DEEJAY

18°

DJUCED™

REFERENCE MANUAL

Manual version 1.1

Introduction

DJUCED™ 18 is a DJ tool adding beauty to the power of mixing audio tracks, scratching and recording your music creations.
DJUCED™ 18 is designed to make mixing user-friendly, thanks to a unique graphic interface and easy-to-use features.

A. DJUCED™ 18 overview

DJUCED™ 18 can be split into 4 main sections:

- Browser area (bottom area): track library = where tracks are stored.
- Left deck area = deck A: where you can load a track, play and control playback.
- Right deck area = deck B: where you can load another track, play and control playback.
- Mixer area (central area): to mix the left and right decks, with crossfader, volume and equalization controls.

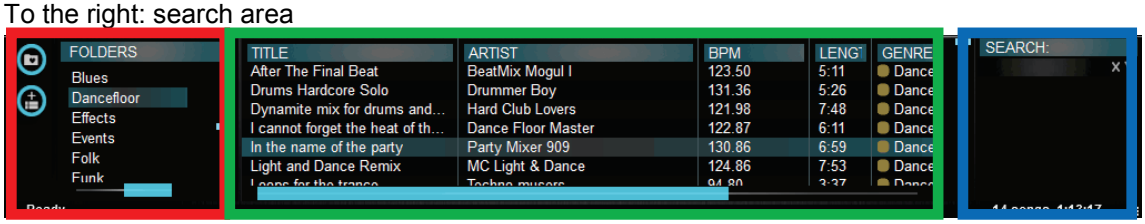
1. Browser area

a) Definition

The browser is an explorer, allowing you to browse through drives and select the files to be loaded on decks.

b) Organization

To the left: folder browser
In the middle: tracks or files browser
To the right: search area

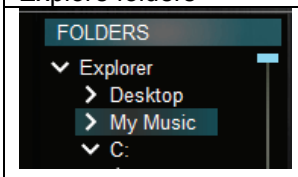
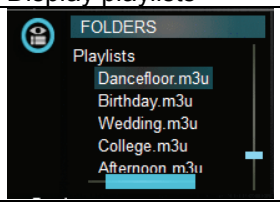


c) Folder browser

(1) Definition

Folder browser = the area which lets you:

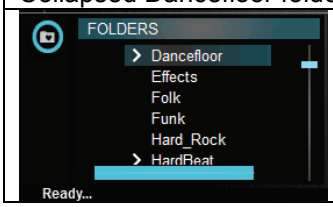
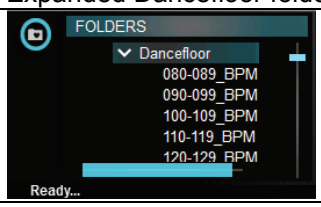
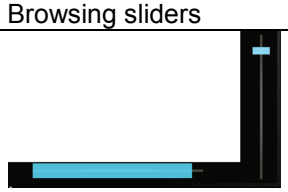
- Explore folders, drives, and the iTunes library on your computer.
- Display DJUCED™ 18 playlists and tree structure.

Explore folders	Display playlists
	

(2) Use

In the Folders area:

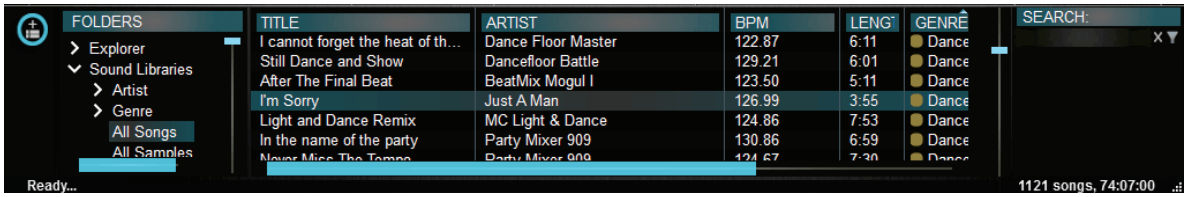
- Click on the right arrow to **expand** (expand: display the subfolders contained in a folder).
- Click on the down arrow to **collapse** (collapse: hide the subfolders contained in a folder).
- Move the vertical slider and the horizontal slider to move within the folder browser.

Collapsed Dancefloor folder	Expanded Dancefloor folder	Browsing sliders
		

Click on the target folder to display its contents in the files browser.

(3) See all tracks stored on the computer

To see all tracks from folders you have already visited, go to **Sound Libraries** > **All Songs** with the folder browser.



d) Tracks browser

(1) Definitions

(a) Tracks or Files browser

This is the area where you can explore the list of tracks included in a folder, a playlist or the All songs list.

(b) BPM (Beats Per Minute)

The beat is an audible and short peak in sound, the succession of which creates the rhythm of the music. The beat is generally easier to identify in drums or bass, but can be played by any instrument, including guitar or the human voice, or by a combination of several instruments.
Once you hear the beat, counting its repetition per minute gives you the BPM (Beats Per Minute) rate.
If you hear no beat in the music, dancers will find it difficult to dance, as dancers naturally align their pace to the beat of the music, in the same way as a jogger naturally aligns his or her pace to the beat of music (that is why so many joggers run with an MP3 player).

(2) Use

In the Folders area:

- Click the right arrow to expand a folder's tree structure (display its sub-folders),
- Click on the target folder to display its contents in the files browser.

In a large list, type the first letter of the track's title on the computer keyboard to find the track.
Once you have accessed the target track, you can load the track on a deck by dragging and dropping the track onto the platter of the virtual deck.

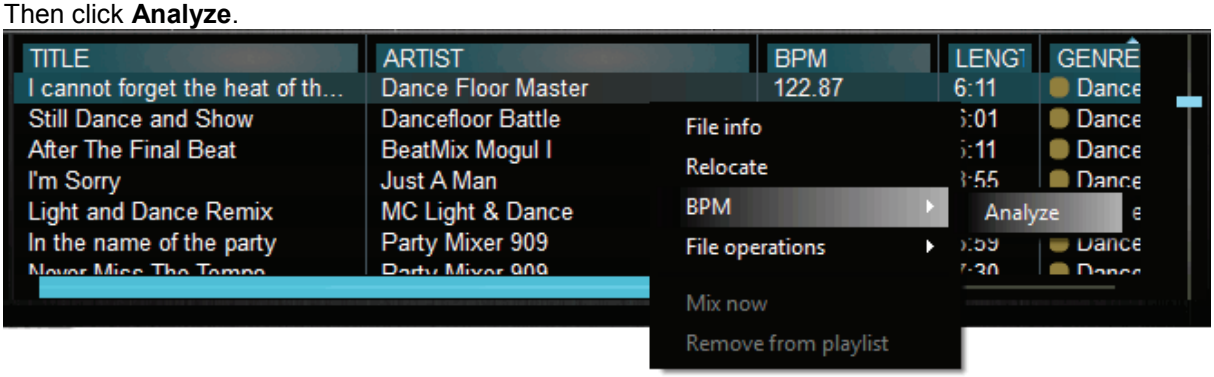
(3) Right-click menu

(a) BPM analysis (Beats Per Minute)

Before you start mixing with DJUCED™ 18, analyze the BPM of all tracks, since the BPM rate tells you which tracks can be mixed together (mixing tracks whose BPM rates are close is better than mixing tracks with very different BPM rates: for example, mixing tracks within 15% of difference is acceptable; DJUCED™ 18 lets you mix tracks with larger BPM differences, but the higher the BPM difference, the more you change the original track when synchronizing it with the BPM of another track, and so the lower the audio fidelity).
BPM analysis is CPU-intensive: you should analyze all your tracks before mixing, as analyzing BPM while mixing slows down the computer and reduces the audio quality.
To analyze the BPM of one or more tracks or a list of tracks:

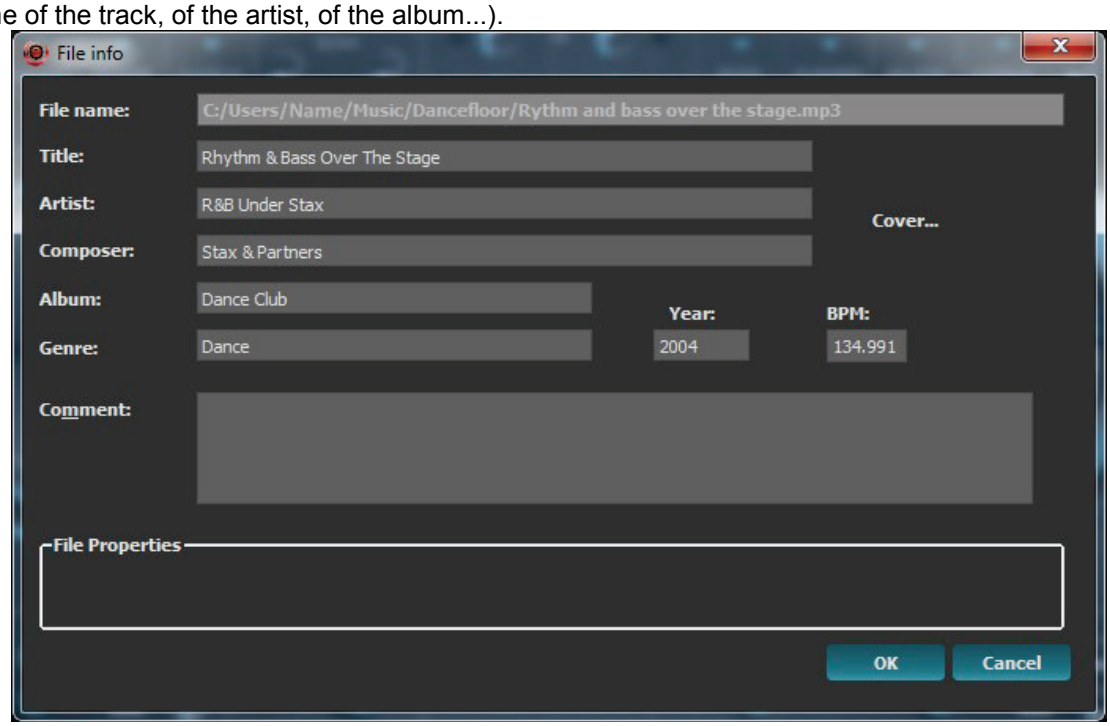
- Select the tracks to be analyzed using your mouse/pad.
- In Windows: right-click to display the BPM menu.
- On Mac, either right-click, click with 2 fingers, or click+Ctrl to display the BPM menu.

