

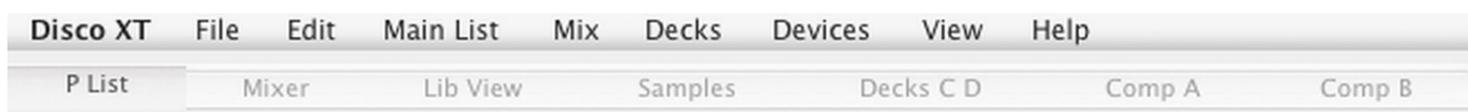
# Devices Menu

'Devices' in Disco XT does not refer to physical devices. Instead, the tools/features of the program are separated to several viewable items (devices). One of the devices is players A+B, another device is sampler for playing short audio samples, and another device is deck/player C...

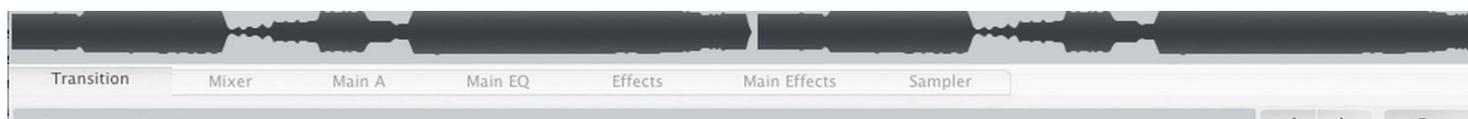
'Devices' and 'Decks' menus lists all devices available. Selecting a device from the menu either shows or hides the device from the current tab, if it is not placed to Sub-Tabs. Sub-tabs are tabs inside the main tabs, which is to keep most of the current tab view the same but view one device instead of another device by selecting/changing a sub-tab.

Disco XT does not have a scrolling/scrollbar feature for the devices view, and to be able to access multiple devices on a limited screen size, tabs are used instead. Tabs are pages with different devices and song lists shown on each page. Clicking tab name in the tab panel opens the tab for viewing and hides the content of other tabs.

One tab (page) could show the decks A+B and mixer, a second tab would show a sampler, third tab would be to use the full screen size for viewing the songlibrary...



Main tabs selects which tab to show.



Sub tabs selects which devices to show within the tab.

Devices in sub-tabs are selected separately from Edit menu > Sub-tabs. You can however hide a device in a sub-tab from this menu.

A single tab can contain either one or two 'Sub-Tab' devices (Sub-tabs A, Sub-tabs B).

## Hide All Devices

With this option no devices are shown, instead, only the elements: sources, main playlist and library are shown. This is a temporary quick mode for a larger view of the song listings, another option is to have the library in full size in another otherwise empty tab.

## Collapsible Devices



Collapsible devices adds triangles to hide/show devices and displays the name of the device.



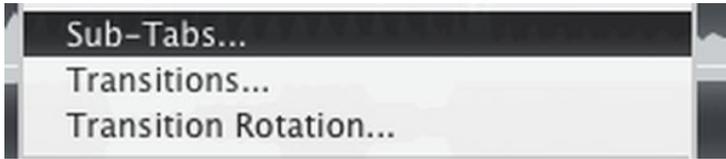
Collapsible devices also adds triangles to the right side of the devices to change the order of the devices by clicking up/down.

With this option, a small bar is added to top of devices that has triangle to hide/show the device, it also displays name of the device and on right side are arrows to change the order of the devices.

'Collapsible 'Devices' can be temporarily enabled to change the order of the devices (top, bottom).

## Collapsible Devices (in Sub-Tabs)

Same as previous, but this is only for the devices in sub-tabs. When a sub-tab page has more than one device the other devices can be hidden. If this is unchecked, all of the devices selected for that sub-tab page are always shown.



The first sub-tab named 'Transition' has 'Transition Editor' and 'Mixer' devices. Both of the devices are shown.



The mixer can be hidden with the arrow on the left side.

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## BPM Tap Counter



Detect BPM tempo values for songs manually by tapping along song tempo while the song is playing. There is also an automatic BPM detection available, see topic 'Tempo and BPM'.

## Current Song

Only enabled in automatic mixing mode.

Shows the title and artist of the currently playing song on the left side, then time elapsed of current song and time remaining until the next song starts.



