Demix Pro v5.0 User Manual

Revision 1
November 13, 2023

Contents

1 Installation and Registration

Device Activation

On the first opening of the software you will be asked to activate the device. Input your ilok account id (you need to create one for free at https://www.ilok.com if you don't have one yet), and the licence code that was sent in the purchase receipt email. Then press Send. Your default web browser should open on the ilok website asking you to log in to your account. Doing so will link your DeMIX Pro licence to your ilok account and will allow you to run the software.

If you want to run DeMIX Pro on another computer, you can fill out the activation form again on the new computer. You'll need to use the same ilok account id, as your licence can only be linked to a single ilok account. You should only need to enter your ilok account password once, and only for the activation on the first computer.

If you lost access to your ilok account or want to switch to a different one, please contact support@audiosourcere.com.

Once your licence is linked the software should open. However, if DeMIX Pro can't detect any valid ilok activation locations you will see a troubleshooting window appear. Please make sure you have iLok License Manager installed and running on your computer, and that you have a valid location available (USB dongle plugged in, or iLok Cloud Session open in License Manager). Please note that the software can be installed on multiple devices, but can only be active on one device at a time. Please note that your Ilok Licence Manager should be 5.7.1 or above. If you find that you can not log in, please check the online support links here 25 .

2 Whats New

Local and Cloud Mode

DeMIX Pro accommodates separations in the cloud 4 or locally 4 on your machine. There is a toggle switch in the top right section of DeMIX Pro that allows users to toggle between the different modes.

Batching Separations

DeMIX Pro allows users to run batches of separations in local mode. Users can select multiple clips and run any combination of the available models in a workflow process. More information can be found here 6 .

Updated User Interface and Experience

DeMIX Pro's user interface and user experience has been dramatically improved to give a more modern look and feel. We have added a

new separation workflow to streamline the separation process. More information on the User Interface can be found here 4 .

Advanced Vocal Extraction Options

In *Local* mode, DeMIX Pro allows you separate all the vocals together, or any combination of lead vocal and backing vocals separately. More information on vocal extraction can be found here 7 .

Other Improvements

- An additional export to mono option has been added.

- DeMIX Pro's playback performance and playback resampling accuracy have improved.

- Various bug and Mac/Windows compatibility issues have been fixed.

3 Quick Start

DeMIX Pro allows you to quickly separate vocals, bass, drums, electric guitar, piano and strings from audio recordings. Extractions can be done locally on your machine or in the cloud. Cloud extractions require an internet connection.

DeMIX Pro application on opening

Drag and drop an audio file into the main panel of the application. DeMIX Pro supports loading of wav, aiff, mp3 and flac audio formats. Once the audio has been loaded, a new track is created with the audio clip inside. For more information about clips, see 5 . Playback of the audio can be started and stopped by pressing the spacebar, or via the standard transport controls. The volume of the audio output by the application can be controlled by the master volume slider, situated at

the top left of the application. Multiple audio files can be imported into the sequencer.
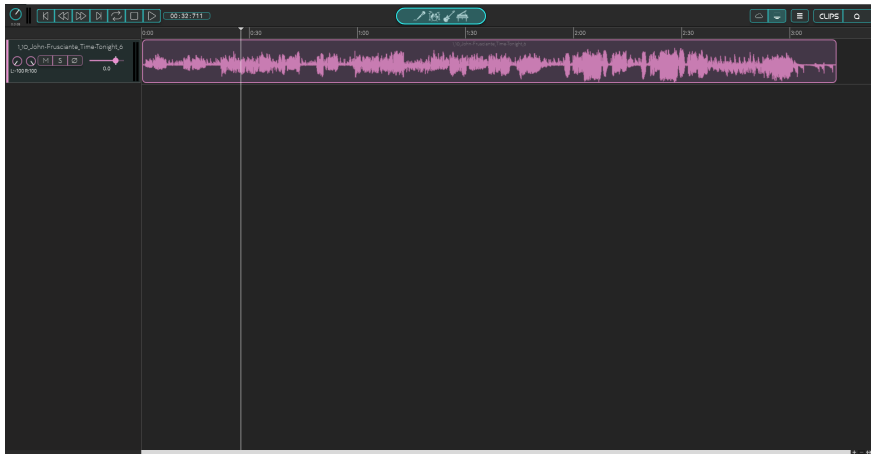

Audio File Loaded

In DeMIX Pro, users can separate vocals, drums, bass, electric guitar, strings and piano. Vocals can extract lead and backing vocals from a mix. Drums will target acoustic or electronic drums, or other percussion sounds. Bass will extract all bass guitar or bass synths from a mix. Electric guitar will extract electric guitars, notably distorted guitars or guitar solos. Piano will extract piano, notably lead piano melodies or chords. Strings will extract classical stringed instruments.

Launching the separation workflow can be achieved in many ways. One way is by clicking the big centred button (with instrument images inside) in the top section of the software. You can also launch from the separation menu (23).