Then click **Analyze**.



(b) File info

Editing the file info lets you manually update the tag of an audio file (the tag is the text which lists the name of the track, of the artist, of the album...).



(c) Relocate

Relocate is an option to update your tracks' location if:

- You have moved/renamed the folder where the tracks are stored; or
- The drive letter of the storage unit has changed.

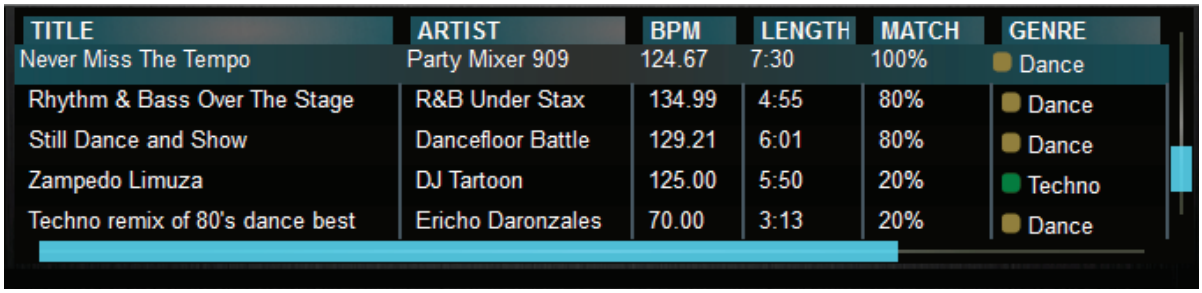
(d) File operations

The operations that you perform on a file in an explorer: delete, rename, copy or move the file.

(4) Files browser fields

(a) Main fields

Title: song name
Artist: artist playing the song (generally the group or singer name)
BPM: Beats Per Minute rate, a critical piece of info in DJing
Album: album containing the song
Match: percentage of match between this file and the last file loaded
Genre: music type
Length: track duration, in minutes and seconds
Rating: your rating for the song

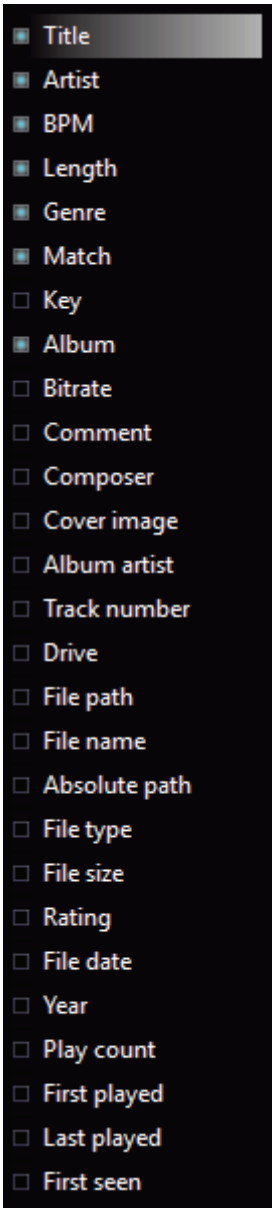


In the files browser, you can:

- Choose the fields to display, by right-clicking (or Ctrl + click on a Mac touchpad), with fields such as: Title, Artist, Album, BPM, Genre, Length, File size, Year, Comment, File Path, Key...
- Drag and drop the fields to change their display order.
- Sort the tracks by field by clicking on the title of any field.
- Access a track by clicking inside a field and typing the first letter that you're looking for.

(b) Other fields

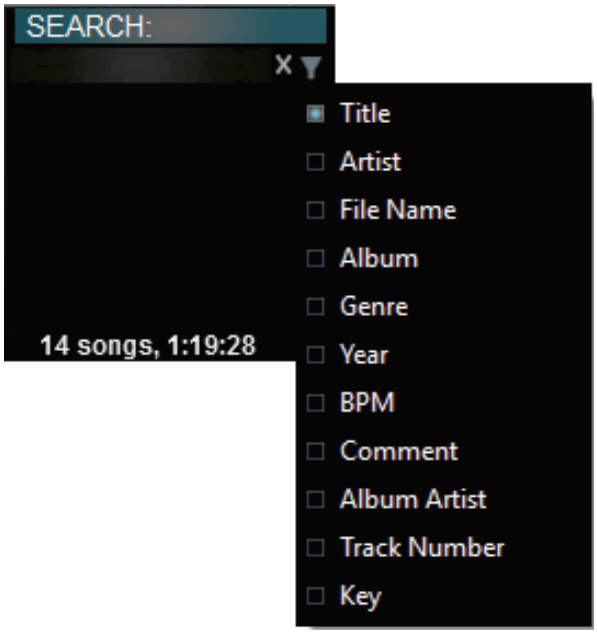
Key: key of a music track (A, B, C… minor or major)
Bitrate: in kilobits/second
Comment: your comments on the track



e) Search area

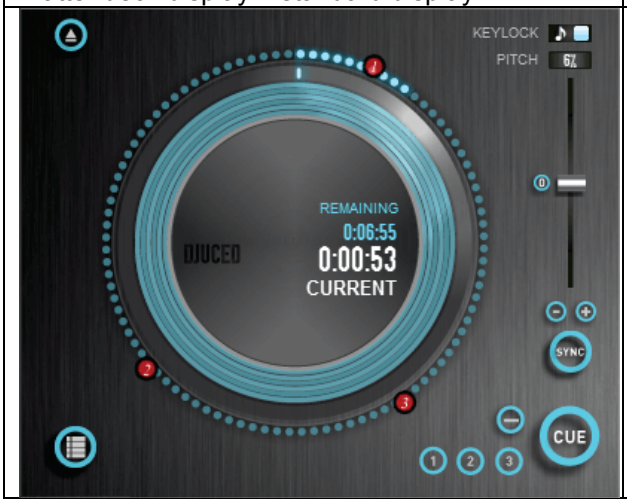
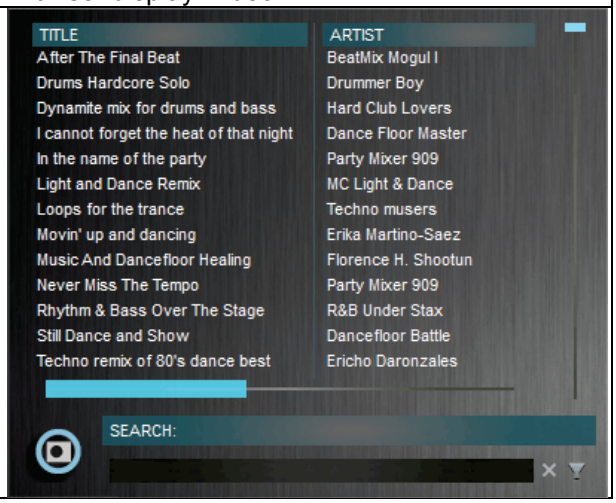
In the **SEARCH** field, type the title of the song or the artist whose track you want to look for.

You can reset the search by clicking on the icon.
You can select the search criteria by clicking on the icon.



f) Optional browser area in the deck

In both deck areas, clicking on the button (below the platter and to the left in the software interface) calls up a browser display in the deck, and clicking on restores the standard platter display.

Platter deck display = standard display	Browser display in deck
	

2. Deck (A = left or B = right)

a) Definition

The virtual decks feature the controls for playback of tracks, similar to the controls on a CD player.

Deck A	Deck B
	

b) Organization

Bottom: the Loop area and the Play/Stop area.
Center: platter, pitch and cue points area.
Over the platter: effect rack area.
Over the effect rack: waveform area.
On top: text information area.

c) Loop area

(1) Definition

Loop: a portion of an audio track that is played repeatedly. Its symbol is  .

(2) Use

Looping, or making a loop, is a way for the DJ to make a rhythm last longer.
The DJ can either:

- Manually set the start and the end of the loop; or
- Set the length of the loop in beats.

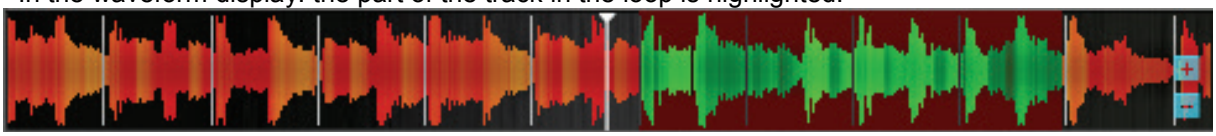
(3) Controls in the software

Loop controls are:

- In/Out = Loop In/Loop Out: Loop In places the starting point of the loop, and Loop Out places the end point of the loop (and clicking on Loop Out again exits the loop playback).
- 1, 2, 4, 8, 16: number of beats per loop.
- Move the loop  ,
- Change the loop length 
- Loop split function  splits the loop into 4 samples.
- Easy loops (EZ)  function sets the Loop In/Loop Out function to match a fixed beat number, so that the even if the track plays 4.4 beats (for example) between the moment you enter Loop In and the moment you enter Loop Out, the EZ setting fixes your loop on exactly 4 beats.

(4) Display

If you are in a loop, the loop is visible in 2 areas:
- In the waveform display: the part of the track in the loop is highlighted.



- On the platter: the loop is displayed in pink.