Then title and artist of the next song.

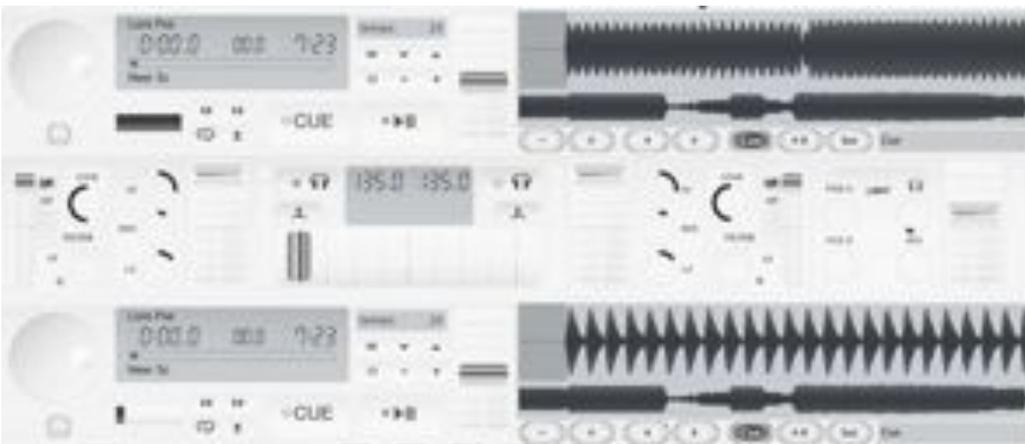
Then time elapsed since the playlist was started and playlist remaining time (until the playlist has been played through).



Playlist remaining time is accurate (calculates song start times, transition durations etc) to get exact remaining time. Although this is only accurate after all songs have been preprocessed: When songs are being preprocessed, 'Counter' field on playlist shows three dots '...'. This inaccuracy is only a second or two per song.

On the right side, computer clock time is shown, such as 12:32PM (without PM/AM). This clock can be set to 24h mode in Edit menu > preferences > Misc.

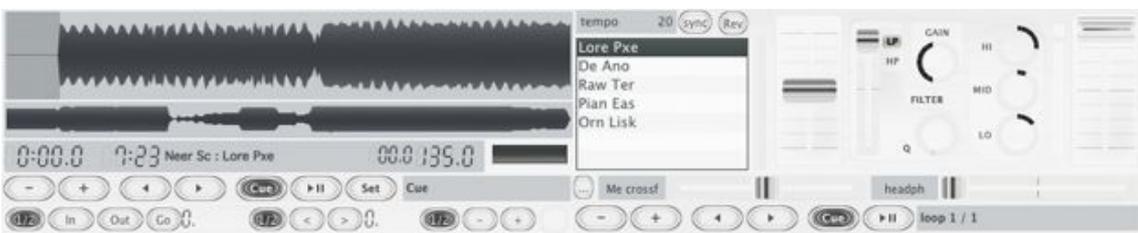
## Deck A, Deck B



Deck A and Deck B are selected separately, 'Entire Wave' and 'Bookmarks' have been selected by right-clicking the background of the player.

Same as 'Decks' but this view option places waveforms on the right side of the decks and A/B are as separate items.

## Deck C, Deck D, Deck E



Three additional decks/players C,D,E. Unlike decks A+B, these are not connected to automatic mixing or to the main playlist. The decks include waveform, tempo options and tempo slider, small playlist, mixer controls, looping and multiple cue points.