Separation Button

Here we take the use-case of a vocal separation as an example. Pressing the *Separate button* (located in the centre of the top section of the software) will bring up the new separation workflow offering the choice of all the separation models. Select *Vocals*.
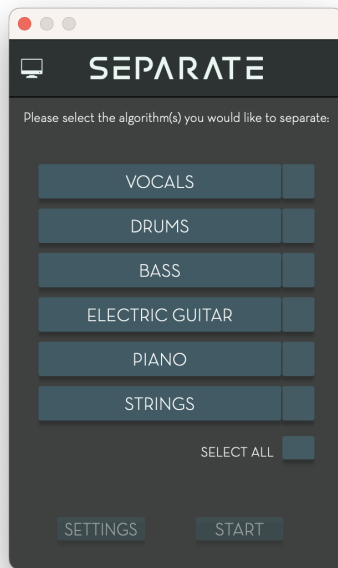
Separation Algorithm Workflow

The settings screen allows users to select the type of vocal separation to start, with a description about each of the vocal options. Select the desired option (the option will be saved) and click *Start*.
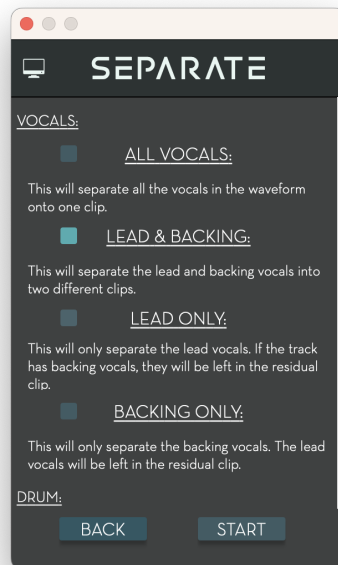
Vocal Separation Workflow Settings

Once the separation is queued, the *Queue Panel* will open on the right side of the software:*Windows:* **shift**+**O** *Mac:* **shift**+**O** . The queue panel shows the separation that was just started along with a label of the clip the separation originated from. Progress can be seen with a blue progress bar in both the queue and in the clip in the main sequencer.

Once the progress is completed (and the progress bar is full), the finalising of the separated files will begin. If it is a cloud separation, the duration of the finalising will be dependent on internet connection. It is also possible to cancel a separation while processing. In the queue panel, click *X* in the progress bar of the item to cancel. Alternatively, all separations queued can be cancelled by clicking *Cancel All Separation* in the Separation Menu 23 .
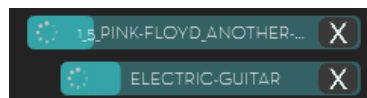
Separation Progress Bar

Once the separated audio is ready, the sequencer creates two new tracks and two clips inside of those tracks, one track for the separated *Vocals* and another for the residual *Non Vocals*. Residual clips are the non separated elements (in the case of a *Vocal* separation that would be all the instruments without vocals). Each track contains a volume fader, level meter, and pan knobs, as well as mute, polarity and solo buttons.

7

The original clip is still visible above the separated tracks for reference. However, the original clip is muted.
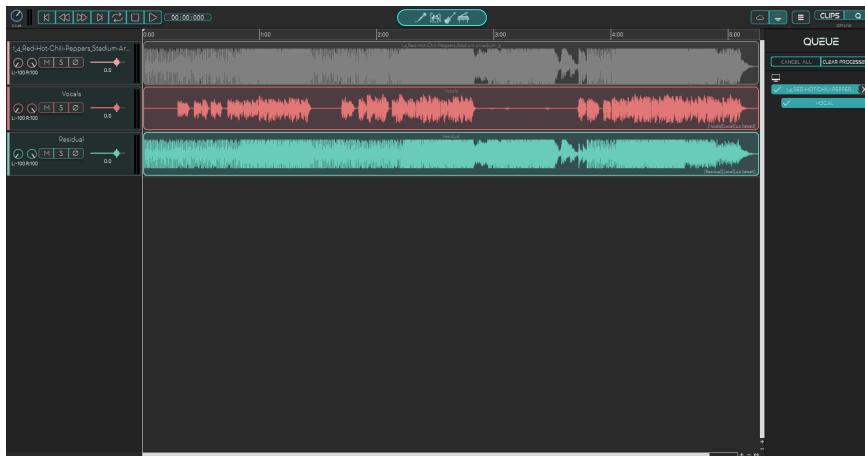
Vocal Separation Completed

To listen to the separated vocals, press solo on the Vocals track and start playback. Similarly, the residual (non separated elements) can be heard by pressing solo on the Residual track. It is important to note that the separation process is non-destructive, with Vocals and Residual adding back together to give exactly the original mix.

Apart from the solo buttons you can mute individual tracks using the mute button, or adjust the balance of the separated tracks using the individual track volume controls. Using (*Windows* - **ALT** + **left-click** *Mac* - **ALT** + **left-click**), you can mute or solo all tracks. You can also use the polarity button to invert the polarity of the track (or "flip its phase").

Having separated the original mix into separated vocals and backing track, it is possible to run further separations on these new tracks. For example, the vocal residual track can be used as input for the next separation.

4   Application Overview

Main Panel

The main panel shows the sequencer that displays all the tracks and clips within the project, along with basic remixing controls, zooming controls and the separation button. When the *Mixer* window is chosen (*Windows* - **ctrl**+**1**, *Mac* - **cmd**+**1**), it displays the channel strip for each track. The main panel is discussed in detail in Section 17 *Main Panel*.
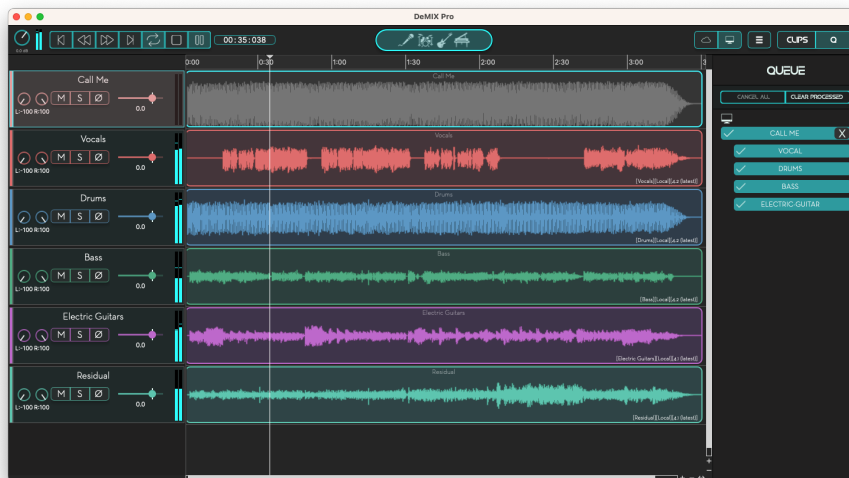
Sequencer View