Each concentric circle of the platter lasts 1 minute (if the track doesn't exceed 6 minutes), so the pink area displayed shows:

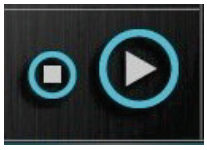
- The loop between the first (outer) circle and the second circle = starting during the first minute of this track, ending after the first minute.
- The loop starts at 0:57 and ends at 1:01.

(5) Saving loops in the sampler bank

To store a loop in the sampler, display the sampler area by clicking on the square SAMPLER button over the platter (and over the SEQUENCER button):

- Either drag and drop (with your mouse) the loop from its pink area on the platter to the sample player on the column of 4 sample players; or
- Click the Loop split button  . This button cuts the loop into 4 parts of equal length, and stores these 4 parts on the 4 sample players

d) Play & Stop area



On each deck:

- The Play  / Pause  button switches between playback and pause on the deck (Pause stops playback at the current position in the track).
- The Stop  button stops playback and returns to the track's starting point.

e) Cue point area

(1) Definition

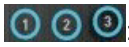
Cue point: a bookmark that you place in a track, allowing you to instantly access this exact point.

(2) Use

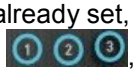
Cue points are necessary for DJs, allowing them to:

- Instantly access a point in the track where the beat is audible, to avoid a slow start and instantly go to an audible rhythm.
- Instantly access different points in the track, if the beat changes.

(3) Controls

In DJUCED™ 18, clicking on Cue buttons 1, 2, 3  :

- Sets cue point 1, 2 or 3 at the current position in the track, if there was no such cue point already set in this track.
- Moves to cue point 1, 2 or 3, if this cue point is already set

(if the cue point is already set, the button is slightly below the buttons of cue points which are not set: in the example  , cue points 1 and 2 are already set, while cue point 3 is not set).

- Clicking on the  button deletes the last cue point you have used.
- Clicking on the button moves playback to cue point 1, or sets cue point 1 at the current position in the track if cue point 1 doesn't already exist.

(4) Display

(a) Around the platter

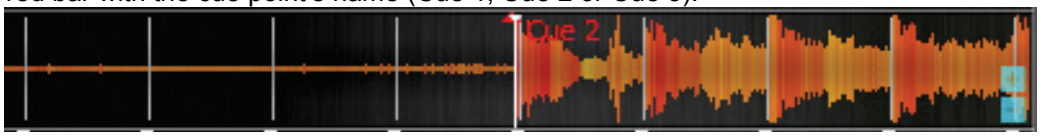
The cue points are displayed in the track overview around the platter.
The full track length is represented as the ring of small circles around the platter, so:

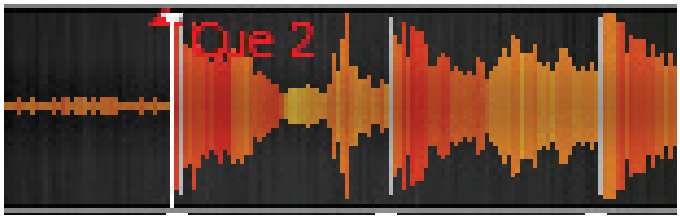
- Cue point 1 in red (close to the first small circle) means that cue point 1 is located at the beginning of the track.

- Cue point 2 in red (at around one quarter of the complete ring) means that cue point 2 is set at around ¼ of the track's length: so for a track of 5:11, this means that the cue point is set at around 1:15.

(b) On the instant waveform

The largest waveform display, showing the current position in a track, shows the cue point as a vertical red bar with the cue point's name (Cue 1, Cue 2 or Cue 3).





f) Pitch area

(1) Definitions

(a) Pitch

Pitch is the control of the playback speed:

- A -6% pitch means slowing down the track by 6% compared to its original speed.
- A 0% pitch means that the track is played at its original speed.
- A 15% pitch means that the track is played 15% faster than its original speed.

(b) BPM

The BPM rate is the Beats Per Minute rate, i.e. how many beats you will hear within 60 seconds of music:

- 80 BPM is a slow beat.

- 100-120 BPM is a standard range for most pop and rock music.
- 140 BPM or higher is fast.

The BPM rate measures a track's rhythm.

(c) Pitch fader

The pitch fader is a slider that lets you speed up or slow down playback of the track:

- You slow down playback by moving the pitch fader up.
- You speed up playback by moving the pitch fader down.
- You set playback at its default speed by setting pitch fader at the center.

The pitch fader amplitude is displayed, in %, over the pitch fader in DJUCED™ 18.
The pitch fader amplitude can be changed (6%, 8%, 10%, 12%, 16%, 20%, 25%, 50%, 100%):

- The larger the pitch fader amplitude, the larger the BPM change you set on the pitch fader.
- The smaller the pitch fader amplitude, the more precise the pitch fader is to set a precise BPM.
- You can click on the % figure to change the amplitude.

(d) Pitch bend

The pitch bend buttons are below the pitch fader in DJUCED™ 18. The pitch bend – and + buttons are buttons that let you TEMPORARILY slow down or speed up playback: when you release the pitch bend button, the track returns to its previous speed.

(e) Pitch reset

The pitch reset function lets you set the track's playback at its original speed, and cancels the previous actions on the pitch fader.
You can reset the pitch by clicking on the button labeled **0** located close to the center of the pitch fader in DJUCED™ 18.

(f) Sync = Synchronize

Sync = Synchronize, which means setting:

- 2 audio tracks at the same speed, with the same BPM.
- Both tracks with the beat occurring at the same instant.

You can manually synchronize with the pitch fader and the pitch bend buttons, or you can synchronize automatically by clicking the Sync button.
The Sync buttons are located below the pitch fader and the pitch bend buttons.

Pressing the Sync button on one deck aligns its BPM with the BPM of the other deck.

(2) Use

A DJ needs to control the track's playback speed, to play the track:

- at the same speed as the previous track, and
- with the beats of both tracks occurring at the same moment,

for the dancers to hear both tracks at the same beat during the transition between these 2 tracks:

- so that the dancers' pace fits in one rhythm, with no rhythm conflict between the 2 tracks, and
- so that the dancers don't need to jump one step to adjust to the new track.

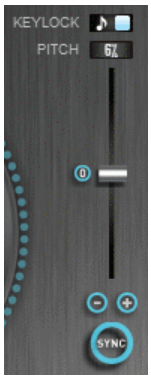
(3) Controls

There are 6 controls related to the pitch.

(a) Pitch fader

The pitch fader is the vertical slider in DJUCED™ 18 that lets you change the playback speed.
You can move the pitch fader on the controller, or in the graphic user interface with the pointer:

- Moving the pitch fader down speeds up the music.
- Moving the pitch fader up slows down the music.

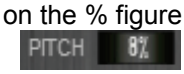


(b) Pitch scale

The pitch scale is a % value (for example, 6%) displayed on top of the fader in the DJUCED™ 18 graphic interface. This % is the maximum speed change that you can achieve by moving the pitch fader up or down. For example, a 6% pitch scale means:

- Setting the pitch fader at its top position slows down the music by 6%.
- Setting the pitch fader at its bottom position speeds up the music by 6%.

You can change the pitch scale by clicking on the % figure with your mouse.



The smaller the pitch scale, the more precise the pitch fader will be, but the smaller the pitch change you can achieve; and vice versa.

(c) Pitch bend - / +

Once you have set a track at the same speed as the other track with the pitch fader, you still need to fix its beat on the same beat as the other track.
There are 2 controls for achieving this:

- Pitch bend – or pitch bend + buttons: you click one of them to slow down/speed up the music temporarily, and release it as soon as you hear the beat of both tracks playing at the same time:

(d) Pitch reset

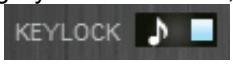
You can reset the pitch:

- Either by gradually moving the pitch fader to its central position (on the controller); or
- By clicking with the pointer on the button labeled **0** close to the pitch fader.

Take care to move the pitch fader to the center slowly, as it is a very common mistake for beginner DJs, after a perfectly smooth transition, to reset the track to its original speed too fast so that the dancers really feel it.

(e) Keylock

The keylock function “locks” the tonality of a music track, to keep the current tonality while the pitch fader or pitch bend controls change the playback speed (without changing the tonality).
- To set keylock on (so that the tonality doesn’t change while you change the pitch): set the square area close to the note icon to blue: if it is grey instead of blue, click on the square to set it to blue.



- To set keylock off (so that the tonality changes while you change the pitch): set the square area close to the note icon to grey: if it is blue instead of grey, click on the square to set it to grey.

(f) Sync

The Sync function adjusts:

- the BPM of one deck to match the BPM of the other deck.
- The beat of one deck at the same moment as the beat of the other deck.

So if you play tracks on decks A and B, and click the Sync button on deck B:

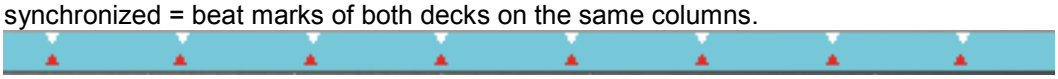
1) It instantly changes the playback speed of deck A to match the playback speed of deck B.
2) It instantly sets the beat of deck A to play at the same moment as the beat of deck B.

Synchronizing a music track with another track can be achieved:

- Either automatically, by clicking the Sync button 

; or
- Manually, generally via 2 steps:
    - First, by setting the same BPM as on the reference deck, using the pitch fader.
    - Then by slowing down or speeding up the track using pitch bend, until the beats play at the same time on both decks.

Once the 2 decks are synchronized, you see that they are synchronized in DJUCED™ 18, as the background of the beat marks turns to blue.
Blue = synchronized = beat marks of both decks on the same columns.



Black = not synchronized = beat marks not on the same columns.

g) Platter area

(1) Definition

On a turntable, the platter is the rotating platform for the record.
DJUCED™ 18 has a platter area for each deck, mainly intended to provide some information for the track loaded on the deck.