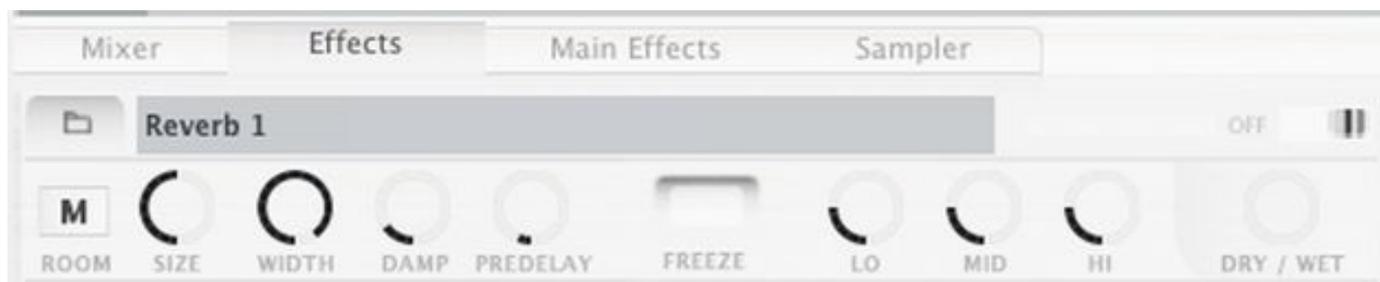
To load file to the player directly, drag and drop the file above the waveform instead of playlist.

## Deck Effects 1, Deck Effects 2

Shows the effect chain 1 of decks A+B without the top piece, if there are no effects in this chain, nothing will be shown. Top parts of effect chains have a popup to select which chain is shown below it and buttons to edit the chain, save presets... This 'Deck effects 1' is only meaningful if you wish to show effects for decks without the top piece taking screen space, so you add the effects to this chain from another tab, or when the chain has one or more effects shown, you can right-click background of effect device to add new effects.



Selecting effects 1, 2 or 3 includes the top piece with popups 'Deck AB' and 'Chain 1'.



While the Deck effects only shows the effects (if any) and not the top piece.

## Decks



Shows decks A+B which are used in automatic mixing mode: now playing song is on the left side and upcoming song is on the right side. If automatic mixing is disabled, these players can also be used manually by right-clicking a song on a list and select 'Load to Deck A/B' or by drag-and-drop song above the deck.

Unlike decks C,D,E, these decks are connected to the 'Mixer' device with volume, EQ controls and crossfader to transition between the decks.

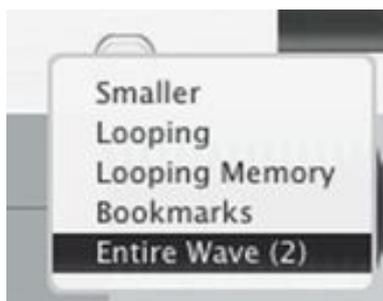
At left, side a jog wheel to adjust playback position precisely. To scroll the jog wheel faster, hold Shift key down.

Below jog wheel ... button for a menu, this currently only has one option: enable/disable "dynamics limiter" for that deck (read "Mixer" device for description of the feature). This is different from the mixer limiter because this is a separate limiter for both decks, so if audio output of one deck rises too high the opposite deck is not limited.

Then a zooming control for the waveform of the deck. The zooming control can be right-clicked to toggle on/off "entire wave" mode which zooms out the waveform to show the entire wave, or you can right-click background of the deck and select 'Entire wave' to show it separately.



Zooming control.



Selecting to show 'Entire Wave' separately.

Backwards and fast forward buttons. Right-click the buttons instead for back/forward step. The amount of the step can be modified in Preferences > Misc.



Repeat-1 button: file plays again from the start after reaching end until this mode has been disabled. When this is enabled no transition to next song is done in Automix mode.



Repeat one.



Save point.

'Save Point' saves current playback position as cue point / start time.

You can then click 'Cue' button to return to that set time. Other way to set/adjust these cue points is to click 'Cue' and then drag the waveform left/right. If 'Cue' button is not active or if the song was playing, the start time is not modified. For multiple cue points and named cue points, click background of the deck and select 'Bookmarks'. Bookmarks is described in topic Menus: View menu: List Bookmarks.

'Cue' button can be right-clicked for "Cue-Play" function.

Play/Pause button can be right clicked for brake start/stop (same as the Brake button in the mixer device).

- Minus and + Plus buttons to temporarily speed or up or slow down song (bending) to synchronize tempo/rhythm locations to another playing file.



Up and down arrows adjust the tempo slider value in steps of 0.1 BPM up/down. Tempo slider and tempo display is described in 'Tempo and BPM' topic.



M Match, matches song tempo to the tempo of the opposite deck B/A A/B. See "tempo and BPM".  
O Original, resets tempo back to +/-0 (no change).



tempo 20

Tempo display.