Separation Button

The separation button is used to launch separations. The separation button launches the *Separation Algorithm Workflow* which allows users to select the specific algorithms to run.

Separation button

Local Cloud Toggle Switch

The local/cloud toggle switch allows users to switch between the two modes.

Local Mode

Local mode allows the users to run any number of separations with any amount of selected clips. For example, users could import 15 different songs, select them all, click the separation button, select all the 6 algorithms and click *Start,* this would queue 90 separations in the queue. The speed of separation in local mode is dependent on the capabilities of the user's machine.

Cloud Mode

Cloud mode allows the users to run 1 separation on 1 clip at a time. The user has a different set of algorithms to select (some options include *Other* and *Four Stem* which are only available on cloud). Users have

to wait for a current cloud separation to finish before starting another. The speed of separations in cloud mode is dependent on the internet connection of the user's machine.

Local Cloud Toggle Switch

Transport Panel

The transport panel contains the master volume slider for the application as well as standard playback controls. These are discussed in detail in Section 18.

Playback Controls

Zoom Controls

The zoom controls are located at the bottom right of the sequencer. The vertical + and - buttons increase and decrease the size of the tracks, the horizontal + and - buttons increase and decrease the zoom of the sequencer. The <-> button resets the sequencer width. All zoom controls are accessible through the View Menu (24).

Zoom Buttons

Side Bar

The side bar toggle switch allows users to see the *Queue Panel* and the *Selected Clips Panel*.


Side Bar

Queue Panel

The queue panel displays the separations that have been processed and/or currently being processed. The queue is broken into 2 sections; *Queue Controls* and *Queue Items*. Queue Controls offers the users the option to *Cancel All* or to *Clear Processed*. *Cancel All* allows the users to cancel all active separations. Once cancelled, separations cannot be restarted. *Clear processed* allows users to remove items from the queue that are no longer processing, such as items that have finished separation or cancelled items.

The *Queue Items* section shows all the separations for both cloud and local. Cloud and Local separations can run in parallel. The cloud separation section is indicated by the small cloud icon, while the local separation section is indicated by a small machine icon.
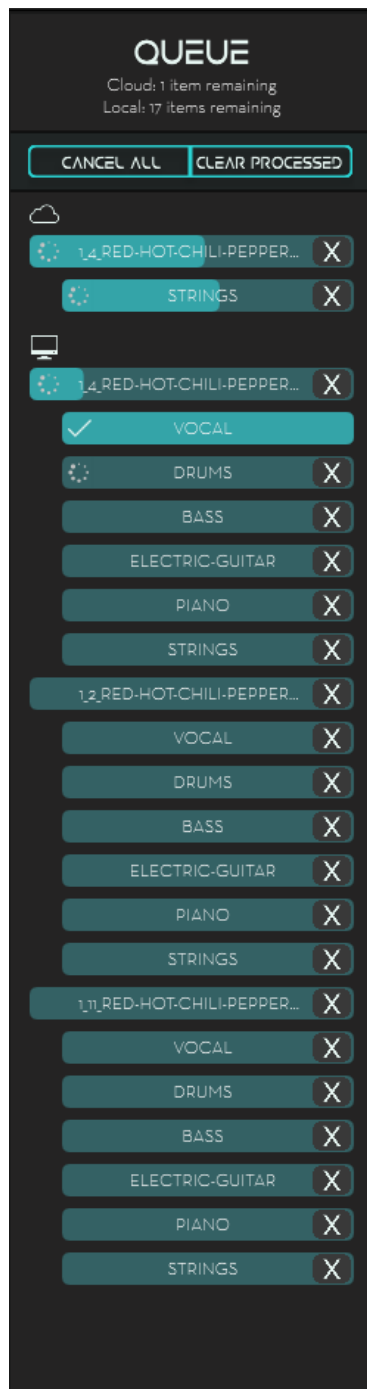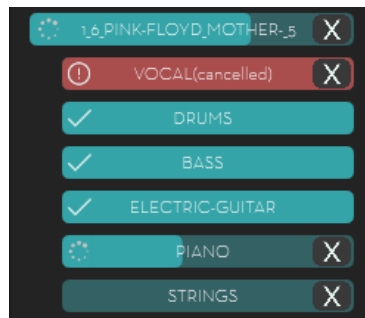
Queue Panel

The queue items have two different levels, the first level is known as the *Parent*. The parent shows the clip information from the original source of the separation. Cancelling at parent level will cancel all of the child separations.

The second level is known as the *Child*. The child relates to the individual separation. The parent can have many children. In the image example, each parent has 6 children separations. Cancelling at child level will only cancel that individual separation.

The progress bar is indicated by a blue bar that moves from left to right of the child item. When a separation is finished, a tick image will appear on the left side of the item. If there is an error or if a separation is cancelled, a small warning image will appear and the child item will turn red.