(2) Use

The platter is used to provide 3 types of information:
Time
Loop
Cue points

(a) Time information

In its center, the platter shows:

- The current position = how far playback is from the track's start = here, at 0:53.
- The remaining time = how for playback is from the track's end = here, at 4:02.

The platter shows, via its concentric circles, how long the track lasts (if it doesn't exceed 6:00).
Each blue concentric circle represents 1 minute, so we see here 4 complete circles, plus 1 circle ending at 0:55, which makes a total length of 4:55 for the track.
For tracks over 6:00, the full track length is scaled to the 6 concentric circles (for example, on a 60:00 track, each concentric circle would count for 10:00).

(b) Loop

The active loop is a pink area on the concentric circles. From its position on the first circle, we can see that the loop starts at 0:48 and finishes at 0:52.

(c) Cue points

The cue points are the red dots displayed on the ring of small blue dots around the platter.
As the 360° ring around the platter represents the full length of the track (4:55), we can see that:

- Cue Point number 1, close to the start, is in the first seconds of the track.
- Cue Point number 2 is located at slightly over 1/5 of the track, so at around 1 minute.
- Cue Point number 3 is located at around ¾ of the track, so close to 3:17.

(3) Controls

The platter area lets you perform 3 functions with your mouse:

- Drag and drop a track on the deck: drag a track from the browser and drop it on the platter to load the track on the deck.
- Drag and drop on the sampler: drag a loop (pink area) from the platter and drop it on one of the sample players to load the loop in the sampler.
- Browse within the track: click on one of the small blue dots on the ring around the platter to instantly access this position within the track.

Note: you cannot scratch in the DJUCED™ 18 platter area. To scratch with your mouse (without using your controller's jog wheel), you must left-click on the waveform, keep the mouse button pressed down, and move the mouse.

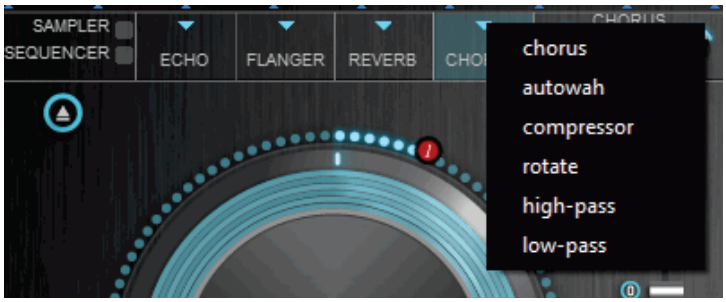
h) Effect rack area

(1) Definition

(a) Effect

An effect is a filter or a combination of filters applied to the music to change the way it sounds.

In DJUCED™ 18, the effects are:
Echo
Flanger
Reverb
Chorus
Autowah
Compressor
Rotate
High-Pass
Low-Pass



(b) Sampler

A sampler is a section playing several short sounds, called samples, over the track or instead of the track.
If a sample is played once, it is called a jingle.
If a sample is played continuously, it is called a looped sample.
The DJUCED™ 18 sampler plays up to 4 samples per deck.

(c) Step sequencer

A step sequencer is a music creation tool used to define the pattern in which a sample is played and repeated. The DJUCED™ 18 step sequencer is a 4-track, 16-step sequencer:

- 4-track = the sequencer lets you load 4 samples.
- 16-step = the pattern lets you choose whether or not to play a sample for 16 steps or 16 beats.

The step sequencer is synchronized with the BPM of the deck, with 1 step sequencer of 4 tracks per deck by default. The sequencer speed can be changed. It can be multiplied or divided by 2.

(2) Use

(a) Effects

Effects are added to the music to customize, enhance, or tweak the sound.
You can apply an effect temporarily to a track to make it sound nicer, or sound closer to another track that you want to mix with this track.

(b) Sampler

Samples are played to customize a track and to add a rhythm over the music.

(c) Step sequencer

The step sequencer is an elaborate tool, allowing you to use the sampler to play samples over the music.

(3) Controls

(a) Effects

DJUCED™ 18 includes a rack of 4 effects per deck.

You can control the effects in the DJUCED™ 18 graphic interface:

- Enable or disable an effect by clicking on the corresponding effect button.
- Load another effect in the slot by clicking on the effect's blue triangle: this displays a menu in which you can select the effect to load in the slot.
- Modulate the last effect loaded with the 2 rotary knobs on the right of the rack of effects.

(b) Sampler

DJUCED™ 18 includes a sampler of 4 samples per deck.

You can load samples in the sampler section by:

- Clicking on the title in the sample player to load another sample; or
- In loop mode:
  - By dragging and dropping the loop from the platter to the sample player; or
  - By using the button in the loop area to split the loop into 4 samples and load 1 sample on each player of the sample player for this deck.

To control playback in the sampler area, you can:

- Play/Stop the sample with the Play and Stop buttons & .
- Set the volume of the sample with the rotary button .
- Record a sample with the Sample Rec button .
- Set the playback in loop mode with the sample loop button .

(c) Step sequencer

You control the step sequencer in the DJUCED™ 18 graphic interface.

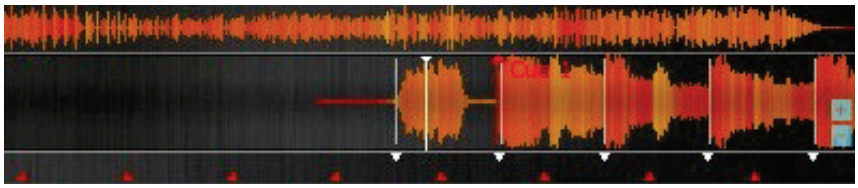
You can:

- Enable/disable the playback of a sample at each step of the sampler by clicking on the button in the matrix:
  - Columns 1 to 4 represent the samples: 1 sample per column.
  - The lines represent the steps.
  - The third square on the fifth line controls the playback of the third sample at the fifth step.
  - If the square is blue, the sample is played at this step.
  - If the square is grey, the sample is not played at this step.
  - If a line is yellow, the step sequencer is currently playing at this step.
- Play/Stop the step sequencer by clicking the / buttons.
- Set the volume of the sequencer with the button.

You can edit the sequence:

- With your mouse: by clicking on the grey/blue square representing each step, to play or not to play the sample at this step.
- With your keyboard: using the keyboard's up and down arrows to move the pointer up/down within the steps of the sequencer, and with the keyboard keys 1, 2, 3, 4 to change the event on sample 1, 2, 3 or 4 in the step sequencer.

i) Waveform area

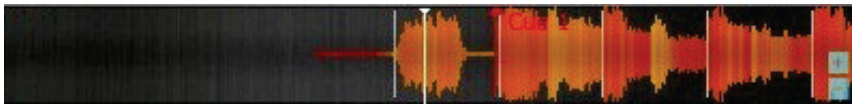


(1) Definitions

(a) Waveform

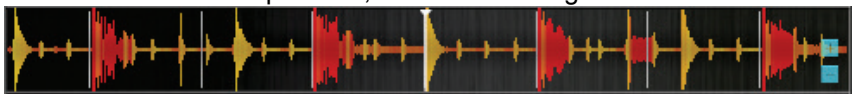
The waveform is a display of the audio signal as a wave, where:

- The signal's amplitude is the distance from the central line:
  - The closer to the central line, the weaker the sound.
  - The further from the central line, the louder the sound.
- The waveform length is the time length.
- The colors shows the type of sound:
  - Red = low frequencies.
  - Orange = medium frequencies.
  - Yellow = high frequencies.



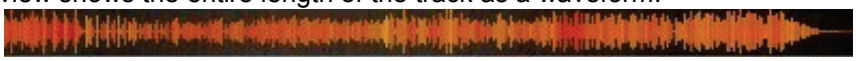
For example, the waveform below shows:

- Small yellow waves = short high tones, such as the sound of a triangle.
- Larger red waves = lower frequencies, such as a bass guitar.



(b) Wave overview

The wave overview shows the entire length of the track as a waveform.



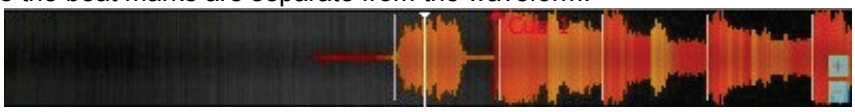
(c) Beat marks

The beat marks are triangles showing the beats: they are displayed separate from the waveform.

If the tracks are synchronized, the background of the beat area becomes blue.

(d) Beat grid

The beat grid is a grid of vertical white lines showing the beats over the waveform.
The beat grid shows the same information as the beat marks, but the beat grid shows it over the waveform, while the beat marks are separate from the waveform.



(2) Use

The waveform area displays the following elements:

- The large waveform shows the sound in detail, with its cue points and beat grid.
- The waveform overview shows the full track, to display silences or rhythm changes.
- The beat marks area shows the beats of both tracks, one below the other: so if the beats of both tracks are on the same column, then both tracks are synchronized, and the background of the beat area becomes blue.

(3) Controls

(a) Waveform

The waveform has 2 controls:

- Zoom In/Out: the +/- buttons zoom in or zoom out on the wave.
- Scratch: click on the waveform and move the pointer to scratch with your mouse.

(b) Wave overview

Browse within the track: click on a position of the wave overview to instantly access this position, as you can do with the small blue dots around the platter.

(c) Beat marks

The beat marks send no commands: they let you instantly see the beats of the track, and whether they are synchronized with the beats of the other track.

j) Text information area

(1) Definition

(a) Tag

The tag in a song is text information stored in the audio file, with data such as:

- Song title
- Artist name
- Album name and track number on the album
- Year of release
- BPM rate

(b) BPM

The BPM is the Beats Per Minute rate. This is a measure of the rhythm: it is a key item of information for DJs, since the BPM rate displays the music's rhythm. It is therefore the information that the DJ looks at to play 2 songs at the same speed: the BPM rate tells you how much you must speed up/slow down a track to reach the appropriate rhythm.

