJ Mode Button is only important in Auto-DJ Mode more information about this you will find in the chapter “4.4.2.1 Auto-DJ”.

24
4.3.2 Waitlist

Contrary to the 2-Playlist-View both players get their songs alternately from one playlist. If you use Double Click or Enter to load the title, the title will be loaded in the left player. When the left player is running, the title will loaded in the right player or ask you if both running.

4.4 Mixer

Apart from the Soundplayer, the Mixer is one of the most important tools of UltraMixer. It enables you to vary volume, sound and sound characteristics of a title. The Crossfader enables you to switch softly between the Players.

A left click on **Mixer** in the navigation bar on the lower part of UltraMixer or pressing
Alt+F1 opens the window.

1. Volume section
2. Fading section
3. Crossfader section
4. Equalizer section
5. Effekt section

4.4.1 Volume-Section

The Volume slider is used to change the volume quickly or to produce soft fadings between both Soundplayers. Techno DJs tend to leave the slider at the maximum volume position (100 percent). They mainly use the Gain slider in the Equalizer section to increase or decrease the overall volume of a title.

Volume slider functions:
- Moving the slider upwards or downwards with the left mouse button pressed increases respectively decreases the volume.
- It is also possible to alter the volume by pointing the mouse on the Volume slider, and using the scroll wheel of the mouse. If Shift is pressed at the same time, the volume will change in bigger steps.
- A left click in the slider area will lead to an abrupt change of volume.
- Like all sliders the Volume slider can be set back quickly to its standard value by using the mouse. A right click or a double left click will set the slider in the maximum position.
• HINT:
If you want to alter the volume for a short moment only, you can use the following function of the slider: Press Shift + left click on any position in the slider area. The slider moves to this position immediately. As soon as you let go the mouse button the slider moves back on its original position. If you use the right mouse button (without pressing any key) instead the slider moves back to the maximum position.

4.4.2 Fading-Section

(1) Fading display
(2) Fading curves
(3) Fading-duration-slider
(4) Auto-Mix and Talk-Over

The Fading section defines how the volume of both Players is blended. The red line shows the volume of the left Player, the green line shows the volume of the right Player. A high value of a curve symbolizes a high volume, a lower value symbolizes a lower volume. The example above shows the following situation: If the Crossfader is moved from the left to the right, the volume of the left Player is lowered in a linear way until there’s nothing to hear any more (red line). At the same time, the volume of the right Player increases in a linear way (green line). It’s due to the example above that the Crossfader got its name.

Fading curves:
• A left click on one of the four buttons (, , or ). activates the appropriate Fading Mode. The selected symbol appears coloured afterwards.
• If the manual function is activated, both lines can be adjusted with the help of the mouse, and the degree to which the volume changes can be defined.
Below the display is a fading slider. With the help of this slider you can determine the duration of the automatic fading.

4.4.2.1 Auto-DJ

Those buttons are especially interesting, when UltraMixer is being used as a juke box (e.g. in bars or restaurants). If the Auto DJ function is activated, the titles of both Playlists will be mixed automatically by the software. Before a title ends, the next title in the other Player starts playing automatically and is blended in with the help of the Crossfader (the speeds of the songs are not adjusted). The result is a music mix without breaks, and you don't have to deal with UltraMixer all the time.

Use the Auto DJ:
1. Load and distribute the requested titles in both Playlists or Waitlist.
2. Make sure both Volume sliders are turned up.
3. Make sure the Pitch sliders of both Players are in the position 0%.
4. A left click on activates the Auto DJ function. The button shines, and the first title starts playing.
5. Seconds before the end of a title (start of fading), the title in the other Player begins to play automatically, and is blended in within four seconds (duration of fading).

Skip a title without interrupting Auto DJ:

A left click on starts the next title of the opposite Player, and blends it in automatically. The button shines during this process. The skipped title will finish after the blending is complete.

HINT:
Titles which are used in the Auto DJ function should be normalized before.

Play modes of the Auto DJ

The Button below the Playlists allows you to switch between two different playlist functions in Auto DJ mode.
The Party Mode allows you to start your playback from every position in the playlist. Just load and start the title. The songs played were removed or remaining in the playlist, depending on the options selected in the UltraMixer settings.

The main difference of the DJ-Mode is, that all loaded titles will be moved on the top of the playlist. After playing the songs will be removed from playlist regardless the UltraMixer Preferences settings.

4.4.2.2 Sync

The „Beats Per Minute“ (BPM) of two titles can be synchronized by this sync function. If the Auto-DJ is activated the title will be synced a short time before fading to the next title. If the Auto-DJ is disabled, the last started title will be synchronized to the other title in short intervals (1 Second).

4.4.2.3 Talk-Over

The Talk button lowers the volume of the music, e.g. to speak in a microphone without being overlaid by the music or overloading the loudspeakers too much. If you want to you can use automatic talk over.

**Talk function:**
1. A left click on the button lowers the volume of the music.
2. The button shines. Now, you can speak in the microphone.
3. A further left click deactivates the function and increases the volume again.

4.4.3 Crossfader-Section

(1) Crossfader
(2) Crossfader buttons
(3) *Monitor buttons*

(4) *Mute buttons*

The Crossfader is used to blend titles in both Soundplayers. The volumes of both titles are altered and put one above the other at the same time. This guarantees a music mix without any breaks. The function of the Crossfader is not limited to simple blendings. Techno and HipHop DJs use this slider to fade in short samples of other titles, which make the original title more interesting. The Mute buttons are also used to create useful effects. You can use them as you see fit.

### 4.4.3.1 Crossfader and Crossfader-Buttons

The Crossfader enables you to switch between titles in Player 1 and Player 2 (and vice versa). The kind of blending depends on the Fading Mode (see "[Fading-Section](#)").

---

**Crossfader and Crossfader button functions:**

- Like the Volume fader the Crossfader can be moved to the left and to the right by moving the mouse into that direction with the left mouse button pressed.
- If the mouse cursor on the Crossfader, the scroll wheel can be used to move the Crossfader as well. By holding the SHIFT key the reaction of the Crossfader is faster.
- A left click in the slider area changes the volume relation between both Players immediately.
- A left click on [left arrow] respectively [right arrow] moves the Crossfader automatically to Player 1 respectively Player 2.
- A left click on [stop] sets the Crossfader in the middle position. Generally, both Players will play with the same volume level now (depending on the Fading Mode).

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### 4.4.3.2 Mute- and Monitor-Button

The Mute buttons mute or demute the Players.

---

**Mute Button functions:**

- A left click on the Mute button of a Player activates the Mute function.
- A further left click deactivates the function.

The monitor button is useful to pre-listen a Title during the other player is playing.
Prelistening-preparations:
- A multichannel soundcard or two soundcards
- Go to to the UltraMixer Preferences / Audio / Soundcards
- Select the rear channel for monitor 1 and 2
- Select the front channel for player 1 and 2
- Now put the headphones in the rear channel and the speaker in the front channel

Monitor-Button Funktionen:
- Load a title in the waiting player and start the song
- Activate the Monitor button (of the Player with the title to pre-listen) with a left click.
- Now, this monitor channel is active; the button shines.
- You can influence the volume in your headphones with the Monitor knob
- A further left click deactivates the Monitor channel.

4.4.3.3 Equalizer-Section

(1) Equalizer knobs (EQ knob)
(2) Pan knob
(3) Monitor knob
(4) Gain knob
(5) Kill button
Using the knobs:

- Click on the requested EQ knob with the left mouse button, keep the mouse button pressed, and move the mouse up and down (standard setting, can be adjusted in the Preferences, chapter „Options & Adjustments”).
- In case the mouse points on a knob, you can use the scroll wheel of the mouse. If you press Shift at the same time, the knob moves faster.
- A right click or a double left click sets all sliders back to their standard positions.

**HINT:**
Generally, all sliders are set back to their standard positions after loading a new title. This function can be deactivated in the Preferences. In that case the sliders won’t move from their last position.

**Equalizer knobs**

The Equalizer knobs influence high (“High”), middle (“Mid”) and low (“Low”) tone frequencies of a title playing. Example: If the high frequencies of a title are too loud, it is possible to lower the volume of this tones with the High knob. The EQs are also used for other functions. Often, they are used to stress certain passages of a title.

**Panorama knob**

The Panorama knob (Pan knob) influences the balance between the right and the left stereo channel.

**Monitor knob**

This knob controls the volume of the monitor channel.

**Gain knob**

The Gain knob is used to increase or decrease the volume of a title. This function enables you to adjust the volume of a title before you start playing it. The position of the Gain knob influences the volume level which is adjusted with the help of the Volume slider.

**Kill buttons**

The Kill buttons are especially important for this effect. This buttons enable you to cut the appropriate frequencies completely.
4.4.4 Effect section

With the help of the Effect Section it’s possible to influence the sound characteristics of a title in real time. At the moment, UltraMixer contains the following standard effects: Flanger, Cut-Off, Resonance.