Separation In Progress

Selected Clips Panel

The selected clips panel has two sections similar to the Queue Panel. The first section is the *Selected Clips Controls*. The controls give users the ability to *Split*, *Duplicate*, *Delete*, *Merge*, *Export* and *Separate* clips. *Splitting* clips breaks a clip into 2 clips. *Duplicating* clips makes new duplicates of the selected clips on new tracks 5 . *Merging* will convert all the selected clips into 1 clip 5 . *Exporting* will allow users to export the tracks where the selected clips are located. *Delete* selected clips will delete all selected clips from the sequencer 5 . *Separate* selected clips allows users to run multiple separations on multiple clips in 1 separation workflow iteration.

Note: a clip is a waveform in the sequencer. The second section of the selected clips panel shows the selected clips with their name and the ability to de-select clips.
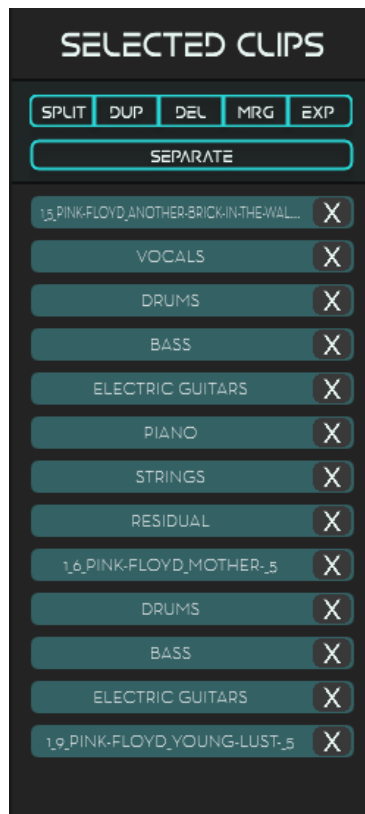
Selected Clips Panel

Local and Cloud Toggle Switch

The *Local* and *Cloud* switch allows users to switch between local and cloud separations. Local separations have no limitations. This means that users can select multiple clips and run multiple separation algorithms on each clip. *Cloud* separations are limited to 1 separation per 1 clip. Users can only run *Cloud* separations when there is no other *Cloud* separation running.

Local Cloud Toggle Switch

Export Button

This exports the audio from all the tracks currently available in the mixer. On selecting this option it brings up a pop-up box asking you to select a directory to save the files to. Note that the export filenames will match the names of the track in the mixer panel. The *Export All Tracks* option ignores all panning, volume, solo or mute settings in the mixer. This can

also be done using a keyboard shortcut: *Windows* - **ctrl**+**shift**+**E**, *Mac* - **cmd**+**shift**+**E**.

Export Button

Menu Bar

The Menu Bar contains options related to importing and exporting audio, saving projects, editing settings, performing separations, as well as displaying the mixer window. Further details on these menus can be found in Sections: File(21), Edit(22),Separation(23), View(24) and Help(25).

Mixer Window

The mixer window contains volume and pan controls as well as mute and solo buttons for each separated track in the application. Further details can be found in Section 20.
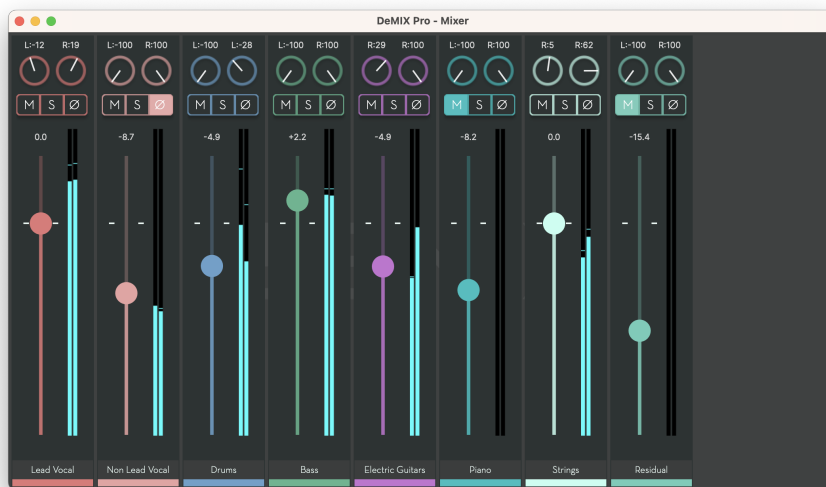
Mixer Window

5   Sequencer Workflow

The new sequencer interface allows new actions for tracks and clips.

Duplicating

Selected clips and/or tracks can be duplicated. If a track is duplicated, it will duplicate all clips inside. If a clip is duplicated, it will create a new track and position the duplicated clip at the same position inside the new track. Duplicating can be achieved using the shortcut (*Windows* - **ctrl**+**D**, *Mac* - **cmd**+**D**), by right-clicking on the track or clip, or by accessing the edit menu 22 .

Merging

It is possible to merge tracks and clips. Tracks can be merged by selecting 2 or more tracks. Clips can be merged when 2 or more clips are selected, whether they are on the same track or different tracks. This can be done by holding down **ctrl** (*Windows*) or **cmd** (Mac) and clicking on multiple tracks or clips. Alternatively **shift** and clicking will work as well. Once multiple tracks or clips have been selected, the *Merge selected* button becomes active. Clicking on *Merge selected* will then merge the selected clips or tracks into a single clip or track. The associated keyboard shortcut for this action is: *Windows* - **ctrl**+**shift** + **M**, *Mac* - **cmd**+**shift** + **M**.