(2) Use

The text area displays:

- The deck letter A for the left deck, B for the right deck.
- The song title (here "After the Final Beat").
- The artist name (here "Beatmix Mogul 1").
- The album name (here "Revenge of the Mogul").

- The track length (here 5:11).
- The BPM rate (here 123.48 BPM).

(3) Controls

The text area lets you edit the BPM. You can manually adjust the BPM if you disagree with the software's BPM analysis: click on the **BPM** zone (displayed vertically, indicated with a red rectangle, below).

By clicking the **BPM** zone, you access a menu that lets you edit the track's BPM.

 Go to first beat: if the track is paused or stopped, this button moves to the first beat.

 BPM analysis: analyses the track's BPM.

 BPM unit -/+1:  removes 1 from the BPM rate (123.48 becomes 122.48).

 adds 1 to the BPM rate (123.48 becomes 124.48).

 Double or divide the BPM rate by 2.

 Beatgrid fine tune: moves the beatgrid left or right.

Manually type in the BPM value (replacing the analyzed value).

Click on the **BPM** zone (displayed vertically, indicated with a red rectangle, below) to return to the text display of the song.

3. Mixer area

a) Definition

The mixer is the area emulating the controls of an analog mixer.

b) Organization

On top of DJUCED™ 18: headphone controls.
In the middle: equalization (EQ) and gain area.
At the bottom: volume and crossfader, VU-meters.

c) Headphone controls

(1) Cue/Mix

This setting lets you choose what you play on your headphones.

(a) Cue

Cue for headphones = PFL (Pre-Fader Listening).
You can choose what to play on your headphones:
The preview = next track (the music you will be playing for your audience); or
The mix = the music you are currently playing for your audience.

The preview is also called Cue for headphones, but this Cue is not related to the Cue points.

- Cue points are bookmarks that you place in an audio track.
- Cueing on headphones is previewing a track for the DJ's ears only, before the DJ plays this track for the audience.

You preview deck A and/or B, depending on which deck you have selected.

- In DJUCED™ 18: select the deck to preview over the volume faders  .

The Preview volume of each deck is not linked to the volume set on the volume fader.

(b) Mix

The Mix position for headphones means that the DJ hears the same audio track on the headphones as what is being played on the dance floor.

(2) Headphones output volume

The headphones output volume is controlled via software, in DJUCED™ 18, by a rotary volume knob 

which lets you control the software volume independently of the hardware volume buttons (- / +).

d) EQ controls

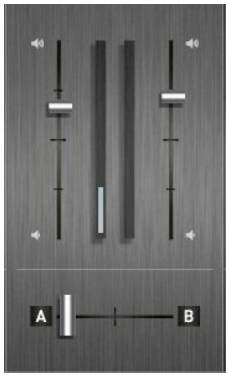
DJUCED™ 18 includes a 3-band equalizer per deck:

- HI/Treble, for high frequencies.
- MID/Medium, for medium frequencies.
- LO/Bass, for low frequencies.

DJUCED™ 18 also includes:

- One gain volume per deck. The gain sets the maximum output volume: if the tracks loaded on the 2 decks have different recording levels, the gain volume of the deck lets you set the same level on both decks.
- A main volume rotary potentiometer.

e) Volume and crossfader controls



DJUCED™ 18 includes:

- 2 volume faders: 1 per deck.
- A crossfader.

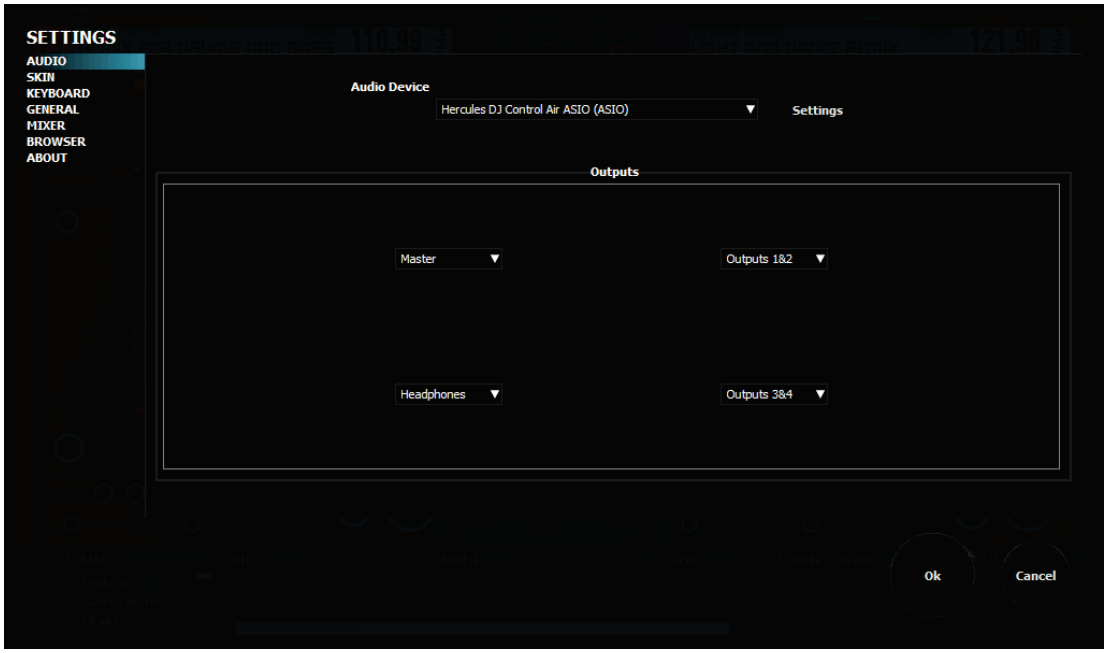
DJUCED™ 18 also includes 2 VU-meters, showing the output level of each deck.

4. Settings

To change the DJUCED™ 18 settings, click on the Settings icon in the bar at the top of the screen.
This lets you access the following settings:

- Audio
- Skin
- Keyboard
- General
- Mixer
- Browser
- About

a) Audio settings



The audio path menu lets you select the audio outputs for the mix and the headphones.
- **Master** is the stereo output where you play the mix, where you connect the active speakers.
- **Headphones** is the stereo output where you play the preview, where you generally connect headphones.

The recommended settings are:

- Master = Outputs 1&2 on the audio interface (ASIO).
- Headphones = Outputs 3&4 on the audio interface (ASIO).

You can connect other sound cards, but we recommend that you play the master and the headphones on the same audio interface, as playing them on two different audio devices may cause audio artifacts.

Once you have selected your audio settings, click **OK** to exit the panel.

b) Skin menu

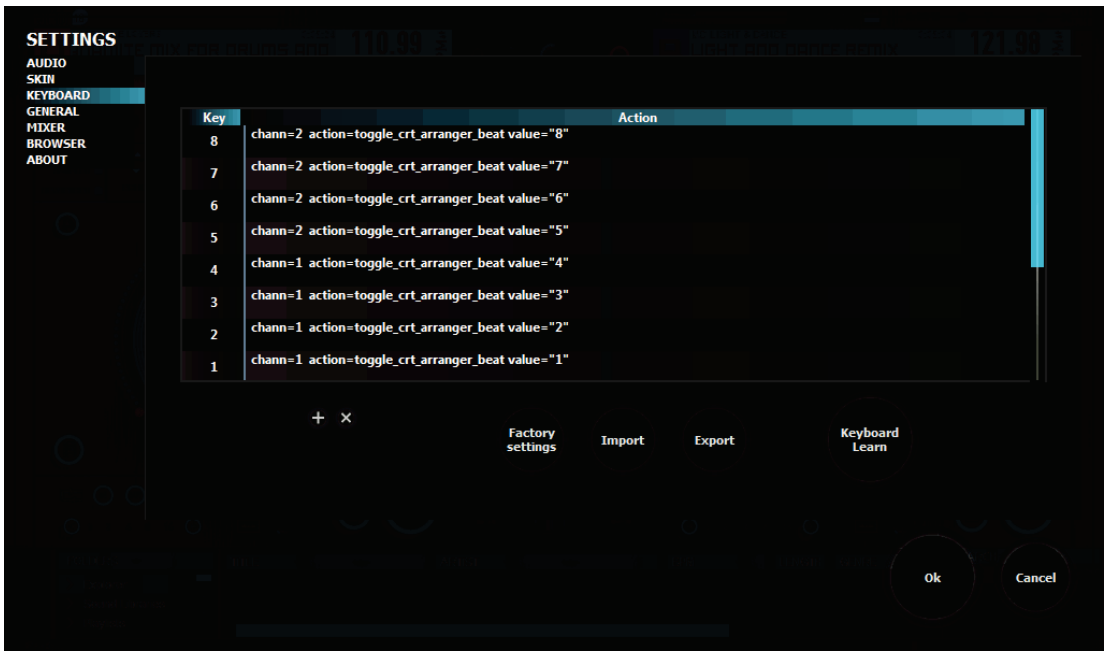
The skin menu lets you load a skin matching your computer's display resolution.
In DJUCED™ 18, you have access to the following skins:

- 1024x600
- 1024x768
- 1280x800
- 1280x1024
- 1366x768
- 1440x900
- 1440x1024

Once you have selected a skin, click **OK**. Loading the skin may take some time, depending on your system's graphics card.