**Using the Kill buttons:**
- A left click on "K" activates the corresponding Kill area. The button shines. A further left click deactivates the function.
- A right click on "K" activates the Kill function for the duration of the click.

**Using the Effect button:**
- A left click on the Effect button activates the corresponding effect. The button shines.
- A further left click deactivated the effect.
- A right click on the button activates the effect for the duration of the click.

**Using the knobs:**
- Click on the requested effect knob with the left mouse button, keep the mouse button pressed, and move the mouse up and down (standard setting, can be adjusted in the Preferences).
- In case the mouse points on a knob, you can use the scroll wheel of the mouse. If you press Shift at the same time, the knob moves faster.
- A right click or a double left click sets all sliders back to their standard positions.
HINT:
Generally, all knobs are set back to their standard positions after loading a new title. This function can be deactivated in the Preferences. In this case the knobs won’t move from their last position.

4.5 Master

The master section includes four areas Equalizer, Recording, AGC und Master. The Equalizer is used to correct the acoustic sound signal. The AGC (automatic gain control) is used for the automatic volume control, the gain will be normalized to a specified value. In addition, the Master section contains a Gain and a Volume knob, which influence the volume of the overall signal (output of the sound cards).

A left click on Master or Alt+F3 opens the Master section.

(1) 31-band graphic equalizer
(2) Recording
(3) AGC
(4) Master volume section

4.5.1 31-Band-Graphic-Equalizer
(1) On button
(2) Frequency sliders
(3) Menu button

The 31-Band graphic equalizer divides the sound in 31 frequency areas. Each frequency can be increased or decreased individually with the help of the corresponding slider. This influences the sound characteristics of the music. Adjust the frequencies before playing the songs, and don’t or hardly use them while a title is playing. (That’s a rule for all elements of a Master section, no matter whether its hardware or software.)

4.5.1.1 On-Button

The On button activates the 31-Band equalizer.

On button functions:
- A left click on this button activates the equalizer. The changed positions of the sliders will be noticed in the overall signal.
- A further left click deactivates the equalizer. This function helps to notice the change, which the sliders produce.

4.5.1.2 Frequency sliders

With the help of the frequency sliders it’s possible to adjust the sound characteristics to the conditions of the surrounding. You’ll need some training to do so.

Frequency sliders functions:
- Move the adequate slider to the requested position with the left mouse button pressed. Moving the slider upwards increases the frequency, moving the slider downwards decreases it.
- A left click in the slider area moves the slider to the corresponding position immediately.
- A right click sets the slider back to its neutral standard position. Using the frequency sliders increases or decreases the volume. The slider on the very right meant to balance the volume again.
4.5.1.3 Menu-Button

The menu enables you to set all sliders back or to save a ready-for-use equalizer setting. This allows you to use identical settings at your next gig (with the same equipment and in the same surroundings).

Saving an equalizer setting:
1. A left click on “Save” opens the selection window.
2. A left click on “Save” saves the settings. The equalizer settings are saved with the file extension UPS (short for UltraMixer preset).

Loading an equalizer setting:
1. A left click on “Load” opens a window.
2. Choose the storage device of the UPS files. A left click on “Load” or a double left click on the file loads the requested settings.

4.5.2 Recording

(1) Recording time
(2) Recording button
(3) Configuration menu
(4) Gain knob

It is possible to record your mixes since UltraMixer 4. The recording area contains a record button (2), the record time (1), the Gain-knob (4), to change the recording volume. The Configuration-Menu (3) allows you to change the recording file type (e.g. .mp3 or .wav) or the destination of the recording file. If you don’t change the recording file destination the records will be showing in the recordings folder in the file archive.
4.5.3 Automatic Gain Control (AGC)

The AGC (automatic gain control) normalizes the sound levels on a certain level. This makes it possible to give different songs an identical auditive volume. Click on the tool button to choose a predefined setting or create your own.

4.5.4 Master Volume Section

(1) Gain knob
(2) On button
(3) Configuration menu

The AGC (automatic gain control) normalizes the sound levels on a certain level. This makes it possible to give different songs an identical auditive volume. Click on the tool button to choose a predefined setting or create your own.

(1) Mute button
(2) Volume knob
(3) Master gain knob
(4) Master Levels
This area controls the volume of the stereo output signal. Changes in the 31-Band equalizer do only influence the overall volume within UltraMixer, not the overall volume of your PC. This allows you to set the PC volume to the maximum.

The Gain knob increases or decreases the stereo output signal. The volume is set next to the blast limit of the loudspeakers. The value of the Volume knob (0-100%) is related to the position of the Gain knob, and is used to alter the volume of the adjusted Gain signal. The 100% position (standard position) of the Volume knob renders the exact signal of the Gain knob.

4.6 Inputs

Typical situations for DJ’s on events are program points like moderations or presentations by guests or by the DJ himself. For this purpose you need microphones, other music sources like CD-Player or Media Player, which the PA is playing back.

Since UltraMixer 4, there is the possibility to control those external audio signals and use up to three different input sources, that can be controlled by UltraMixer.
Input Settings

UltraMixer recognizes all connected input devices automatically. In the preferences menu you can select the input device, the output and monitor channel for each input lane.

On/Off Button

With the help of the „On“ Button you can activate the audio signal from the input device. The monitor button allows you to pre-listen the input device.

Equalizer

The Equalizer knobs influence high (“High”), middle (“Mid”) and low (“Low”) tone frequencies of input audio signal.

Volume Slider

The volume slider is used to change the volume.

4.7 FileArchive

The FileArchive is an audio-file organization database. It can be used to create folders and groups after personal preferences. Very big amount of data can be filtered and searched in a short time. The grouping is only done in the file archive and not on the hard drive because the archive does only handle logical references to the physical files. This is a very big advantage over other systems since you are able to have several files in different groups.
Open this window with a click on ARCHIVE in the navigation bar at the bottom edge of UltraMixer or by pressing Alt+F1.

(1) FileArchive-Index
(2) Archive table

4.7.1 The first launch

When UltraMixer is launched for the first time, the FileArchive will be empty. This chapter will show how easy it is to fill it.

Adding songs:

Beneath the playlists, waitlists, wishlists and tables are toolbars. Just one click on the “+”-symbol will open a menu where music can be added. This includes separate songs, directories, CD-titles, iTunes-titles, Playlists and iTunes playlists.

Alternatively it is possible to add music with a right click on the list and using a context menu. With an explorer and finder drag and drop is also a possibility.

**Hint:**
Titles which are not directly added to a group will be put in the file “Unsorted” to sort them later in the FileArchive.
Adding directory:

It is quite likely that a great amount of your music is already sorted in directories and is on your harddrive. With the “+”-symbol or a right click in the archive, whole directories including all subfolders and even other drives can be added.

4.7.2 FileArchive groups

(1) FileArchive Widget button
(2) Group tree
(3) Toolbar

4.7.2.1 FileArchive Widget-Button

The UltraMixer user interface is very variable and can be adapted to the users needs. Therefore the file archive tree has been designed as so called Widget. After this design decision the file archive tree can be put on the left or on the right from the file archive table.
4.7.2.2 Group tree

**User groups:**

It is possible to add music directories by a context menu in the file archive tree or the toolbar. Directories will create groups with the same name as they are on your hard drive by default. It's always possible to rename the groups or create your own groups. Nevertheless, it is possible to delete, color or move those groups. There are many functions to adapt the file archive to the users needs.

**HINT:**
Many users have their music already structured on their hard drive. Just add the root folder of your music directory to UltraMixer and all your folders along with the structure gets imported automatically.
System groups:

System groups are meta groups that are independent from the user groups and might be already existent even in an empty file archive. Those groups help to build up the archive and give a structural overview or show already played titles or show latest file archive search requests.

**System groups at a glance:**

- **Search results:** whenever a search in UltraMixer has been performed those results will create a new folder in the system groups search results.
- **Played titles:** shows all played titles of all past UltraMixer sessions.
- **Structured:** All files of the music directory are structured automatically by their ID3-Tags and grouped in subfolders like „genre“, „year“, „artist“ and „dancestyle“.
- **Unsorted:** Every title that has been played with UltraMixer but has no entry in the file archive gets a place in the „Unsorted“ system group.
- **Recordings:** All records will be stored automatically in this directory (by default)

**HINT:**

The main advantage of „Structured“ is that similar ID3-Tag entries can be found very quickly and therefore it’s even possible to solve inconsistencies in the file archive.
Intelligent Groups:

Intelligent groups are implemented since UltraMixer 4. Those groups allows you to define your own selection criteria. After defining your file archive will be filtered by the selection criteria and the selected music files will be shown in the intelligent group. If there are changes to these files the intelligent groups will be refreshed automatically.

In contrast to the normal groups the intelligent groups are colored green (default) and have there own group symbol. A double click on the group show you the editing dialog.