## Decks n

This is same as 'Decks' but no waveform is added below the deck. The waveform can be shown by selecting 'Waveforms' from 'Devices' menu separately. This allows to show the deck without the waveform or to place the waveform of the deck to other location than below the deck.

## Decks s



Smaller size version of the decks A+B without the tempo slider and jog wheel. This controls the same player as the larger size and so is only a view option. You can also switch this smaller/larger mode of the decks by right-clicking background of the deck (not clicking on any button or control).

## Decks s Bottom



"Decks s" consists of 1: Top piece, 2: Waveform, 3: bottom piece. You can here show only one of these pieces instead if needed. Uncheck 'decks s' if you select this.

## Decks s Top



See 'Decks s bottom'

## Dual Adjust 1, Dual Adjust 2



Allows to modify two parameters at the same time (one is adjusted horizontally as X, one parameter is adjusted vertically as Y).

## Effects



Effects 1–3 (under Devices menu) all are identical and have a popup menu to select which effect chain is being shown/edited. Described in topic 'Effects'.

## Loop

For looping/repeating a short segment of an audio file by setting a start time and length. See topic 'Loop'



## Main Adjust



Adjusts the main (master) output of Disco XT, including the decks, comps and samplers (all audio except headphones).

First from the left is a compressor, this is similar to the limiter available for main output but this uses a bit different algorithm and has user modifiable parameters. This is also available as an effect in the 'Effects' devices. Compressor attenuates audio levels quickly when the levels go above the set threshold. Amount of compressing is shown as a meter on the right side, next from gain knob (if there is any compressing).

Purpose of the compressor is to increase loudness of audio output by reducing output level dynamically at values over the set threshold while keeping audio below the threshold level unaffected.

Ratio sets amount of compression.

Attack sets how quickly the compressor starts reducing audio level after the signal goes above the threshold. Release sets time it takes until the level is returned to normal after the audio is no longer over the threshold level.

Post gain is a simple gain/volume adjustment after the compression.

Equalizer knobs for low, middle and high frequencies. The sound of the EQs is customizable in Edit menu > Adjust EQs.



Rest of the controls are same as available in the mixer device. (master level, headphone and mix knobs, BPM displays).

## Main Effects 1, Main Effects 2

This is same as showing device "Effects 1" (or 2 or 3) and setting it to show 'Main' effects, but without the effects top piece.

In the default layout, in the sub-tabs 'Main EQs' consists of this view item. The effect chain has to be edited elsewhere as the top piece is not shown, although current effect's background can be right-clicked to add effects.



Effects top piece is not included.

## Mixer

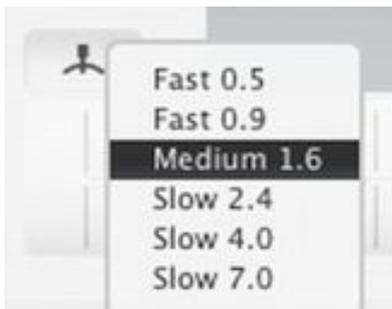


At middle is crossfader slider for transitioning from left deck to right deck and vice versa. When no headphone output is configured and mix mode is set to Automix, the crossfader is disabled and shows no slider (this can be changed in Preferences > Misc).



Crossfader.

Above crossfader, at left and right sides are brake buttons to stop playback of decks similar to that of vinyl player power-off. Right-click the brake button instead to select a duration for the brake.



BPM values of the decks A and B are shown with current tempo and rate slider values, these values can be clicked and dragged up/down to alter tempo or rate of that deck, or double clicked for half/double and other functions.



Hi, Mid and Low EQs. At middle the EQ has no effect, to the left the amount of frequencies is reduced. Besides

this gain control, the sound of these filters can be modified in Edit menu> Adjust EQs.



Filter set to 'LP' mode.

The filter can be set to two modes: Lowpass (cuts out higher frequencies) or Highpass (cuts out low frequencies), filters have a Q (resonance) knob that amplifies the signal near the cutoff frequency.

Volume sliders are by default at 100%. To increase loudness over this 100% (normalized), adjust the gain knob instead (the gain knob has a range of 0–200% and default value of 100%, though this range can be increased in preferences > misc).