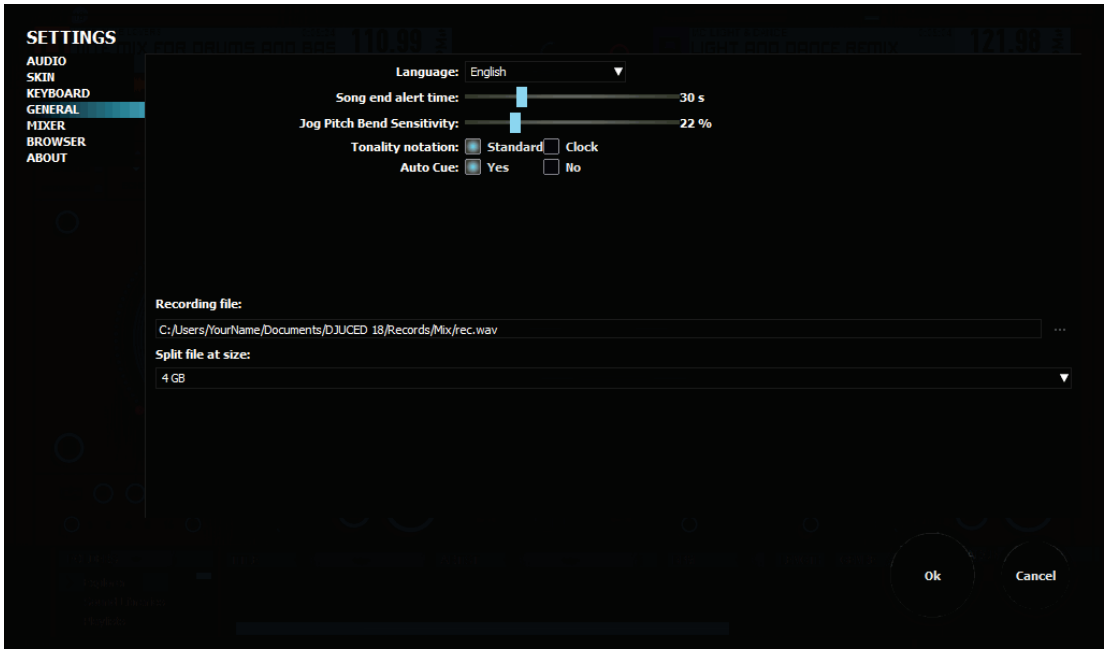
c) Keyboard menu

The keyboard menu lets you define shortcut keys on your computer's keyboard.



d) General

The general menu lets you define 7 settings:



(1) Language

Arabic, Dutch, English, French, German, Greek, Italian, Polish, Portuguese, Russian, Spanish, Turkish.

(2) Song end alert time

The song end alert is a visual change in the DJUCED™ 18 waveform display: the waveform area blinks in red when the song is close to its end. This feature is included to prevent the DJ from reaching the end of the track without noticing it, with nothing then playing for the audience.

The song alert time lets you choose how many seconds remain in the track's playback before displaying the song alert. By default, it is set at 30 seconds.

(3) Jog pitch bend sensitivity

If you have a DJ controller controlling DJUCED™ 18, this setting sets how much turning the jog wheel bends the pitch if the jog wheel is not set in scratch/vinyl mode.

(4) Tonality notation

Choose whether to display the key of the music track

- in standard display (C major, A minor…), or
- in clock display (following the Camelot harmonic mixing wheel: from 1 to 12, A or B: example: 11B).

(5) Auto Cue

At the end of the analysis of a track, if DJUCED™ 18 finds no Cue point, it adds automatically a Cue Point 1 at the first beat detected in the track.

(6) Recording file

When you record your mix in DJUCED™ 18, it is saved by default in the following folder: Users/YourName/Documents/DJUCED 18/Mix.
However, you can change this path if you like.
DJUCED™ 18 records the file in uncompressed format, at 44.1KHz /16-bit stereo.

(7) Split file at size

Here you can define the size at which your recording files will be split up.

e) Mixer

The mixer menu lets you define 2 settings:

(1) Crossfader curve

The crossfader curve is the shape of the mixing curve, depending on the crossfader's position.
There are 3 possible crossfader curves:

- Mix
- Scratch
- Custom: you define your own curve

(2) Equalizer limit

Choose the equalizer ranges:

- Normal: -36 dB / +12 dB
- Smooth: -24 dB / +6 dB
- Hard: -48 dB / +12 dB

f) Browser

The browser setting lets you:
- Choose what is displayed in the browser.
- Select the colors of the music genres.

g) About

This menu shows the version of DJUCED™ 18.

B. Mixing in DJUCED™ 18

1. Preliminary operations

When mixing in front of an audience, you must focus on the music and the audience, so you should prepare your tracks and audio library in advance:
- Locate all of your songs.
- Analyze the audio library.
- Place cue points in the tracks.
- Create playlists.

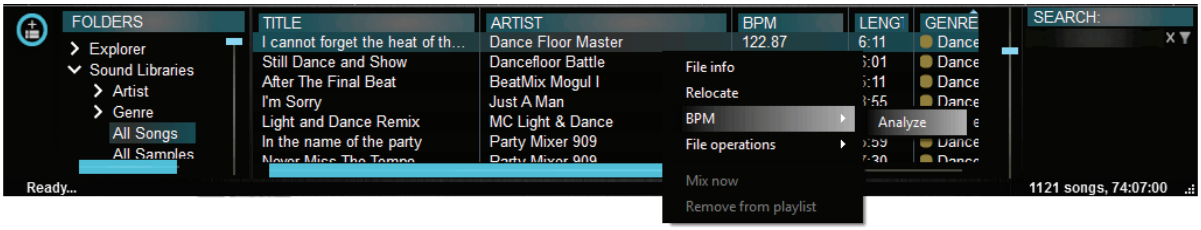
a) Locating your songs

If songs are stored in folders located in multiple areas of your drive, you must gather them in the audio library in advance, so that you can see them instantly while mixing.
It is better to store all songs on the same drive unit, rather than on several drives.
You should avoid mixing with songs stored on USB keys: store the songs on a hard drive before a public performance, since the access time on USB keys is slower than on hard drives.

b) Analyzing the songs

Once you know where your songs are stored, analyze them (please see the “Right-click menu” section) to get the BPM values.

In the file browser:
- Select the tracks to be analyzed, using your mouse/pad.
- In Windows: right-click to display the BPM menu.
- On Mac, either right-click, click with 2 fingers, or click+Ctrl to display the BPM menu.
- Then click **Analyze**.



BPM analysis is slow and CPU-intensive, so you must not carry out BPM analysis while mixing during a public performance, as this would slow down your computer. If you analyze a complete library of hundreds of songs, you don’t need to remain in front of your computer during the analysis: this can take hours, depending on how fast your computer is.

You will know that a track has been analyzed when the browser displays its BPM rate.

c) Placing cue points (= bookmarks) in your tracks

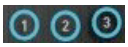
Once you have analyzed your tracks, you should load them on the DJUCED™ 18 decks, play them and place cue points. You generally need to set at least 1 cue point (or more than 1) per song: the first cue point is generally placed at the first beat of the song, as a beat is needed to dance. The start of a song with no beat is not danceable! Please see the Cue point area section.
- Load the track on a deck.
- Play the track.

(1) Placing cue point 1

Once you have reached the track position where you want to place a Cue point:
- Stop playback.
- Click on the Cue button in DJUCED™ 18.

Placing cue points 2 or 3

Once you have reached the track position where you want to place cue point 2 or 3:
- Stop playback.

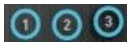
- Click on Cue buttons 2 or 3  in the DJUCED™ 18 graphic interface.

(2) Deleting a cue point

- Click on  in DJUCED™ 18 to delete the last cue point (1, 2 or 3) you have used.

(3) Moving a cue point

Once you have reached the track position where you want to place cue point 1, 2 or 3:

- Stop playback.
- Click on Cue buttons 1, 2 or 3  in the DJUCED™ 18 graphic interface to place the cue point at the current position.

d) Creating playlists

Once you have seen where your audio files are and have placed cue points in these tracks, you can gather them in playlists.
A playlist is a way to gather tracks in the same list, even if they are located in different folders.

- Create a playlist by clicking on the  button on the left of the folder browser.
- Enter the name for your playlist.
- Drag and drop tracks into the playlist.

Playlists are made for DJs to gather tracks together that they are likely to play at the same party.
Example of playlists:

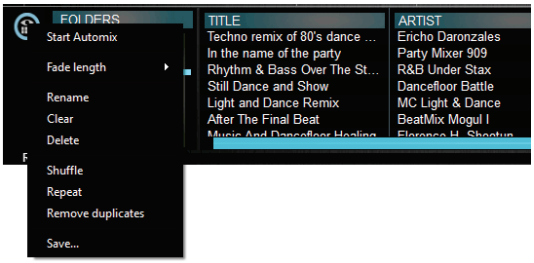
- Wedding
- Birthday
- 1990s
- New Wave
- Old standards
- Sports songs
- 160 BPM

As you can place the same audio track in different playlists, you can use playlists to sort the tracks according to several criteria, such as:

- The type of event where you may play this track (birthday, wedding, club, café...).
- The speed of the track (BPM).
- The style of music.
- The year the song was produced.
- The track length.
- The artist name.
- The country where the song comes from...

When you are in a playlist, the playlist management icon appears:  . Click on it to access functions related to playlists:

- **Start Automix**: plays the tracks from the playlist without any action required by the DJ.
- **Fade length**: length of the transition during which track n and track n+1 are played.
- **Rename** / **Clear** / **Delete** the playlist.
- **Shuffle** playback.
- **Repeat**.
- **Remove duplicates** (if you have inserted more than one copy of the same track in a playlist)
- **Save**: lets you save as a new playlist.



2. Mixing

a) Finding a track

Once you have sorted your audio library into playlists, you should be able to easily find your tracks.