**Tip:**
Intelligent groups are especially useful for repeating search queries.

4.7.2.3 Toolbar in the FileArchive tree

The functions of the key pads does not differ from the toolbar.
Additional function of the “+” button:
• „Create a new group“.

Additional function of the preferences button:
• „Clear search folder“ all search results will be deleted.
• „Played titles“ all played titles can be deleted or exported to a CSV text file.
• „Create a new group“.
• „Create a new Intelligent Group“.
• „Save Group“. Save a group as playlist (.m3u) or as textfile (.csv)
• „Delete group“.
• „Rename group“.
• „Colorize group“.
• „Synchronize group“. Through the synchronization of a group, all paths of all music titles in the groups are updated. A synchronization is necessary when a file has been added or deleted on the hard drive.

The expand/contract button can be used to hide a widget or show more widgets.

When the folder (left) is activated all files of a folder including all subfolders will be shown. The „lock“-Button (right) disables all Drag&Drop action. This prevents moving directories while in the hectic of a gig.

4.7.3 FileArchiv table
4.7.3.1 Top bar

The Widget areas left and right from the file archive table can be disabled by the expand buttons. This function provides the possibility to increase the size of the file archive table. The path display above the file archive helps (even in very big file archives) to get a much better overview. This display shows the current folder (right) and the next directly above (left).
4.7.3.2 Title table

The table shows all the music tracks that are in the currently selected directory. Like the organization of a playlist, the title information can be shown and grouped. A title that has been played in the current UltraMixer session is marked with a red dot.

Tip:
Titles in the archive table can be sorted with a click on the table head of the particular criteria. A second click changes the sorting order and vice versa.

4.7.3.3 File archive table toolbar

For further information also see “5.2 Toolbar”.

For further information also see “5.3 Search for titles in UltraMixer”. The Modes Buttons are used to change between Archive, Mixer and Master mode.
4.8 Navigationbar

1. UltraMixer logo
2. Archive button
3. Archive menu (up arrow)
4. Mixer button
5. Master button
6. Inputs button
7. 2-Playlists button
8. Waitlist button
9. Preferences button

4.8.1 Mode Buttons

The Modes Buttons are used to change between Archive, Mixer, Inputs and Master mode.

**HINT:**
You can deactivate the mode archive or mixer to get more space for the playlists.

4.8.1.1 FileArchive menu

The FileArchive context menu contains all general functions of the Archive. A left click on the arrow-button opens the FileArchive context menu.
Search

A mouse click on the menu „Search“ opens the detail search (see „5.3 Search for titles in UltraMixer“).

Importing

The following import options are available.

- Import a still existing recovery file (.ufa)
- Import a UltraMixer file archive backup
- „Import BPM Studio File Archive“. This allows former BPM Studio user to import the bpm studio file archive in UltraMixer
- “iTunes Playlist“. Import a itunes playlist.
- „Import iPod tracks“ Allows you to send music files from your iphone or ipod to UltraMixer

Exporting

The data backup of the FileArchive is accomplished with the help of the function “Export”. A UFA file (short for UltraMixer FileArchive) is saved or as CSV File (Character Separated Values).
FileArchiv synchronize

Due to the synchronization of the FileArchive all paths of your titles will be updated. A synchronization is always needed when file on your hard drive have been changed, moved or even deleted.

Check consistency of the FileArchive

All audio data in the FileArchive are filed as reference to the original data on the harddrive. The “Check consistency” function controls, whether all references are valid, and deletes them from the FileArchive, if invalid. A consistency check is carried out with each start of UltraMixer.

Clear FileArchiv

This function clear the whole File-Archive, the Wishlist, all Playlists and the player too. This function does NOT delete the selected titles from the harddrive!

Filearchive Statistics

This dialog show you some statistics about your file archive.
Reset Hits

The system registers each time you load a title in the Soundplayer, and shows this information in the “Hits” column. This information is especially helpful to find proven and beloved titles immediately. This function sets all values back to 0.

Reload ID3-Tags

All information from the data of the hard disk is renewed in the FileArchive.

Normalize (Replay Gain)

All titles in the FileArchive are normalized to a reference value according to the Replay-Gain standard (standard: 89dB, for setting see “6.4.4 Mixer / Analysis”).

Analyze Tracks (Professional Edition only)

UltraMixer analyzes the speed of music files automatically, and transfers this information to the FileArchive immediately and analyze the waveform as well.

Undock File-Archive

This menu item allow you to undock the file archive and show it on an extra screen.

4.8.2 View Buttons

Allows you to switch between the 2-Playlist-View and the Waitlist-View.

4.8.3 Preferences

The UltraMixer menu is a context menu, which contains general information about and functions of UltraMixer..
Switch to Fullscreen Mode

The UltraMixer window is set to full screen mode.

Waveform

Activate or deactivate the Waveform.

Show ShortCuts

This function shows the ShortCuts of the user interface.

Purchase license

A link brings you to the UltraMixer website, where you can purchase a license.

Activate UltraMixer

This function enables you to activate UltraMixer with a license you purchased before.

About UltraMixer

Shows information about the version of UltraMixer.

Check for Updates

If a connection to the Internet is available, UltraMixer checks, whether new updates are available.
Preferences

Opens the UltraMixer Setup, where all relevant parameters and settings can be adjusted (see "6. Options and adjustments").

Exit

Exits the software.

4.9 Widget areas

UltraMixer has many possibilities to adapt to the user needs. This variability has been achieved by so called „widget areas“. Widget areas are regions where additional features can be shown, those components are called widgets. Widgets are small standalone function sets, e.g. a clock and can be placed in any free widget area. UltraMixer contains widget areas between sound players and at both sides of the File-Archive. According to the settings 7 widgets can be show at the same time. See marked widget areas in the following figure:

Through the widget areas in UltraMixer it is getting even more flexible since the user can use their preferred functions according to their own needs.
Select Widgets:

- The widget area has two widget buttons where the widget can be selected.
- The widget buttons can be reassigned by left-click on the arrow next to the widget name with another widget.
- Left click on the arrow button open the widget menu.
- The available widgets are displayed and can be selected by left clicking on the menu item.
- The entire button allows the widget quick selection.

**Tip:**
Additionally, the user can select whether one or two widgets are shown. This setting can be controlled by the widget menu. Click on „Show two widgets“. The following widgets are available:

1. User picture
2. Cover (FA)
3. Cover (A/B)
4. Fading
5. Info
6. Midi
7. Notepad
8. Sample player
9. Special FX
10. Clock
11. Wishlist
12. Waitlist
4.9.1 User-Picture

A picture of your choice can be faded in.

4.9.2 Cover (FA)

This function shows the cover corresponding to the selected song in the filearchive.

4.9.3 Covers (A/B)

Many mp3 files contain the cover or other pictures of the original CD. Therefore, the upper part of the middle console offers a picture function for audio files. This function shows the cover corresponding to the song being played.

4.9.4 Fading

This area is an identical copy of the Fading Section described in “Fading-Section”

4.9.5 Info

The Info Section contains news about UltraMixer. To use this feature, a connection to the Internet is required. It's possible to deactivate this section in the global setup (menu item User Interface).

4.9.6 Midi

If you connect a midi controller than you can see additional options in this widget

4.9.7 Notepad

The user can note important points during or for the gig.
4.9.8 Sample player

The sampler consists of 16 slots. These slots are used for loading and playing short music files (samples). The 16 sampler slots are represented by 16 buttons. These buttons can be used and configured independent of each other.

Empty slots are marked by the gray background color. Slots which are ready for use are shown as black knobs.

A right click on one of the buttons opens a configuration menu. Here you are able to adjust the functionality of the selected slot.

**HINT:**
Through the headphone symbol you can pre-listen the samples, just activate it and play a sample.
Loop: Sample is played in a loop.

DirectPlay: Affects the configuration of the Sampler buttons. If DirectPlay is selected, the sample is only played as long as the mouse button is pressed.

Fade out at Stop: If this option is selected, a sample won’t terminate at once when stopped, but is faded out gently.

PlayOver: When using this option, the sampler lowers the volume of the Soundplayers to a predefined level. Therefore, it is possible to specify a certain volume level in the Sampler Settings.

Below the slot buttons are the preferences. The following actions are available:

1. Edit sample bank
2. Reset sample bank
3. Load sample bank
4. Save sample bank
5. Save sample bank as
6. Preferences

Next to the preferences button, you can also adjust the volume.

4.9.9 Special FX Widget

Across this widget you can start special sound effects. The following are available:

- Brake: slow down the track until stop and start it again
- Backspin: simulate a backward spin of the turntable
- Forwardspin: simulate a forward spin of the turntable
- Reverse: Play the track in reverse order

4.9.10 Clock

Shows a analogue or digital clock in 12 or 24 hour format. A left or right click on the clock enables you to switch between the different display modes

4.9.11 Wishlist

This list gives you the possibility to store music requests without being played back.
4.9.12 Waitlist

Here are the titles of both Players appearing in one playlist, called waitlist. This has the advantage that the user sees exactly what tracks are played in a row.