Deleting

Selected clips and/or tracks can be deleted. Deleting selected clips or tracks can be achieved by using the shortcut (*Windows* - **delete**, *Mac* - **delete**), by right-clicking on a clip or track, or by accessing the edit menu 22 .

Tracks

Tracks are containers for clips. A track can be empty or it can have multiple clips. A track has a horizontal volume slider, pan faders, a mute button, a solo button and a polarity button. Tracks can also be renamed and have their track colour changed. The size of the track (vertically and horizontally) can be modified using the zoom controls. The track name can be set by double-clicking on the name label.


Track Section

New tracks can be created by selecting *New Track* in the File menu 21 , by duplicating existing tracks or by dragging clips under the last existing track. Right-clicking will open a menu to start a separation, rename, set the track colour, duplicate or delete the track.

Apply Separation

In local mode, this will select all of the clips in the track and open the separation workflow popup window allowing users to make separations.
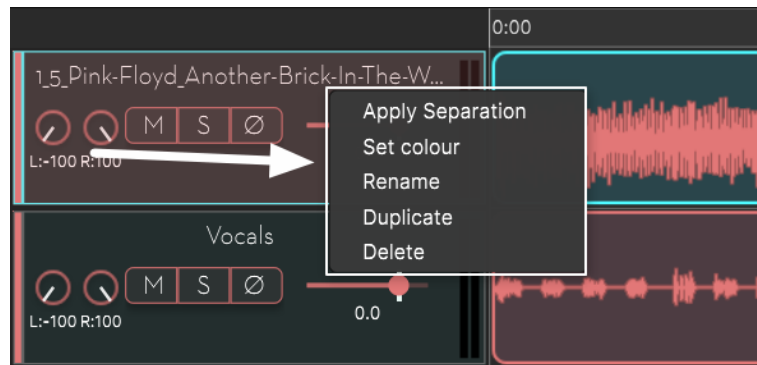
Track Options

Set Colour

Clicking on *Set colour* launches a pop-up *Colour Picker* window. Picking a colour in this window will then change the colour associated with the selected item to that chosen. Right-clicking on a track and setting the colour will change the colour of the track and the associated clips. Right-clicking on a clip and setting the colour will only change the colour of that specific clip.

Track Colour Picker

Rename

Clicking on *Rename* gives the option to rename the track by typing in the desired track name.

Duplicate

Clicking *Duplicate* will duplicate all of the tracks clips onto a new track. The new track will have the same track name and colour.

Delete

Clicking *Delete* will delete the track and all the clips within the track.

Clips

A clip is a section of audio contained within a track. When importing audio, a track with 1 clip is created. The clip can be split into many smaller clips, all of which can be separated individually.
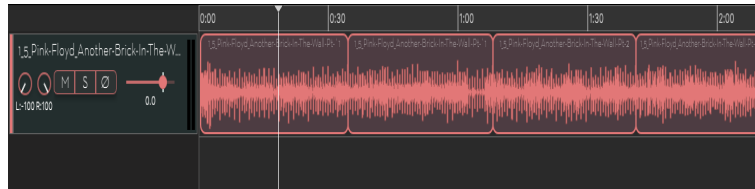
Clips Section

When selecting a clip, it highlights the clip with a blue outline. Multiple clips can be selected by holding *shift* while clicking on the clip. Clips can be dragged along the sequencer timeline or dragged to other tracks. If a clip is dragged out of bounds below the last track, a new track will be created.
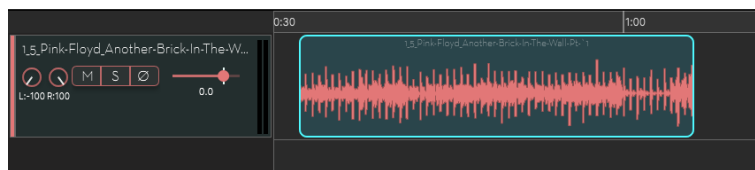
Selected Clip

Right-clicking inside the clip will open a dropdown menu where you can separate, split, duplicate, delete or rename the clip. Right-clicking also allows you to set the clip colour.

Mute
Clicking on *Mute* will mute the clip. The track itself will not be affected, only the selected clip.

Set Colour
Clicking on *Set colour* launches a pop-up *Colour Picker* window. Picking a colour in this window will then change the colour associated with the clip.
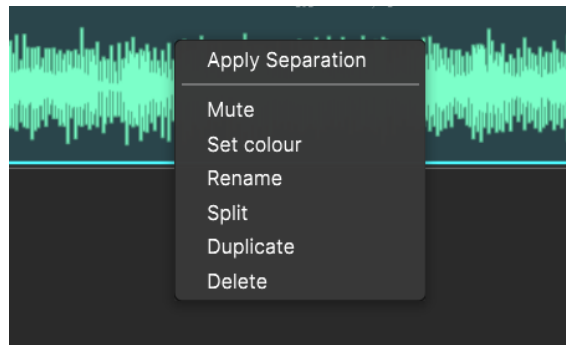
Rename
Clicking on *Rename* will start editing the clip name.

Duplicate
Clicking on *Duplicate* will duplicate the clip and create a new track for the duplicated clip.

Delete
Clicking on *Delete* will delete the clip, the track will also be deleted if it doesn't contain any other clip.

Clip Options

Splitting Clips

Clips can be split using the shortcut (*Windows* - **S** , *Mac* - **S**) or by right-clicking and selecting *Split*. All selected clips will be split at the position of the playhead. Each new clip will keep the previous clip name and colour.