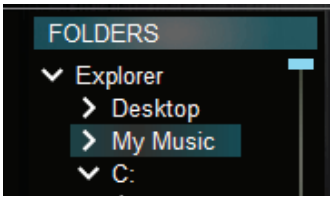
(1) Accessing a playlist or a folder

To go to a playlist of a folder:

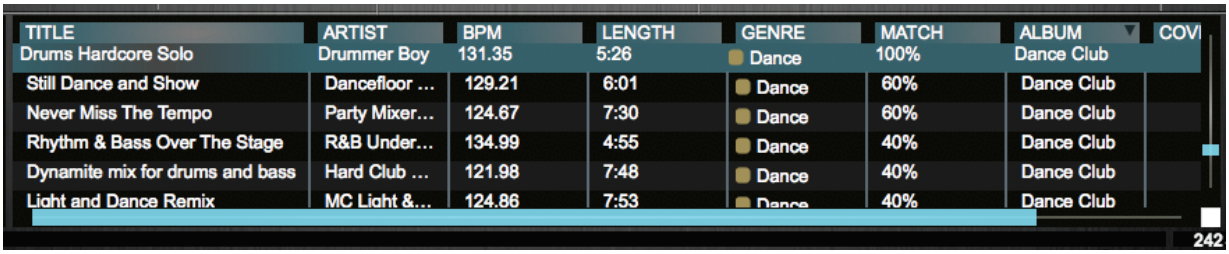
In the Folders area, double-click on  to expand a folder's tree structure (that is to say, to display its sub-folders).

(2) Browsing through the playlist or the folder

Click on the target folder to display its contents in the files browser.



The files browser lets you browse through the list of tracks contained in a folder or a playlist.



(3) If you can't find the track

If you aren't able to find a track, you can:

- Go to **All Songs** in the folder browser.
- Type in a chain of characters in the **Search** field.

b) Loading the track

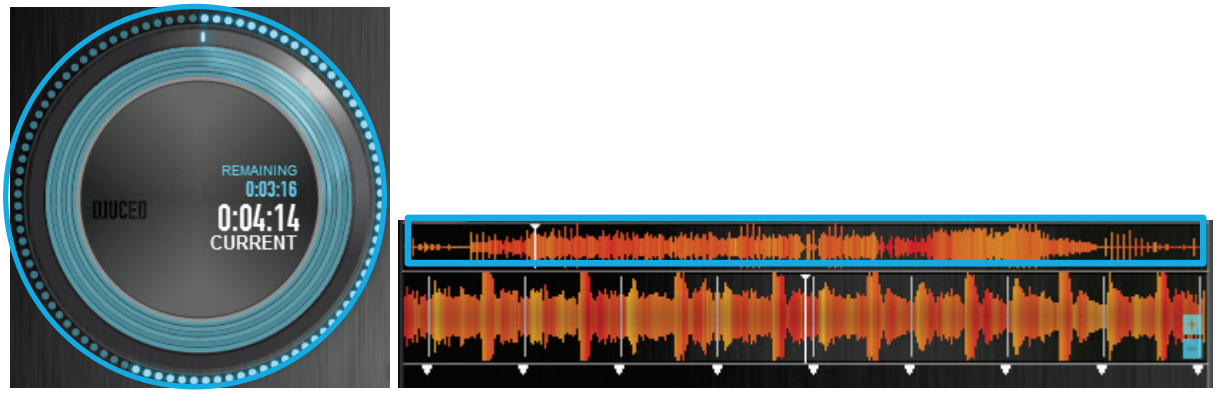
Once you have accessed the target track, you can load the track on a deck by dragging and dropping the track onto the platter of the virtual deck.

c) Browsing within the track

Once you have loaded the track, you can browse within the track using the waveform or the deck.

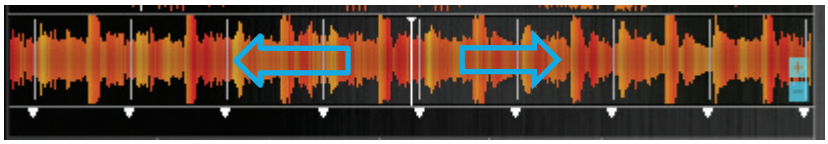
(1) Fast browsing

To get to the point that you wish to access in the track, click on one of the blue dots located around the platter, or inside the upper waveform.



(2) Slow and precise browsing

Click on the waveform and move the mouse pointer to the right or to the left.



d) Previewing the track

Preview = Pre-listen = PFL (Pre-Fade Listen) = listen to a track on your headphones, which the audience doesn't hear.

(1) Setting the headphones to Cue mode

To use your headphones for previewing tracks, set the headphones output to Cue mode:

- If the headphones mode is set to Cue, your headphones are set to preview tracks.
- If the headphones mode is set to Mix, your headphones play the mix (i.e. the same sound that is being played on the speakers for your audience).

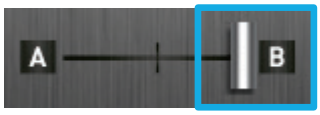
=> To preview tracks, set the headphones mode to Cue:

(2) Selecting the deck to be previewed

Once you have loaded a track on a deck, select previewing for this deck by highlighting the box next to the headphones symbol, located above the volume fader.

- Select the headphones on deck A to preview deck A.

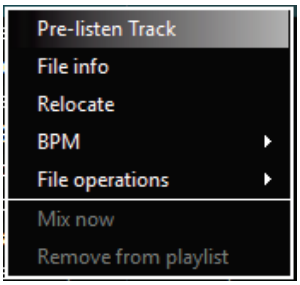
- Set the crossfader at 100% on deck B if you plan to preview deck A.



Or set the volume fader for deck A at 0%, so that the audience doesn't hear it in the mix.

(3) Previewing in the browser

The tracks can be previewed in headphones within the browser. The previewing duration can be set in the browser's settings.



(4) Playing the track

Click the Play button on the deck you want to preview.

You can hear the track on your headphones. You can now preview the track, meaning that you can check that its rhythm and tone fit with the track you are currently playing for the audience.

e) Synchronizing the track

Synchronizing the track that you are previewing with the track currently playing for the audience means:

- Changing the speed of the track you are previewing to the same speed as the track the audience hears: you change the BPM (Beats Per Minute) rate of the track you are previewing, so that it matches the BPM rate of the track that the audience hears.
- Lining up the beats of the track you are previewing with the beats of the track that the audience hears.

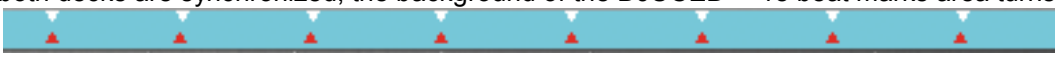
(1) Automatically, with the Sync function

If you click the Sync button on a deck, you instantly:

- Change the BPM of the track on this deck to match the BPM rate of the track playing on the other deck.
- Line up the beat of the track on this deck with the track playing on the other deck.

The Sync button is located at the base of the pitch fader.

When both decks are synchronized, the background of the DJUCED™ 18 beat marks area turns blue.



When the decks are not synchronized, the background of the DJUCED™ 18 beat marks area is black.

When the "Sync" sets a pitch out of the pitch range, the pitch range is automatically adjusted to the value of pitch. Hence the pitch fader position always shows the real pitch value.

(2) Manually, with the pitch fader and pitch bend

If you prefer to synchronize manually, as you would do with real turntables, then you need to:

- Move the pitch fader until the BPM rates of both tracks are similar.
- Use the pitch bend function until the track's beats line up with the beats of the other deck.

(a) Move the pitch fader until the BPM of both tracks are similar

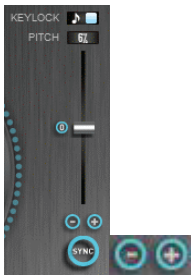
By moving the pitch fader up, you decrease the BPM: you slow down the music,

By moving the pitch fader down, you increase the BPM: you speed up the music.

If you reach the limit of the pitch fader (up or down) while still being far from the target BPM, then you should change the pitch scale by clicking on the % figure displayed on top of the pitch fader in DJUCED™ 18.

(b) Use pitch bend so that the track's beats play with the beats of the other deck

Once both tracks are playing at the same speed, you still need to move the beats of the track that you are previewing to play at the same time as on the reference deck.
You can slow down or speed up the track using the – (slower) or + (faster) buttons.



As soon as both beats are playing at the same time, release the pitch bend button.

f) Playing the track for the audience

Once both tracks are synchronized, you can mix the track you are previewing so that the audience hears it.
You can either:

- Directly mix the track you have synchronized, by moving the crossfader; or
- Mix using the bass, for example if you have different tones between the songs loaded on deck A and on deck B.

(1) Play the track directly for the audience, with a short transition

You can directly mix the synchronized track:

- By moving the crossfader to the center, so that the audience hears both the tracks on deck B and deck A.
- Then move the crossfader from the center to deck A.

(2) Play the track for the audience with a transition using low frequencies

You can make a transition using bass frequencies, prior to mixing from one track to another:

- First, cut the medium and treble frequencies on both decks.

- Move the crossfader to the center, to play both the tracks on deck B and deck A.
- After a 10 second pause, move the crossfader from the center to deck A.

- Restore the medium and treble frequency levels.

g) Software takeover

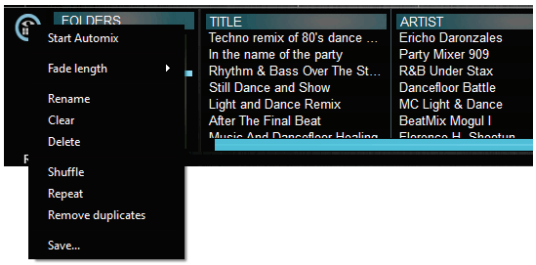
When the user moves a control on DJUCED interface and then moves the control on a hardware DJ controller, the control has no effect on DJUCED until the hardware controller reaches the software value.
When software takeover in engaged, a ghost of hardware control is shown.

h) Automatic mixing: Automix

Automatic mixing, or Automix, is a function whereby the software automatically links up playback of files in the playlist, without any action required by the DJ. This is therefore a temporary function, and should be used only when necessary.
To access the automatic mixing function, you need to have created one or more playlists (using the  button), and be inside the playlist that you want to mix automatically.