4.10 Video functions

UltraMixer 5 Pro Entertain has new video functions. Those will be explained in this section.

General information

Activating the widgets is a requirement for the video functions.

4.10.1 Configuration

The configuration contains six sections. General, wallpaper, slideshow, logo, live text and webcam.
4.10.2 General

Many options can be changed here. The crossfader can be switched to operate independently from the audiocrossfader. Visuals that play when no video is playing can be selected. It is further possible to show the information of the next title playing, when the tracks are about to change.

4.10.3 Optimizing the performance

To optimize the performance you can turn off the blend-effects and set the frame rates. Slower computers need a higher buffer and therefore the frame rate should be decreased.

4.10.4 Wallpaper

A wallpaper can be chosen. The chosen wallpaper will be displayed when no slideshow, video or visuals are currently used.

4.10.5 Slideshow

A folder with pictures can be displayed as a slideshow. To use the slideshow the duration and transition have to be set. This will be displayed when no video or visuals are.
4.10.6 Logo

The logo of the company, DJ or restaurant can be displayed. It will be visible at all times.

4.10.7 Live Text

Text can be edited and then shown to the crowd. It can appear at the bottom, in the middle or at the top and stays visible all the time.

4.10.8 Webcam

A local USB-webcam or network-camera can be displayed.
5. How it works in UltraMixer

5.1 General operating concept

5.1.1 Main mouse functions

All important UltraMixer functions are attainable with the mouse. There are some principal rules:

Single click with left mouse button (left click):

- buttons are activated / deactivated
- audio files are marked, which means, a colored background appears
- functions and actions are chosen in the menu

Double click with the left mouse button:

- knobs and sliders are set back to their standard positions
- titles can be imported
- files can be opened

Press left mouse button + further actions:

- knobs and sliders can be turned and moved
- audio files can be dragged and dropped or imported
- scroll bars can be shifted

Single click with right mouse button (right click):

- knobs and sliders are set back to their standard positions
- menus and further functions can be opened
- all knobs and sliders can be turned and moved

The use of all elements will be explained more detailed later on.
5.1.2 Main keyboard function

The keyboard is used to extend the functions, which are attainable with the mouse. In addition, short cuts allow you to get to the most important functions. This makes the use of UltraMixer more efficient and faster. The most important rule for short cuts is (there are some exceptions):

Shortcut Rules:

- Ctrl is responsible for the left side of UltraMixer.
- Shift is responsible for the right side of UltraMixer.

Additional, there are some keys, whose functions can be adjusted in the “Preferences”.

The standard short cuts will be explained in the appropriate chapters. A table with all short cuts can be found in chapter “7.1 Shortcuts”.

5.2 Toolbar

Below the Playlists, the FileArchive table and the FileArchive tree stands one toolbar. On the left side are buttons, that take direct influence on the displayed list (e.g. add or remove a title). In the middle area are informations for all the titles that are displayed (e.g. number of titles (if existent)) and on the right side are buttons, that could be important when working with the list (e.g. single / track mode).
5.2.1 „+“ - Button

With this button it is possible to add music. A left click opens a context menu, that allows you to add individual titles, entire folders (only audio files), audio data from CDs, already existing playlists and iTunes playlists.

5.2.2 „-“ - Button

After a left click on this button, the currently selected title will be removed from the list. This makes it possible to remove unwanted items with just a click from the list. The title will only be removed from UltraMixer, not deleted from your harddrive.

5.2.3 Preferences
(1) Load title into Soundplayer
(2) Add title to other lists
(3) Add more music
(4) Remove and mark
(5) Delete from hard disk
(6) Save List
(7) Edit, Analyse, Extras

Load title into Soundplayer

The currently selected title can be loaded into the Soundplayer over this menu item.

Add titles to other lists

Depending on the selected view (2-Playlist or Waitlist - Mode) the selected titles of another list can be added.

Add more music

This menu allows you to add more music.

Remove and tag

Allows you to select, remove or tag all titles with one click.

Delete from harddrive

This function deletes the selected titles from the harddrive. They are sent to the bin, by default.

Save List

The tracks in the filearchive table can be saved as Playlist (.m3u) or as text file (.csv).

Edit - Analyse - Extras

This menu allows to edit ID3-Tags, normalize titles or to calculate BPM (beats per minute).
5.3 Search for titles in UltraMixer

UltraMixer offers a variety of ways to look for titles, which are explained in more detail. These search options are available:

1. Quick Search
2. Column Search
3. Filter Search
4. Highlighter Search
5. Live-Search
6. Detail Search
7. Table Search

5.3.1 Quick Search

The Quick Search is a very simple possibility in UltraMixer to search after a title in the entire FileArchive. Therefore it is used most often. This search is in the FileArchive (see chapter “4.7 FileArchive”) in the toolbar of the FileArchive tables.

![Search Bar](image)

**Hint:**
If next to the lope icon is not written „Search“ you have to change the search option with a left click on the magnifier to „Search“.

To search for a title, the text box must be clicked and the search term has to be entered. To start the search through the whole FileArchive the Enter key has to be pressed. If all titles are found, matching the search term, a new folder is created, that contains all search results. The result is in the FileArchive tree in the system folder „search results“. Finally, the newly created folder will automatically be selected, to go directly to the search results.
5.3.2 Column Search

The column search operates like the quick search, but only for the chosen columns.

An example:

Searching for “Nena” would show all results where “Nena” is in the title, the artist or even a comment. If you would search for “Artist: Nena” then only the results with the artist “Nena” will be displayed.

**Tip:**
It can be even more detailed by using two columns.
For example: “Artist: Nena Rating: 3-5”

5.3.3 Filter Search

If the folder containing the requested music is already known, it can be used to filter certain titles of this folder out. This search is also contained in the FileArchive in the toolbar or the FileArchive table.

**Hint:**
If next to the magnifier icon is not written „Filter“ you have to change the search option with a left click on the magnifier to „Filter“.

After every entered character all titles of the folder, that match with the input, are filtered out. If a redundant character was entered, this can be easily removed and the filter result will adjust automatically.

**Hint:**
A new folder with the file results is stored in the search results when „Enter“ is pressed after the filter search (see Quick search).
5.3.4 Highlighter Search

With the Highlighter Search all tracks in the FileArchive table, that match with the search term, are marked red.

**Hint:**
If next to the magnifier icon is not written „Highlighter“ you have to change the search option with a left click on the magnifier to „Highlighter“.

Similarly to the previous search options all marked groups are merged in a new search folder after pressing „Enter“.

5.3.5 Live-Search

If you are in the FileArchive table or a Playlist and you want to quickly access a known title you should choose the Live-Search. After entering the first letters, the first matching title is automatically selected.

**HINT:**
The Live-Search must be enabled in the UltraMixer settings in order to use it.

5.3.6 Detail Search

For performers or bands which are represented by several titles a detailed search can be necessary. In order to get to the detail search dialog the arrow button, that is located right next to the Archive button in the navigation bar, has to be clicked. A menu will appear, in which the menu item „Search“ must be selected to open the Detail Search.
5.3.7 Table Search

Finally there is a search possibility, that is perhaps already known from other applications. Press „Strg + F“ to open an additional search dialogue.
5.4 Pre-listen titles

To exercise the work, DJs need a possibility to pre-listen to titles, without interrupting the current title. UltraMixer offers two options to pre-listen titles. The first option is to pre-listen over the Monitor-function and with the second option the title can be pre-listened on an independent player.

5.4.1 Pre-listen over the monitor

If a title is already loaded into the player, it can be pre-listened by the monitor-function. Thus, while a title is playing on the stereo equipment, the next to be played track can be selected and initialized. The monitor function can only be used if at least two sound cards or a multi-channel cards is available. Only with these cards the signals of the monitor and the player can be divided to different channels. If you only have a simple sound card, the confirmation of the Monitor-buttons does nothing.
The Monitor-Buttons are arranged to the left and right of the Crossfader. All settings made (e.g. Gain-knob, EQ-knob, Pitch-knob, etc.) are to be heard over the Monitor-channel.

**Monitor-Button Functions:**

- Activate the Monitor button (of the Player with the title to pre-listen) with a left click.
- Now, this monitor channel is active; the button lights up. You can influence the volume in your headphones with the Monitor knob.
- One more left click deactivates the Monitor channel.

**HINT:**
It can be helpful to listen to both titles at the same time on the headphones, if you want to adjust the speed or the volume of the tracks. Just activate both Monitor buttons.

### 5.4.2 Pre-listen over the Previewplayer

If the titles of a playlist are reassembled or you are working with the FileArchiv, it may be necessary to pre-listen to a title in advance. In the Playlist, Waitlist, Wishlist or the FileArchive table the Previewplayer column (PP) can be displayed.