Dragging Clips

Selected clips can be dragged horizontally across the sequencer or vertically to different tracks. Clips can be dragged on top of other clips. In this case, only the clip that starts first will be displayed. When dragging clips, there is automatic snapping to the edge of the next/previous clips. When dragging a clip to the space below the last track, it will create a new track for the clip. Multiple clips can be dragged at once when selected.
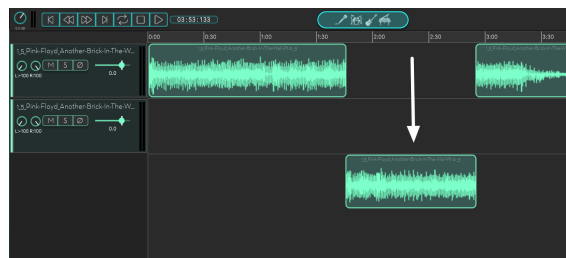
Dragging clip to create new track

6 Separation Workflow

The *Separation Workflow* is the workflow that allows users to pick which separations they want to run. The separation workflow can be accessed by the *Separation Button* in the centre of the top section of the software, the *Separation Menu* 23, right-clicking on a track, right-clicking on a clip and the *Separate* button in the selected clips side panel.

When the separation workflow opens, it will show the available algorithms. Local and cloud have different options available for each mode.
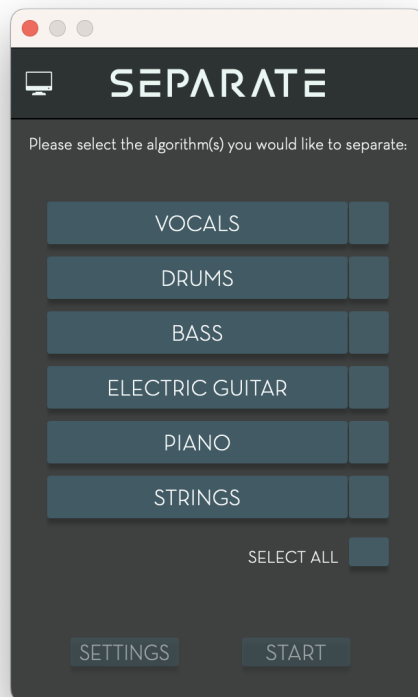
Separation Workflow in Local Mode

In *Local* mode, users have the choice of picking any and/or all of the algorithms for separation. The options include vocals, drums, bass, electric guitar, piano and strings. The *Select All* button selects all the algorithms for separation. Separation will start when the user clicks the *Start* button by applying the selected algorithms consecutively on the source clip.
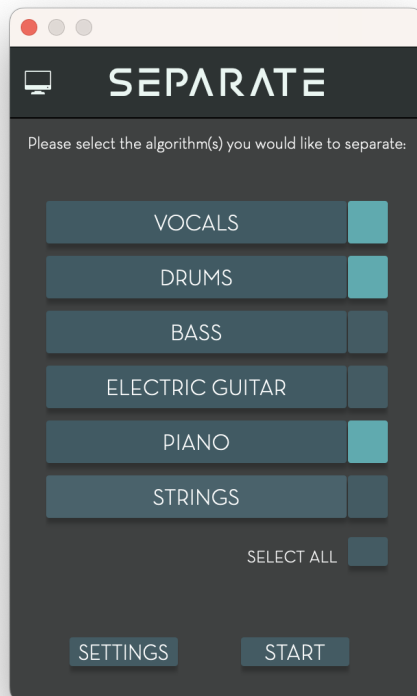
Selecting instruments in Separation Workflow

If there are any available settings for the chosen algorithms, the *Settings* button will become enabled. The settings page allows users to select the specific parameter settings for the chosen algorithms. These parameters will be set globally and saved when closing the software.

In *cloud* mode, users can only select one algorithm to separate. The algorithms available are all vocals, lead vocals, drums, bass, electric guitar, other, piano, strings and four-stem.

7   Vocals

Running the Vocals model will separate out the vocal elements from a song or mix.

Available in: Local, Cloud
Settings include: Algorithm Version (Local Only).

There are many different vocal separation options. In *Cloud* mode, users have the option of *All Vocals* and *Lead Vocals*. *All Vocals* will extract all of the vocals found in the audio clip. When the separation is finished

processing, it will return all of the vocals on one clip and the non vocals (or backing track) on a separate clip. *Lead Vocals* will extract all of the main vocal line of the audio clip. When the separation is finished processing, it will return the lead vocals on one clip and the non lead vocals (which includes backing vocals + the other non lead vocal elements) onto a separate clip.

In *Local* mode, there are 4 options for vocal separation, **All Vocals**, **Leading Vocals + Backing Vocals**, **Lead Vocals Only** and **Backing Vocals Only**.

All Vocals will separate all of the vocals into one clip.

Lead and Backing will separate the lead and backing vocals into two different clips.

Lead Only will separate the lead vocals. If the track has backing vocals, they will be left in the residual clip.

Backing Vocals Only will only separate the backing vocals. The lead vocals will be left in the residual clip.