Master volume slider on the right side of the mixer has a gain range of 0–200% (twice the normal). At middle the master level is at maximum loudness. Above the middle, the master level raises above the maximum loudness, but when the limiter is enabled the output does not start to clip/exceed but instead compresses the audio/reduces peaks. If the limiter is disabled, master volume should be set to below middle (around 95%) to prevent distortion. Range of master slider can be changed in preferences > misc.



Pan knobs, headphone gain knob, headphone mix knob and master volume slider.

Normalization gain values for songs are detected and applied automatically and those normalization values are not shown in the mixer at all but is hidden. This normalization can be disabled in Mix menu > Playback Options if not needed. Normalization values can be a little over 100% such as 104% etc, that is why master volume was recommended to be set to 95% instead of 100% earlier.

Panning (left/right balance) knobs are located on the right side of mixer. Next is a knob for headphone listening loudness and below it a 'Mix' knob to mix main output to the headphone output. Headphone listening has a limiter too (separate from main output, although it is turned off too when main limiter is turned off) this limiter is to be able to listen at enough loudness so the headphone volume is 0–200% (kob at full: normal volume is twice).

Mixer has a small horizontal meter below the LIMIT button.

This meter indicates how much limiting the limiter needs to do (audio compression/loudness reducing). Increasing master volume or increasing deck gains (or adding loud audio effect to decks) usually show up in this meter. When the limiter meter is going full or near full, the limiter might produce noticeable "dynamics distortion" effects, the master slider should then be lowered enough and the limiter meter should then drop.

Distortion during playback is not a problem if using export or record functions to create a file from the output of Disco XT as the recording feature has a normalization stage before the audio is saved to disk.

The deck volume sliders and the master slider include level meters indicating current playback amplitude. Distortion is shown separately in a box above the level meter. If decks A or B show distortion you probably don't have to do anything as the main limiter takes the distortion out.



Level meter next to volume slider.

## Offset Play

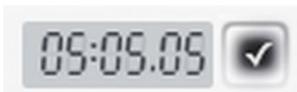
This view is not available unless:

- Automix mode is set to off (manual mode).
- Either deck A or B is playing and the opposite deck B or A is not playing.
- Or if crossfader is fully at either side.

An offset can be set where to start playback of the opposite deck. This only starts playback of the other deck when the playing deck reaches the exact position. Transition such as crossfader or volume or filter adjustments needs to be made by the user.

Click and drag the top wave to scroll the view if needed (does not affect the offset time).  
Click and drag the bottom wave to adjust the offset time.

Then clicking check button at top-right corner to enable offset play, a counter is shown with seconds going down until playback starts. The offset point can be tested with the prelisten button.



Offset has been set and activated, and starts in 5 minutes, 5 seconds and 5 ms.



Zooming control for the waveforms.

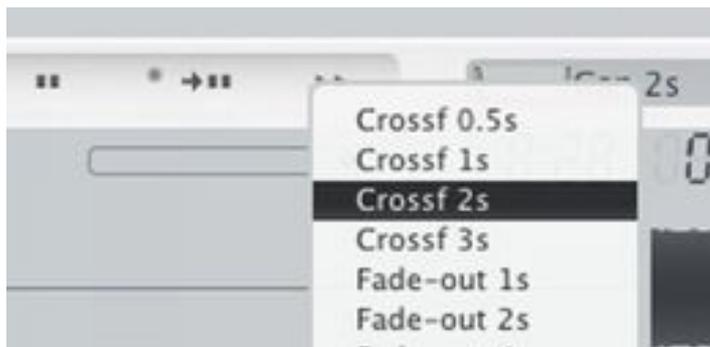
## Playback Ctrl



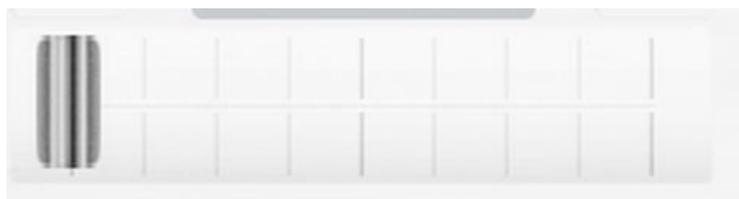
First are buttons for setting program mix mode: Manual, Semi and Auto, these are same as in the "Mix" menu:  
Manual Mode  
Auto (No Transitions) (semi)  
Automix Mode

In manual mode, the user needs to load songs to the decks A–B (or to the decks C, D, E) and then use crossfader control of the mixer (or crossfader controls of the decks C,D,E) to create transitions (fading one audio file to another).