For all titles of these lists the selected title can be heard by left clicking on the icon over the Previewplayer. Below the Previewplayer and its controls is described.
(1) close previewplayer
(2) track display
(3) pin
(4) play- / stop-button
(5) barsearch
(6) search forward
(7) search backward
(8) previous track
(9) next track
(10) time passed
(11) remaining time
(12) volume slider

About the pin (3), the Previewplayer can be pinned to any spot and will appear in the same place at the next title. If the pin function is disabled, the player will appear below the title that will be pre-listened.

**HINT:**
The player stops, when the view or the mode in UltraMixer is changed, so that fast and suddenly necessary breaks are still possible.

### 5.5 Streaming / Broadcasting

„Reach the whole world with UltraMixer“. Since UltraMixer 4 you can stream your mixes directly to the internet. At the moment you can stream your music to Mixlr, SHOUTcast or Icecast servers.

#### 5.5.1 Mixlr

**Streaming requirements:**

The following steps are necessary to stream with UltraMixer.

1. You need an account for a social network like Facebook, Twitter or Soundcloud.
2. Register yourself on [www.mixlr.com](http://www.mixlr.com) with that account.
Before you can stream your music you need to connect UltraMixer with the streaming server. First, switch to the Master section and open the Recording/Broadcasting preferences. Now choose Mixlr as server type, set a broadcast name and a category. Enter your login and password and apply the settings. At the end you can start the streaming by starting the record.

**Receiver requirements:**

Your audience only need to visit www.mixlr.com and choose the right category, to find and listen your music stream. You can even post mixlr-links to Facebook.

### 5.5.2 SHOUTcast

**Streaming requirements:**

The following requirements are necessary to stream your music with SHOUTcast.

1. Download the SHOUTcast Server 1.x software from www.shoutcast.com
2. Install the server software
3. In the installation directory you will find a server config file called „sc_serv.ini“. This file contains all necessary server settings and has to be modified e.g. login name, password, port number and so on.
4. After you configure the ini file, save your settings and start the server program
5. Start UltraMixer
Before you can stream your music you need to connect UltraMixer with the streaming server. First, switch to the Master section and open the Recording/Broadcasting preferences. Now choose SHOUTcast as server type, set the streaming url, a broadcast name and a category. Enter your login and password and apply the settings. At the end you can start the streaming by pressing the record button.

**Receiver requirements:**

Your audience need a compatible server client like Winamp, Mediaplayer or itunes to receive your music stream.

The streaming adress is the following: „http://“ + „server ip“ + „:“ + „port number“

### 5.5.3 Icecast

**Streaming requirements:**

The following requirements are necessary to stream your music with Icecast.

1. Download the Icecast Server software from www.icecast.org
2. Install the icecast server software and start it.
3. Config the server across the configuration menu
4. Start UltraMixer
5. Enter all necessary connection information in the streaming preferences dialog in UltraMixer.
6. Start the recording
Receiver requirements:

Analogous to SHOUTcast settings, look above.

5.6 How can I mix two titles so that they have the same beat?

It requires much training and experience to create a beat-synchronized mix. Two titles with the same speed and the same rhythm are laid above each other. That means each beat of one title plays at the same time as the beat of the second title (for more information see the next chapter).

UltraMixer can automatically synchronize the beats or you can do it by yourself.

5.6.1 Automatic mixing

There are two ways to synchronize the beats automatically, the “Sync”-Button in the Soundplayer and the “Sync”-Button in the fading area.

The button in the player will change the BPM of the title that is in the player to match the other. This synchronizes the titles once.

With the other button the changes will last. The shorter track will be changed to match the other one.
5.6.2 Manual mixing

The steps for a beat-synchronized mix could be the following:

1. Import the requested titles in the Playlists.
2. Start a title.
3. Make sure the Crossfader stands on the side of the current title.
4. Open the Monitor channel of the second title. The following steps are done with the help of your headphones.
5. Search for the first beat of a title with the help of the frame-search buttons (see "4.2.6 Frame-Search Buttons"). If you don't find it in the beginning, play the title or search it with the forward/backward slider. Go on searching for the start of the first beat with the frame-search buttons.
6. A left click on the Cue button saves this position.
7. Start the title, so UltraMixer can calculate the number of BPM.
8. Adjust the BPM number to the one of the title playing with the help of the Pitch slider (see "4.2.6 Frame-Search Buttons").
9. If necessary, correct this speed with the help of your ears. Use the Pitch buttons.
10. Adjust the highs, lows and mids of the title. Increase or decrease the volume with the help of the Gain knob.
11. A left click on the Cue button brings you back to the Cue point you saved before.
12. Start the title from there on (parallel to the beat of the first title) to start the mix.
13. If the speed of both titles isn't exactly the same yet, correct it with the Pitch buttons, and use the Pitch Bend buttons to hold the title parallel to the first title.
14. Blend in the second title with the help of the Crossfader.

Tip:
Don't give up! There is much exercise necessary to reach a perfect mix. Especially your hearing has to be trained, so that you are able to react even to very small speed differences. Just look for some rhythms for exercise. We recommend 4/4 time with only a few beat instruments, which will hardly distract from the original beat. Additionally the whole speed of the title shouldn't be very high.
5.7 About beats and mixes

House and Techno music use 4/4 times, exactly like the following examples. They are especially handy for explaining what's important when mixing. This description can differ from other descriptions in terms and details, but the principle is just the same.

Techno and House tracks consist of beats, bars and breaks. The beats are the beats of the rhythm. They don't have to be represented by a bass or beat instrument. Even a classical violin concert contains beats. Back to the dance tracks: breaks are the pauses of a title in which no bass or similar tune is heard. Bars are little sequences of a title, which consist of an even number of beats. The following shall be valid for this description: 1 bar = 8 beats. That's no arbitrary division. Often, certain elements like sounds and tones are repeated after 8 beats.

1 Bar

In a dance track, the main topic of the title is based on an even number of bars. Generally, the melodies of dance tracks lasts for 4 bars, sometimes 2 bars, and are repeated afterwards. Related to 2 bars per topic the pattern AB is created:

1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8
Main theme Main theme

When mixing two tracks with the same speed, it's most important that the beats of both titles are exactly above each other.


Otherwise, you will have a chaos of rhythms when blending.
You should also have a look at the melody of both titles. It's recommended not to start the new title before an even number of beats of the current title has been played:

UltraMixer calculates all the beats for you in most cases. You can see the beats as thin lines in the waveform. Bars and themes are not calculated.

5.8 Tray mode

The tray mode minimizes UltraMixer in the task bar. This mode is particularly suitable if you use UltraMixer as a jukebox and perform by the way other programs. Before switching to the tray mode it is useful to activate the Auto-DJ function.
6. Options and adjustments

The working parameters and the functionality of UltraMixer are managed in the settings. For example, shortcuts can be changed, the behavior of operating elements can be defined or the soundcard channels can be connected to the output channels.

Steps to the setup menu:

1. Open the UltraMixer menu with a left-click on the button „Preferences“ in the bottom frame bar.
2. Select the menu item „Preferences...“.
3. The following window opens:

![Preferences window]

4. If necessary, select one of the top menu buttons in the upper pane. The actual content of the submenu is shown in the second line.
5. Accomplish the desired settings.
6. Any changes in the setup menu are generally stored with left-click on „OK“.

The various configurations of the sub-menus are explained in more detail in the subsequent chapters.
6.1 Audio

The sound system may vary on different operating systems. At present on Windows both, DirectX and ASIO are available. On Mac OS X CoreAudio is supported and for GNU/Linux operating systems the OpenSound System (OSS) and ALSA is supported by UltraMixer. If you select the option „Auto Detect“ at this point, UltraMixer looks for the optimal settings for your current audio setup.

**HINT:**
As soon as several ASIO sound cards are in one system, UltraMixer will activate the preferred one. ASIO is not permitting two active sound cards simultaneously. Therefore you can select the preferred ASIO device in the audio settings.

6.1.1 Sound cards

At this point the two players, their associated monitor channels, the sample player and the pre-listening-player are assigned the individual sound cards or rather sound card channels. UltraMixer recognizes on its own, what hardware is installed, so that an incorrect selection is not possible.

6.1.2 Audio Engine

6.1.2.1 Latency

Latency is the time between the emergence of a sound or turn of a knop and the output.

UltraMixer offers the possibility to change the latency (in milliseconds). Low latency results in higher CPU load and it can lead to audio dropouts.
6.1.2.2 Mixer-Quality

The choice among mixer quality influences the sound quality and the quality of the pitch. The interpolation algorithm of the mixer are graded as follows:

- Low quality: Linear interpolation (fastest)
- Normal quality: Bilinear interpolation
- High quality: Spline interpolation
- Highest quality: Bicubic interpolation (slowest)

6.1.2.3 Time-Streching-Quality

Across this combobox the quality of Timestrecher can be set. You can choose between „crisp beats“ for titles where the beat is important and „clear sound“ for titles that are more melodic and a compromise between the two variants.

6.1.2.4 Scratching Qualität

Across this combobox the quality of Scratching can be set. Keep in mind that high quality leads to a higher system utilization.