* *Residual* contains the non separated elements 15.
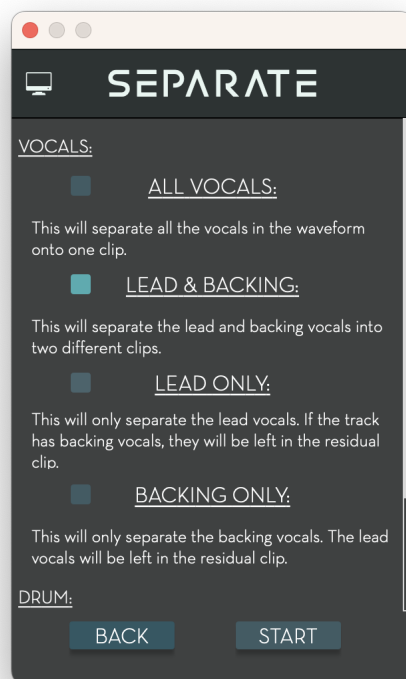
Vocal Settings

8   Vocal Separation Use Cases

A good example of a vocal separation use case would be when the user wishes to separate both the lead vocal and vocal harmonies into independent tracks for remixing with the other elements in the track. Here the user should select the vocal algorithm in local mode, then click the *Lead and Backing* setting. In cloud mode, a good workflow would be to first apply an *All Vocals* separation to obtain separated vocal and instrumental tracks. The separated vocal track can then be separated again, this time using the *Lead Vocal* separation option, resulting in 2 new tracks, one which contains the lead vocal and the other containing the backing vocals. Similarly, the backing vocals track can be further separated with the *Lead Vocal* algorithm to extract one of the remaining voices from the others. The quality of the separation will depend on how prominent one voice is compared to the others. For example, trying to extract one voice from an ensemble will be significantly more challenging than one voice of a two-piece harmony.

If there are passages which contain only lead vocals, it is recommended to select and run the *All Vocals* separation on those passages instead of the *Lead Vocal* separation and use the *Lead Vocal* separation on passages that contain both lead and backing vocals.

In most cases "All Vocals" or "Drums" should be applied first and then other separations could be performed on the resulting tracks.

9   Drums

Running the Drums model will separate out the drums/percussion from a song or mix.

Available in: Local, Cloud
Settings include: Algorithm Version (Local Only).

10   Bass

Running the Bass model will separate out the bass guitar/ bass synth from a song or mix.

Available in: Local, Cloud
Settings include: Algorithm Version (Local Only).

11   Electric Guitar

Running the electric guitar model will separate out the electric guitar from a song or mix. Usually the best results are found to be on mixes that have heavy distorted guitars, power chords or guitar solos. If the expected result is a good sounding Electric Guitar track, the best way

to extract it will most likely be directly from the full mix.

Available in: Local, Cloud
Settings include: Algorithm Version (Local Only).

12   Piano

Running the piano model will separate the piano elements from a song or mix. Usually the best results are found to be on mixes where the piano is a main part of the mix.

Available in: Local, Cloud
Settings include: Algorithm Version (Local Only).

13   Strings

Running the strings model will separate the stringed instrument elements from a song or mix.

Available in: Local, Cloud
Settings include: Algorithm Version (Local Only).

14   Four Stem

Running the four stem model will separate *All Vocals*, *Drums*, *Bass* and *Other* from a mix.

Available in: Cloud Only
Settings include: Perfect Reconstruction (Cloud Only).

15   Residual clips

After a clip separation ends, one last clip called Residual is created. The Residual clip contains all the elements from the original clip that aren't in any of the separated clips. For example, when running a batch separation of drums and bass, the drums will be returned on one clip, the bass on a second clip and the residual (anything else than drums or bass) on a third separate clip. The separated drums and bass clips and the residual clip will sum back to the original audio clip. The generation of the residual clip can be disabled in Separation Settings 22.

16 Additional Information

Please note that the *Piano* and *Strings* separations are currently in an experimental state and may not yet work as reliably as our other separations. Nevertheless, they will give high-quality separations in most cases.

17 Main Panel

On opening the application, the Main Panel is empty, apart from an invitation to drag and drop a file to open in the application. Once a file has been loaded, the main panel displays the audio track and its clip. As additional tracks are created, these additional tracks will appear in the view and the mixer window. Each track has a collection of clips and every clip can be separated, muted, duplicated, deleted or split. New clips can be created by splitting existing clips. Clips can be merged with other clips to consolidate into one clip. For more information on clips, see Section 5 .
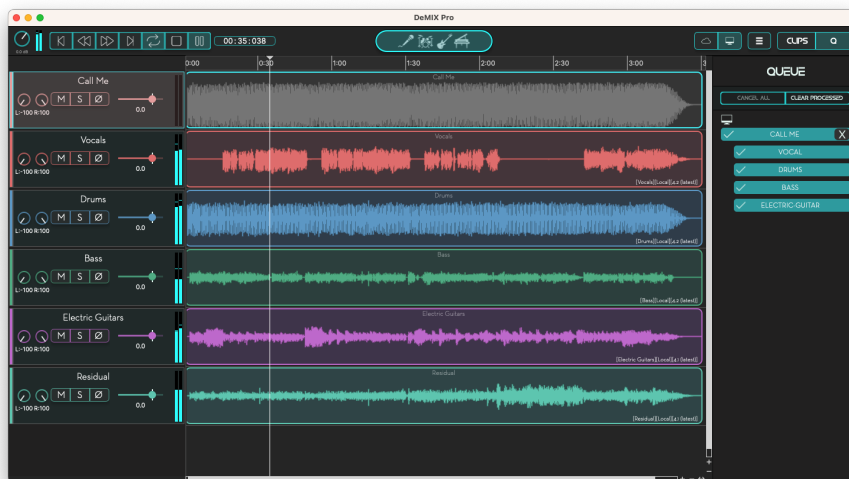
Main Panel

The playhead can be positioned by left-clicking on any of the clips, or on the timeline at the top. On the left of the sequencer are the name, colour and other information about each track. Double-clicking on the name of a track allows to rename it. Left-clicking the track will select the track and all clips inside. Right-clicking on a track will open a menu with options such as starting a separation, renaming a track, duplicating the track, deleting the track or changing its colour.