'Fade Now' can be used in manual mode to switch song automatically using a transition preset.



'Fade Now' button is right-clicked in manual mode to transition.



Crossfader of decks A+B is in the mixer.



Crossfader of the decks C,D,E. Side of "me" is the deck, the right side is other audio.

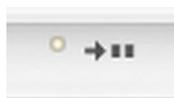
In semi (no transitions) mode songs are loaded from the main list to the decks A+B similar to Automix mode, but no transition is made automatically unless the user selects 'Fade Now', or the transition can be done by clicking the play button of the deck and then use the crossfader.

In Automix mode, songs are loaded from the main list and transitions are made when songs are about to reach duration. Although the name Automix, this mode does have many user controllable (but optional) features such as adjusting transitions, switching song earlier (Fade Now), setting up start times in the decks...

Next is button 'Start/Stop' to start or stop playback of the main list using Automix mode, then button to pause currently playing song (maintaining current position) or resume playback if paused.



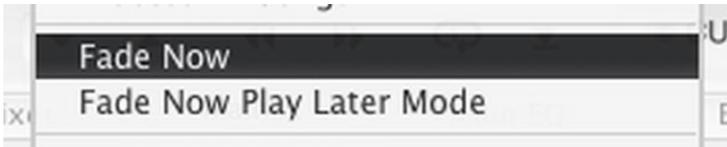
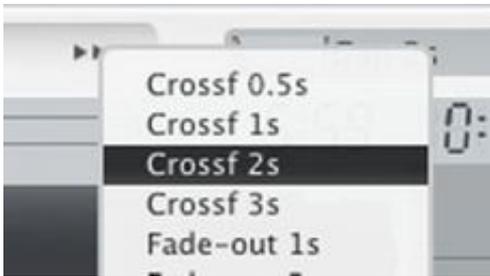
Enable/disable 'Pause after this': when enabled (light on), no transition is made after this song except fading out, so the next song will not start. After the song has been faded out the user can press 'start' to start playback again.



'Pause after this' is enabled (yellow led).

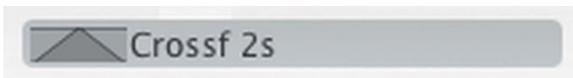
'Fade Now' button, this is same as in the 'Mix' menu, except that if right-clicked, a menu is shown to select a transition preset for this transition, keeping the preset selected in 'Transition preset' popup menu unchanged.





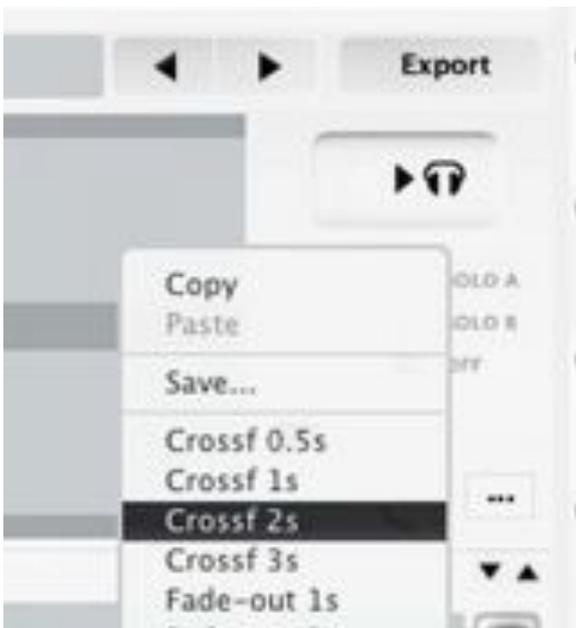
When 'Fade Now Play Layer Mode' is enabled, the remaining duration of the song which is faded out is placed to the end of the main playlist.

Then 'Transition preset' popup menu to select a transition preset for songs in Automix mode, if you have edited transitions in the transition editor device, the program asks whether to keep the created transitions or reset those existing transition with this preset.