6.2 Appearance

Under this menu item, the appearance of the tables, the player, the mixer, the file archive and the ID3 tags are set.

6.2.1 General

6.2.1.1 Language selection

Here you can adjust the language of UltraMixer's user interface. The languages English and German are already included. Changes do not take effect until the restart of UltraMixer.
6.2.1.2 Tooltips

Generally, a short additional information is shown, when you point on an element of the user interface. Turn this of if you are disturbed by the small tooltip windows or you don’t need this information.

6.2.1.3 Antialiasing

By default, the fonts are smoothed by UltraMixer.

**Tip:**
This option causes an higher CPU load and should be turned off on systems with performance problems.

6.2.1.4 Confirmation message when ending UltraMixer

Generally, a confirmation dialog pops up and prevents the accidental shut down of UltraMixer. You can deactivate this dialog with this option.

**Hint:**
Independently from this setting the security questions always appears if some music is playing.

6.2.1.5 Check for updates at startup

If this option and the connection to the Internet are active, UltraMixer searches for updates each time the program starts.

6.2.1.6 Advice on empty FileArchive

If this option is activated and the FileArchive is empty when UltraMixer starts, a dialogue will appear. The dialogue makes it possible to add music files immediately to the UltraMixer FileArchive.
6.2.1.7 Show Error Report Dialogue

UltraMixer is improved constantly. Therefore, special error detection algorithms have been developed. These algorithms allow to recognize and eliminate even the smallest errors through an update. This field is activated by default and causes UltraMixer to search for possible errors and to produce an error report if necessary. This procedure is accomplished each time you quit UltraMixer. If that is the case, UltraMixer will ask for your permission to send the error report before closing down.

6.2.1.8 Show Info Panel

The Info widget might be deactivated. In this case, UltraMixer won’t connect to the internet.

6.2.1.9 Live Search

If you are in the FileArchive table or a playlist and you want to get quickly to a known title, then the live search should be selected. After entering the first letter the first matching title is automatically selected.

6.2.1.10 Show three Widgets

If you have enough space in the playlists mode between the two playlists, then you can enable this option for displaying a third widget.

6.2.2 Tables

For tables as a menu item the font of the Playlists, Waitlist, Wishlist and the FileArchive can be set. The font, font size and the formatting of the text can be set and a further option allows to display the titles only in capital letters.

Show playtime instead of play duration. You can choose between the exact daytime or in how many minutes the title will be played, shown in the sum column. The display format for the track number for titles of an album can be changed here.
6.2.3 Player

Is the option „Enabled Ticker“ activated, long title names will scroll automatically in the display. In the waveform section own waveform and beat stroke colors can be defined. As needed they can be turned on and off.

6.2.4 Operation

6.2.4.1 Pitch Slider Mode

Determine in which manner the pitch-knobs of UltraMixer should be controlled.

**Available pitch slider behavior:**
- “From top to bottom”: moving the mouse downwards decreases the pitch value.
- “From bottom to top” (default): moving the mouse upwards decreases the pitch value.

6.2.4.2 Control Knob Handling

Set in which manner the knobs of UltraMixer should be controlled.

**Available knob behavior:**
- “From top to bottom” (default): moving the mouse downwards increases the knob value.
- “From bottom to top”: moving the mouse upwards increases the knob value.
- “From left to right”: moving the mouse to the right increases the knob value.

6.2.4.3 Action when double-click

The following actions can be selected when double clicking a title in the FileArchive:

1. Load title into player
2. pre-listen titles
3. Edit ID3-Tag in table
4. Edit ID3-Tag in window
Load title:

Load title into player after double-click

pre-listen titles:

After double-click on a title the pre-listening player opens and the selected title can be prelistened.

Edit ID3-Tag in table

A description field opens after double-click on a row of the table. This description field allows to edit the ID3-Tag.

Edit ID3-Tag in window

A new window opens in which you can edit all ID3-Tags.

6.2.5 FileArchive 1

6.2.5.1 Check consistency of the FileArchive on startup

Generally, UltraMixer checks with each start, whether the links between the audio files in the FileArchive and the original data on the harddrive are still valid. In case they are not, the links are deleted from the FileArchive. If you don’t want the consistency check or it is too slow, deactivate this option and use the function „Synchronize FileArchive“ instead.

6.2.5.2 Automatic FileArchive backup

Every 24 hours, when the program was started, UltraMixer create a file archive backup in the file archive directory.

6.2.5.3 Clear search results in filearchive when quitting

The results of the search function are enlisted as a subgroup in the “Search” folder of the FileArchive. If this option is activated, UltraMixer will empty this folder each time it shuts down.
6.2.5.4 *Last search results*

If this option is activated only the last search results will be saved.

6.2.5.5 *Multi column sort*

Sort the column depending on the other column. For example, column title depending on column artist. Abba - Money Money Money, Abba - Waterloo, Elvis - Heartbreak Hotel, Elvis - Jailhouse Rock.

6.2.5.6 *Move deleted files to the trash*

You can delete audio files from the harddrive in the Playlist or in the FileArchive. Generally, this data is sent to the bin to avoid accidental deleting. It’s possible to retrieve this data. Important: If you deactivate this option, the data is not sent to the bin, but deleted completely at once!
6.2.5.7 Use Caching

If Caching is used, UltraMixer checks with each upload of a title in the FileArchive, whether this title is already in the database. Duplicate entries are skipped, and the upload is sped up.

6.2.5.8 Save meta information additionally in the file

When editing ID3 Tags, the altered information is saved to the file, and therefore doesn’t remain in the UltraMixer database only.

6.2.6 FileArchive 2

This can be used to connect to iTunes, but it is also able to change settings so that several UltraMixer can use the same filearchive.

6.2.7 Location of the iTunes library file (XML)

To be able to access the iTunes playlists the specification of the iTunes library file is necessary. UltraMixer comes with an auto-detect function to determine the location of the file itself. However it is still possible to select the file itself any time when using the „browse“ item and indicating the library file itself.

6.2.7.1 Location of the UltraMixer Archive Single-Instance

It can be of a great use for the user, to create not only one but several music archives. UltraMixer offers the possibility to indicate more than one storage location for the archive.

More than one UltraMixer can use the same FileArchive. You can define this UltraMixer Instance as Server or as Client.

6.3 Skinning

This submenu is used to alter UltraMixers’s user interface. There are different skins available.
HINT:
UltraMixer has the customizable skins. It is possible to increase UltraMixer to any size (depending on minimum size).

**Loading a skin:**
1. A left click selects the requested skin. On the right, a preview and additional information are shown.
2. A left click or a double-click on the button “Apply Skin” opens the skin. The changes are effective immediately.

HINT:
It is also possible to display UltraMixer in a different color scheme. On the right side under the heading color scheme is a selection box. A new color scheme can be advantageous, if UltraMixer is used in low light conditions.

6.4 Mixing

This submenu contains the settings for mixing audio files.

6.4.1 Soundplayer

6.4.1.1 Frame-Search length

These settings are related to the function of the frame-search buttons (see „4.2.6 Frame-Search Buttons“). Here, you can determine, how big the steps of the frame-search function are. Default are 10 milliseconds.

6.4.1.2 Reset Pitch-Time-Slider when loading a new title

When loading a new title, the pitch slider set back to their standard position (zero position) by default. If this function is deactivated, the slider remain in the position was adjusted last.
6.4.1.3 Reset Pitch Time knobs, Equalizer and Effects when loading a new title

When loading a new title, all equalizer and effect knobs are set back to their standard position (zero position) by default. If this function is activated, all knobs remain in the position they were last adjusted to.

6.4.1.4 End of song warning

If this option is activated, a visual warning appears shortly before the end of a title. With the help of the corresponding parameters, you are able to define the time at which this warning appears.

6.4.1.5 Interrupting titles played

If a title is loaded into the Soundplayer, while another title is running at the same time, a confirmation dialogue appears by default. It might be deactivated with this option.

6.4.1.6 Load title only if player is stopped

The option „Load track only if Player is stopped“ prevents the sudden stop of music, if a new title is loaded accidentally.

6.4.1.7 Player starts at Enter or double-click

The title can be started by Enter or double click.

6.4.1.8 Remove songs from Playlist after playing

After a title has been played, it is deleted from the Playlist by default. This prevents a title from being played twice. Deactivate this option, if you don’t want to use this feature.

**Hint:**
This option is can not be used while the Auto-DJ is in DJ-Mode. The songs there will always be removed.
6.4.1.9 Load next title

Loads the next track after the current title is finished.

6.4.1.10 Automatic online CD-request (CDDB)

If this option is activated and an internet-connection is available, the internet will be searching automatically for information about the CD.

6.4.1.11 Slow down the player when ending

Here you can turn off the sound effect when quitting UltraMixer. The effect is played only if some music is playing when quitting UltraMixer.