You must then click on the playlist management icon  to access the Automix menu, which includes the following options in particular:

- Start Automix.
- Fade length: lets you set the length of the transition between tracks, in seconds. This lets you select how long before the end of the first track the software will start playing the following track.



If you start automatic mixing, DJUCED™ 18 will play the playlist in its entirety, in the order in which it is displayed, unless you click on the  icon again and select **Stop Automix**.

3. Scratching and effects

a) Scratching

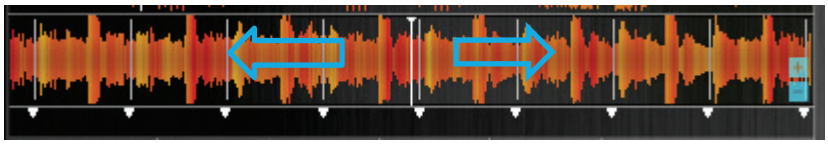
(1) Definition

Scratching is the sound produced by a vinyl record playing on a turntable, when you place your hand on the record and move it with your hand directly touching the record.
Scratchers are turntablists using scratch techniques to produce sounds and create original music tracks with the sounds of scratching.
In computer DJing, scratching is a software emulation of the same operation, processed in the DJ software.

(2) Scratching in DJUCED™ 18

To scratch in DJUCED™ 18:

- Left-click on the waveform and, while holding the button down, move the mouse to the right and to the left.



(3) Notes on scratching

The quality of a scratch depends on the DJ's talent, and also on the music track used to scratch. You cannot make a good scratch sound with just any music track: your scratching performance depends on how the music track you have loaded on the deck sounds when it is scratched.
Some DJs emphasize their scratching talent by scratching using music tracks which already include scratch sounds.

b) Effects

(1) Definition

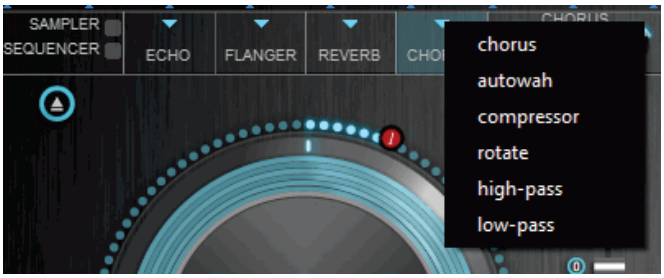
An effect is a filter or a combination of filters applied to music, to change the way it sounds.

(2) List

In DJUCED™ 18, the available effects are:

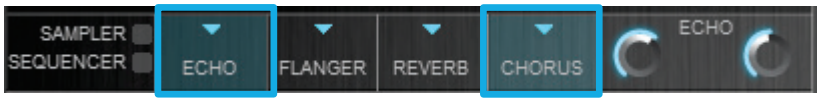
Echo
Flanger
Reverb
Chorus
Autowah
Compressor
Rotate
High-Pass
Low-Pass

The effects bar can contain 4 effects. To modify the list, click on the icon representing a down arrow located above the name of the effect: a menu then appears, allowing you to select the new effect.



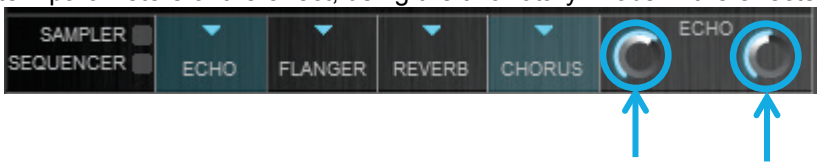
(3) Enabling/disabling an effect

You can enable/disable one or more effects simultaneously by clicking on the effect(s) in question.



(4) Modulating an effect

You can modulate 2 parameters of the effect, using the two rotary knobs in the effects bar:



c) Samples

(1) Definition

A sample is a short sound played alone or in combination with other samples, over the music or instead of the music.
If a sample is played once, it is called a jingle.
If a sample is played continuously, it is called a looped sample.

(a) Opening the sampler

There is a checkbox labeled SAMPLER at the end of the Effects rack: 

.
If you select this checkbox, you will see a column of 4 sample players in DJUCED™ 18. The samples loaded by default are:

- Hit-hat
- Snare
- Kick
- Ride

(b) Playing samples once or in a loop

To play a sample once, click the  button.

To play a sample in a loop (i.e. repeatedly), click the  button (1), then click  (2).

(c) Adjusting the volume of samples

To adjust the volume of a sample being played, click the  button and move the mouse upwards to increase the volume, or downwards to decrease the volume.

d) Loops

(1) Definition

Loop: a portion of an audio track that is played repeatedly.

(2) Controlling loops

(a) Setting a Loop In point = start of the loop

While the track is playing, click on  to place the starting point of the loop.

When you set a Loop In point, the track keeps on playing without any change.

(b) Setting a Loop Out point = end of the loop

Once a Loop In point is placed, you place the Loop Out point by clicking on 

.

Once you have set a Loop Out point, the track's playback is replaced by playback of the loop.

(c) Dividing the loop length by 2

Once inside the loop, you can divide the size of the loop by 2 by clicking on 
.

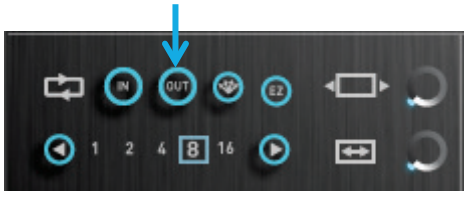
(d) Doubling the loop length

Once inside a loop, you can double the size of the loop by clicking on 
.

(e) Exiting the loop

Once inside a loop, you can exit the loop and keep on playing the track at the end of the loop by clicking on 

.



(f) Splitting the loop into 4 samples

You can create 4 samples from a loop by clicking on the  button. These new samples will be placed in the column containing the 4 sample players.

(g) Enabling/disabling easy loop mode

You can enable easy loop mode by clicking on the  button. In this mode, the start and the end of a loop are automatically fitted to a beat.

C. Frequently asked questions

a) Is DJUCED™ 18 a time-limited version?

No: DJUCED™ 18 does not include any time limitations if the DJ controller with which it is bundled is connected; however, it will run in demo mode (with a limit of 30 minutes per session) if this DJ controller is not connected to the computer.
If you run DJUCED™ 18 without having already connected the controller with which it is bundled to your computer, you can use DJUCED™ 18 for up to 30 minutes, after which the software will shut down.

b) Is DJUCED™ 18 compatible with DJ controllers other than the controller with which it is bundled?

The version included with your controller is only controlled by the DJ controller with which it is bundled.

c) Is DJUCED™ 18 compatible with other DJ audio interfaces than the audio interface built into your controller?

Yes: you can select your choice of audio interface in DJUCED™ 18.
By default, if your DJ controller includes an audio interface, DJUCED™ 18 will play the sound on this built-in audio interface. However, you can select another audio interface in the Settings menu: to display the menu, click on the Settings icon in the bar at the top of the screen.

d) Is DJUCED™ 18 compatible with ASIO and WDM (Windows Driver Model) drivers in Windows?

Yes: DJUCED™ 18 is compatible with ASIO and WDM drivers.

e) Which audio formats is DJUCED™ 18 compatible with?

DJUCED™ 18 cannot play DRM-protected files.
DJUCED™ 18 is compatible with audio files which can be played by Microsoft Windows Media Player or iTunes on the same computer (Windows or Mac).

f) What should I do if I don't hear any sound when DJUCED™ 18 is playing music?

1) Make sure that you have properly connected your speakers to the audio interface: if your DJ controller features a built-in audio interface, your speakers must be connected to the controller's Master output (= 1-2), and not to your computer's internal sound card.
2) Click on the Settings icon in the bar at the top of the screen, and then in the Audio tab, make sure that you have properly configured:
   - The Master to output 1-2 on your audio interface; and
   - The headphones to output 3-4 on your audio interface.

g) What should I do if I hear crackling sounds in DJUCED™ 18?

In Windows and on Mac:

- Be sure to analyze your files BEFORE mixing with them, as this will ensure that you have a much greater degree of your processor's resources available for the mix; and
- Shut down all other programs while you are mixing.

In Windows, configure your computer with the following settings:

1) Verify that your computer's power supply is connected: avoid mixing on a laptop or netbook computer powered only by its battery, as the processor may run at a reduced speed which will impede its performance for mixing.
2) Disable WiFi on your computer.
3) Disconnect the computer from its network or Internet access, so that you can then disable your antivirus software and firewall.
4) Go to the **Windows** (or **Start**) button > **Control Panel** > **System** > **Device Manager** > **Universal Serial Bus controllers**:

- Right-click the first **USB Root Hub** entry, and select **Properties** > **Power Management**. Untick (i.e. deselect) the **Allow the computer to turn off this device to save power** box.
- Repeat this procedure for each **USB Root Hub** entry in the list.

5) Verify that you have lots of free disk space available on your main hard drive. You need at least 10 to 15% of free disk space on your C: drive for your computer not to be slowed down.
6) If you are using a graphics chipset which is an ATI Radeon or an Nvidia Geforce model, and you are running Windows Vista, 7 or 8, avoid using Aero display themes: right-click on your Desktop, then select **Personalize** > **Change the visuals and sounds on your computer**. Choose a non-Aero theme, such as **Windows 7 Basic** or **Windows Classic**.

In Mac OS:

1) Avoid playing the mix on one sound card and using headphone previewing on another sound card: you should play all sounds on the same sound card (whether built into the DJ controller, or separate), rather than using two different sound cards in Mac OS.
2) Avoid connecting the DJ controller to the USB port built into a keyboard; and if you are using a MacBook, check whether you still hear crackling sounds when you connect the DJ controller to another USB port.

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