'Transition preset'

Alternative is to right-click transition editor instead, to select a transition preset for that single transition.



Selecting transition preset for a single transition in the 'transition editor' device.

Then knob for microphone volume/gain, a talkover button to reduce music playback while speaking to microphone, then a button to turn ON/OFF microphone. Microphone is setup in preferences > audio.



Record button to start recording audio output of Disco XT. By default, recording feature waits initially for some audible audio before starting recording (such as song playing in the decks), after that initial wait the recording will go on until stopped, or until the maximum recording time of 6 hours is reached. When recording is waiting for audio, it can also be clicked once more to start recording immediately. Time recorded is shown next to that button.



Press 'Record' button to stop recording audio output. The window for saved audio is described in 'Recorded Audio' topic.

## Playlist Navi



By default the playlist navigation is shown above the transition editor. This can be hidden by unselecting 'Transition Navigate' from Devices menu and this 'Playlist Navi' can then be selected to show the navigation without the transition editor.

## Sampler

For playing short audio samples during mixing, includes storage for multiple audio samples. Details in topic 'Sampler'.

## Spectrum

Show a simple average frequency spectrum of Decks A/B.

## Sub-Tabs A



Sub-tabs A is a list of tabs (device pages) inside the main tabs. Devices in sub-tabs are selected separately from Edit menu > Sub-tabs.

## Sub-Tabs B

Another Sub-tab panel.

## Transition Editor

Editor for Automix mode: to adjust fade-out, fade-in, offset, and add effects to transitions and prelisten transitions with headphones. Details in the topic "Transition Editor".

## Waveforms

Shows the audio amplitudes/peaks of decks A+B. Not usually needed to select, as the waveform is included with "Decks S" and "Decks". If you select "Decks N" (no wave) and this instead, it allows to place the waveform of the deck elsewhere than below the decks.

Right-click background of decks A+B to select 'Entire Wave (2)' this places another waves below the zoomable waveforms, these show the entire song instead of zoomed area.

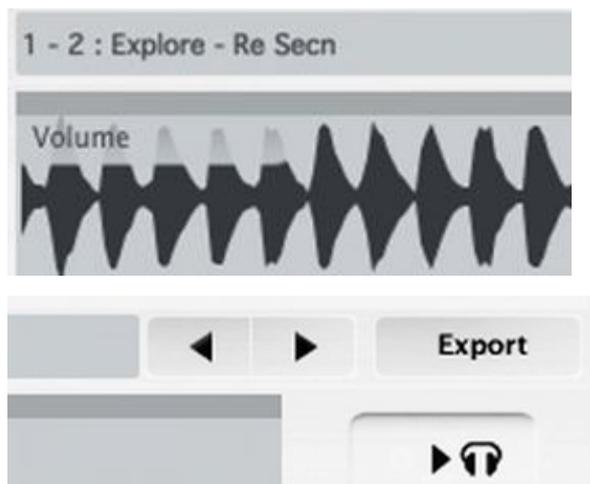


Waveform with entire wave shown below.

## Transition Navigate

(Same as Playlist Navi)

Shows playlist index number (1-2, 3-4...) and titles of songs in the transition editor, then < > navigation buttons to navigate which transition of the main playlist to edit.



Then export button (same as Main List> Export as audio).

When navigating, transition editor navigation also hides decks A+B if navigation is not set to the first item of the main playlist, so the decks A+B instead display and control the otherwise hidden transition editor players. This allows to set starting times/cueing for songs while creating transitions.

If you wish to have this item shown separately from the transition editor, select 'Playlist Navi' instead.

## Transition Effects



Shows "transition effects editor" below the transition editor device. "Transition effects" allows to add effects to transitions (such as filters, reverbs) and also to just add specific effects to certain songs on the main playlist.

## Wider Waves

To switch decks A+B waveforms to a wider waveform view.

When checked, waveforms of decks A+B are 1024 pixels wide

When unchecked, waveforms of decks A+B are 512 pixels wide (half).

## Same Wave Zoom

When enabled, waveforms of decks A+B have equal zoom setting (and adjusting either wave zoom adjusts both). This enables better sync play viewing of the two songs when 'Wider Waves' is checked (wave A on top, wave B below it).