6.4.1.12 Jump to first Cue-Point after loading a track

If this option is enabled the track position will be set to the first cue point after loading a new track.

6.4.1.13 Playmodes

Vinyl-Mode:

Allows you to scratch the track with the mouse or a connected midi controller.

CD-Mode:

Mouse actions in the Waveform or jogwheel actions increase or decrease the pitch of the track, while the track is playing or allows you to search the beat point (Framesearch).
6.4.2 Auto-DJ

6.4.2.1 Moving the crossfader automatically

If this option is activated, the crossfader is moved automatically to the Soundplayer that plays the first track.

6.4.2.2 Asynchronous Fading for Auto-DJ

This option allows you to define and use asynchronous fading curves. The left fading curves represents the old title and the right curve the new title.

6.4.2.3 Sync Limit

The automatic synchronization is only useful if the BPM differences are small, because the new title will be increased or decreased in speed. Here you can define a BPM limit, where the automatic sync works. In case the bpm difference is out of range the x curve will be used for fading.

6.4.3 Beatmatching

6.4.3.1 Snap Loops on Beats

If this option is enabled and the loop will be activated the starting point will be snapped on the next beat point. This function only works while the player is playing.

6.4.3.2 Snap Cue-Points on Beats

The same functionality like Snap Loops before.

6.4.3.3 Always use real-time BPM (BPM from ID3 tags are ignored)

UltraMixer analyses by default each title in real time and shows everywhere only the
calculated real-time BPM. If you prefer to calculate the BPM values with another program, switch off this option. Keep in mind, that the automatic synchronization then won't work reliable in some cases and that you have to adjust the pitch slider manually.

6.4.3.4 **Save real-time BPM in ID3 Tag**

We recommend activating this option if you want to use the real-time BPM values calculated by UltraMixer also in other software. Important: BPM values from other programs will be overwritten. Default is off.

6.4.3.5 **Skip already analyzed Tracks**

If a BPM value already exists in ID3-tags the title will be skipped if the option is enabled.

6.4.3.6 **Accuracy & BPM-Analyzing-Range**

Define the Accuracy and expected BPM range for analyzing.

6.4.4 **Mixer / Analysis**

6.4.4.1 **Reset the crossfader**

If this option is activated the crossfader is set to the middle position when UltraMixer is shut down.

6.4.4.2 **Use volume normalization**

In the Playlist or in the FileArchive, audio files can be normalized to the ReplayGain standard. You can deactivate this function, if you don't want to normalize the titles you use.

**Gain offset (tracks with RG)**

Generally, all titles are normalized to a value of 89 dB. This value can be altered by adding an offset. Afterwards, the value is 89 dB + offset value.
Gain offset (tracks without RG)

It is also possible to assign an offset to titles which were not normalized before. In this case, the original volume will be increased by this value.

6.4.4.3 Silence detection

The activated silence detection skips quiet areas at the beginning and the end of a title. This is a feature that is particularly important for the Auto-DJ, to prevent unintentional „breaks“.

6.5 Keyboard

Here, you find all the ShortCuts which can be altered. You can adjust, save and load them here. All standard ShortCuts are listed in chapter 7 again.

**Altering a ShortCut:**
1. Activate the button “Learn key” with a left click.
2. Choose the ShortCut which you want to alter.
3. Insert the new ShortCut, e.g. for “Alt+A” you keep the Alt button pressed, and press A. The new ShortCut appears behind the corresponding action immediately.
4. Save the new ShortCut by deactivating the button “Learn key”.

**Saving ShortCut settings:**
1. A left click on „Export...“ opens the export window.
2. Choose a storage device, and insert the name of the file.
3. A left click on “Export” confirms the saving of the ShortCut. ShortCut settings show the extension UKM (UltraMixer Key Mappings).
**Loading ShortCut settings:**
1. A left click on “Import...” opens the import window.
2. Choose the requested UKM file.
3. A left click on “Open” loads the ShortCut. The new ShortCuts are valid immediately.

### 6.6 Microphone

#### 6.6.1 Talkover

![Microphone Talkover Settings](image)

- **Recording Device**
  - `no device`

- **Output Device**
  - **Player**: 0 (Lautsprecher High Definition Audio-Gerät...)
  - **Monitor**: 0 (Lautsprecher High Definition Audio-Gerät)...

- **Talkover**
  - **Output Volume (100 %)**
  - **Reduce Volume to (20 %)**
  - **Threshold (50 %)**
  - **Release Time (100 ms)**

- **Options**
  - Reduce music volume automatic when talking

- **Controls**
  - Drag sliders for volume adjustments

- **Buttons**
  - OK, Cancel, Apply
6.6.1.1 Manual Talkover

In this submenu you can adjust the settings for the Talk function. The slider for reducing the volume determines the rate of per cent, to which both Volume sliders are lowered when using the Talk button (see "4.4.2 Fading-Section").

6.6.1.2 Automatic Talkover

In contrast to the manual Talkover the volume is reduced when speech is detected in microphones.

Recording-Device

Select a microphone channel.

Playback-Device

Select an output channel.

Playback Volume

Define the playback volume of the microphone.

Reduce Volume

The slider for reducing the volume determines the rate of per cent, to which both Volume sliders are lowered when using the Talk button (see "4.4.2 Fading-Section").

Threshold

Define the volume level in per cent what is needed to recognize the microphone speech.

Release-Time

Determine the time stay in position until go back to original volume after ending the microphone announcement.
6.7 **MIDI Controller**

In this submenu you can determine which MIDI equipment can be used for handling UltraMixer. If the controller will not be detected automatically you can select it across the menu item „other midi device“.

6.8 **Light (Light Controller)**

UltraMixer offers an interface to control the light software Madrix. The necessary adjustments might be carried out in that submenu.

6.9 **Additional**

6.9.1 **Support**

In case there is any problem with UltraMixer, it may be necessary to send the log files (error report files) to the UltraMixer support team. These log files help to analyze and solve the problem. An additional text box allows you to indicate further comments or suggestions, that may help solving the problem. With clicking on „Send log files“ the data is sent directly to the UltraMixer support.
6.9.2 Other

Here you can delete the waveform cache. Each time a title is loaded it is analyzed and some data about the graphical waveform and all beats are stored in this cache. This makes the same title loading much faster next time. If you clear the cache all titles are analyzed again.

6.9.2.1 Waveform Cache

Here you can delete the Waveform Cache. The waveform cache is a buffer which contains all graphical information from titles already been loaded and analyzed. At the end a reload of the same title will be accelerated significantly.

6.9.2.2 Tools

The program allows you to analyse your whole music files in advance. The test cases are:

Load track:
  • Calc song length
  • Calc silence
  • Calc BPM
  • Calc replay gain
  • Read ID3-tags

Caution: Do not use it on a gig because this test tool is not stable and may kill UltraMixer.

6.9.2.3 Preferences

Here you can reset the UltraMixer preferences and open the UltraMixer Data directory in the Explorer or Finder.
7. Using the keyboard

UltraMixer offers ShortCuts to simplify your work. ShortCuts are combinations of keys, which allow you to use the most important functions of UltraMixer faster and more efficient than with the mouse. Most ShortCuts can be adjusted.

The table below contains all standard ShortCuts. Each function (action) is listed with its ShortCut and a short description. The ShortCuts are shown in the form function key - action - key. Here are some more information:

There are three different function keys for the ShortCuts:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt key</td>
<td>Shift key</td>
</tr>
<tr>
<td>Ctrl key</td>
<td>For Player 1</td>
</tr>
</tbody>
</table>

Actions describe states which can occur when using

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pressed</td>
<td>Action happens, when the key is pressed, and is valid as long as the key is pressed.</td>
</tr>
<tr>
<td>released</td>
<td>Action happens, when the key is released.</td>
</tr>
</tbody>
</table>

The following terms can occur next to the key names:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMPAD</td>
<td>Number block of the keyboard</td>
</tr>
<tr>
<td>DIVIDE</td>
<td>Division of the number block (&quot;/&quot;&quot;)</td>
</tr>
<tr>
<td>MULTIPLY</td>
<td>Multiplication of the number block (&quot;*&quot;&quot;)</td>
</tr>
<tr>
<td>SUBTRACT</td>
<td>Subtraction of the number block (&quot;-&quot;&quot;)</td>
</tr>
<tr>
<td>LEFT / RIGHT</td>
<td>Cursor arrows left / right</td>
</tr>
<tr>
<td>BACK_SPACE</td>
<td>Back space key of the keyboard</td>
</tr>
<tr>
<td>COMMA</td>
<td>Comma (&quot;,&quot;)</td>
</tr>
<tr>
<td>PERIOD</td>
<td>Period (&quot;.&quot;)</td>
</tr>
</tbody>
</table>
General Actions:

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AutoMix</td>
<td>Alt pressed A</td>
<td>Activate Auto-DJ</td>
</tr>
<tr>
<td>change_playlist_fokus</td>
<td>pressed TAB</td>
<td>Switch focus between Playlists</td>
</tr>
<tr>
<td>crossfader_left</td>
<td>Alt pressed LEFT</td>
<td>Crossfader to left</td>
</tr>
<tr>
<td>crossfader_right</td>
<td>Alt pressed RIGHT</td>
<td>Crossfader to right</td>
</tr>
<tr>
<td>minimize_to_tray</td>
<td>Alt pressed T</td>
<td>Activate TrayMode</td>
</tr>
</tbody>
</table>

7.1 Shortcuts

The following examples will be used for Player 1. To use the same shortcuts for Player 2 just exchange the Shift key with the Ctrl key.

7.1.1 Adding

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_add_dir</td>
<td>Ctrl pressed F</td>
<td>Add directory</td>
</tr>
<tr>
<td>p1_add_file</td>
<td>Ctrl pressed D</td>
<td>Add file</td>
</tr>
</tbody>
</table>

7.1.2 Stop / Cue

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_cue</td>
<td>Ctrl released 2</td>
<td>STOP / CUE</td>
</tr>
<tr>
<td>p1_cue_pressed</td>
<td>Ctrl pressed 1</td>
<td>Start playback from cue point</td>
</tr>
<tr>
<td>p1_cue_released</td>
<td>Ctrl released 1</td>
<td>Stop playback from cue point</td>
</tr>
</tbody>
</table>

7.1.3 Playing

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_play</td>
<td>Ctrl released F3</td>
<td>Play</td>
</tr>
</tbody>
</table>
### 7.1.4 Set Volume

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_volume_down</td>
<td>Ctrl pressed COMMA</td>
<td>Decrease volume</td>
</tr>
<tr>
<td>p1_volume_up</td>
<td>Ctrl pressed PERIOD</td>
<td>Increase volume</td>
</tr>
</tbody>
</table>

### 7.1.5 Mixer - Effects

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_efx_CutOff_off</td>
<td>Ctrl released NUMPAD8</td>
<td>Deactivate CutOff effect</td>
</tr>
<tr>
<td>p1_efx_CutOff_on</td>
<td>Ctrl pressed NUMPAD8</td>
<td>Activate CutOff effect</td>
</tr>
<tr>
<td>p1_efx_flanger_off</td>
<td>Ctrl released NUMPAD7</td>
<td>Deactivate Flanger effect</td>
</tr>
<tr>
<td>p1_efx_flanger_on</td>
<td>Ctrl pressed NUMPAD7</td>
<td>Activate Flanger effect</td>
</tr>
<tr>
<td>p1_efx_resonance_off</td>
<td>Ctrl released NUMPAD9</td>
<td>Deactivate Resonance effect</td>
</tr>
<tr>
<td>p1_efx_resonance_on</td>
<td>Ctrl pressed NUMPAD9</td>
<td>Activate Resonance effect</td>
</tr>
</tbody>
</table>

### 7.1.6 Mixer - High / Mid / Low

<table>
<thead>
<tr>
<th>Action</th>
<th>ShortCut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_eq_high_down</td>
<td>none</td>
<td>Decrease high frequencies</td>
</tr>
<tr>
<td>p1_eq_high_kill_off</td>
<td>Ctrl released DIVIDE</td>
<td>Kill high frequencies off</td>
</tr>
<tr>
<td>p1_eq_high_kill_on</td>
<td>Ctrl pressed DIVIDE</td>
<td>Kill high frequencies on</td>
</tr>
<tr>
<td>p1_eq_high_up</td>
<td>none</td>
<td>Increase high frequencies</td>
</tr>
<tr>
<td>p1_eq_low_down</td>
<td>none</td>
<td>Decrease middle frequencies</td>
</tr>
<tr>
<td>p1_eq_low_kill_off</td>
<td>Ctrl released SUBTRACT</td>
<td>Kill low frequencies off</td>
</tr>
<tr>
<td>p1_eq_low_kill_on</td>
<td>Ctrl pressed SUBTRACT</td>
<td>Kill low frequencies on</td>
</tr>
<tr>
<td>p1_eq_low_up</td>
<td>none</td>
<td>Increase middle frequencies</td>
</tr>
<tr>
<td>p1_eq_mid_down</td>
<td>none</td>
<td>Decrease middle frequencies</td>
</tr>
<tr>
<td>p1_eq_mid_kill_off</td>
<td>Ctrl released MULTIPLY</td>
<td>Kill middle frequencies off</td>
</tr>
<tr>
<td>p1_eq_mid_kill_on</td>
<td>Ctrl pressed MULTIPLY</td>
<td>Kill middle frequencies on</td>
</tr>
<tr>
<td>p1_eq_mid_up</td>
<td>none</td>
<td>Increase high frequencies</td>
</tr>
</tbody>
</table>
### 7.1.7 Frame-Search

<table>
<thead>
<tr>
<th>Action</th>
<th>Shortcut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_frameSearchBackward</td>
<td>Ctrl pressed F7</td>
<td>Frame-Search backward</td>
</tr>
<tr>
<td>p1_frameSearchForward</td>
<td>Ctrl pressed F8</td>
<td>Frame-Search forward</td>
</tr>
</tbody>
</table>

### 7.1.8 Load Playlist

<table>
<thead>
<tr>
<th>Action</th>
<th>Shortcut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_loadSelectFile</td>
<td>Ctrl pressed P</td>
<td>Load selected Playlist File into the Player</td>
</tr>
</tbody>
</table>

### 7.1.9 Mute

<table>
<thead>
<tr>
<th>Action</th>
<th>Shortcut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_mute_off</td>
<td>Ctrl released M</td>
<td>Deactivate Mute</td>
</tr>
<tr>
<td>p1_mute_on</td>
<td>Ctrl pressed M</td>
<td>Activate Mute</td>
</tr>
</tbody>
</table>

### 7.1.10 Change Speed

<table>
<thead>
<tr>
<th>Action</th>
<th>Shortcut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p1_pitch_down</td>
<td>Ctrl pressed F9</td>
<td>Decrease the speed of the playback</td>
</tr>
<tr>
<td>p1_pitch_up</td>
<td>Ctrl pressed F10</td>
<td>Increase the speed of the playback</td>
</tr>
<tr>
<td>p1_pitchBendDown_pressed</td>
<td>Ctrl pressed F11</td>
<td>Activate the Pitch Bend down</td>
</tr>
<tr>
<td>p1_pitchBendDown_released</td>
<td>Ctrl pressed F11</td>
<td>Activate the Pitch Bend down</td>
</tr>
<tr>
<td>p1_pitchBendUp_pressed</td>
<td>Ctrl pressed F12</td>
<td>Activate the Pitch Bend up</td>
</tr>
<tr>
<td>p1_pitchBendUp_released</td>
<td>Ctrl pressed F12</td>
<td>Activate the Pitch Bend up</td>
</tr>
</tbody>
</table>
8. MIDI-Controller

UltraMixer cannot only be operated by mouse and keyboard, but also with external equipment, the so called MIDI Controllers. They enable a faster and more comfortable handling of UltraMixer, and in addition, they are more robust than normal keyboards. Most MIDI Controllers contain sound cards already.

**UltraMixer supports the following MIDI Controllers:**

- American Audio DP2
- American Audio Radius 1000 und 2000
- American Audio VMS4
- Reloop Digital Jockey
- Hercules DJ Console
- Hercules DJ Console MK2
- Hercules DJ Console MK4
- Hercules DJ Control MP3
- Hercules DJ Control MP3 e2
- Hercules DJ Console RMX
- Hercules DJ Control Steel
- Hercules DJ Console 4-MX
- Hercules DJ Console DJ4Set
- Denon DN-SC2000
- Denon DN-MC3000
- Denon DN-MC6000
- Denon DN-HC4500
- Behringer BCD2000 Console
- Behringer BCD3000 Console
- M-Audio Xponent
- Numark Total Control
- Numark Mixtrack (Pro)
- Numark DJ2GO
- Vestax VCI 100
- Vestax VCI-100MKII
- Vestax VCI-400
- Vestax TR-1
- Vestax Typhoon
More MIDI controllers are added on a regular base. Check the website www.ultramixer.com for a list of all MIDI devices currently supported.

Each controller is connected with the PC via the USB-hub. To use them for handling UltraMixer, please proceed as follows:

<table>
<thead>
<tr>
<th>Step by step:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Connect the Controller and your PC via USB.</td>
</tr>
<tr>
<td>2. Install the MIDI driver. For more information have a look at the documentation of your Controller.</td>
</tr>
<tr>
<td>4. Open the UltraMixer menu by clicking the „Preferences“ button and choose “Preferences”.</td>
</tr>
<tr>
<td>5. Open the submenu “MIDI Controller”.</td>
</tr>
<tr>
<td>6. Choose your Controller under “MIDI Device”.</td>
</tr>
<tr>
<td>7. Confirm your settings with “OK”. The selected MIDI Controller can be used now.</td>
</tr>
</tbody>
</table>
9. Further information

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