18   Transport Panel

The transport panel is situated at the top left of the application. It contains a number of controls related to playback of audio. These are as follows:

Master Volume - this slider controls the volume of audio playback from the application. Below it is a display which shows the current gain of the audio relative to its original level in dB.

Return to Start - this button moves the playhead back to the start of the audio. This can also be done by pressing **ctrl**+← on *Windows* or **cmd**+← on *Mac*.

Rewind - clicking on this button moves the playhead back by one second. This can also be done by pressing ← on the keyboard. Pressing **alt**+← will move the playhead back by 10 seconds.

Fast Forward - clicking on this button moves the playhead forward by one second. This can also be done by pressing → on the keyboard. Pressing **alt**+→ will move the playhead forward by 10 seconds.

Move to End - this button moves the playhead to the end of the audio. This can also be done by pressing **ctrl**+→ on *Windows* or **cmd**+→ on *Mac*.

Loop - if a time-selection has been made in the main panel, this button toggles whether looping occurs on that section or not. This can also be done by pressing **L** on the keyboard.

Stop - pressing this button stops playback

Play - pressing this button starts playback

Pause - pressing this button pauses playback

The behaviour of stop and pause depends on the chosen playback mode in the transport settings menu. If auto return is selected, then the playhead will return to its original position, while if persistent is cho-

sen, then the playhead will stay at its current position when playback is stopped or paused.

Transport Location Display: This text box displays the current location in time of the playhead.

Hovering over the transport buttons will display the shortcut key for each button.

19   Zoom Controls

The zoom panel contains tools for zooming in and out of both the spectrogram editor and the multi-track view. These are described below:

 Zoom in - vertical axis This tool zooms in on the vertical height of the tracks. Shortcut (*Windows* - **+** , *Mac* - **+**)

 Zoom out - vertical axis This tool zooms out on the vertical height of the tracks. Shortcut (*Windows* - **-** , *Mac* - **-**)

 Zoom in - time axis This tool zooms in on the horizontal width of the waveforms. Shortcut (*Windows* - **ctrl** + **+** , *Mac* - **cmd** + **+**)

 Zoom out - time axis This tool zooms out on the horizontal width of the waveforms. Shortcut (*Windows* - **ctrl** + **-** , *Mac* - **cmd** + **-**)
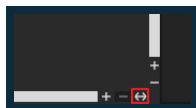
 Zoom out full This tool resets the zoom to the maximum possible in the application. This is expanded to the clip furthest from the start of the timeline.

Looping

A sequencer loop can be drawn by left-clicking on the timeline and dragging the mouse. The loop is highlighted by a dark grey line at the top of the timeline. The loop can be enabled/disabled by pressing the loop button in the transport panel, or by pressing **L** on the keyboard.
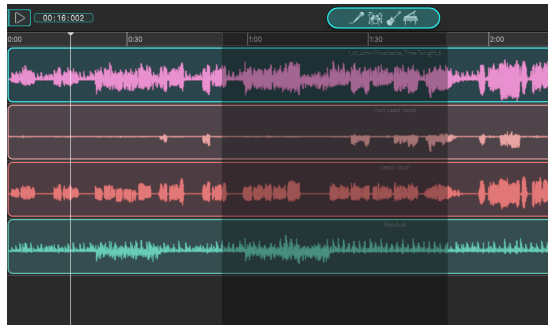
Sequencer with active loop section

The sequencer loop can be used to repeat sections or allow for accurate clip splitting. For example, setting the loop in a drum track allows for fine-tuning a drum loop. Once the loop is accurately set, the drum clip can be splitting on both sides of the loop to give a new drum clip that can be looped cleanly.

20 Mixer Window

The *Mixer* window displays all available channel strips in a small independent window.
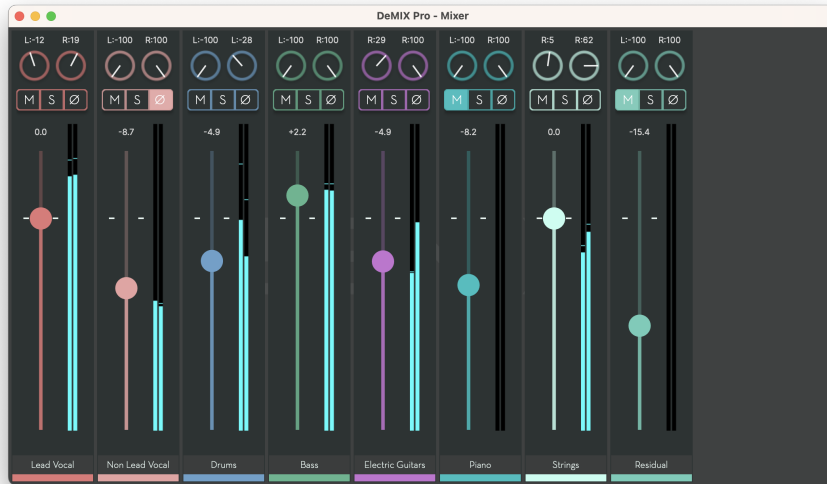
Mixer Window

Mixer Channel Strip

Each track has its own channel strip with a volume fader, level indicator, and pan knobs, as well as mute, solo and polarity buttons. Tracks can also be renamed by clicking on the track name and typing in the desired name. Double-clicking on a volume fader will reset it to its initial position, as will double-clicking on a pan knob.

The mixer window can be opened by selecting the View menu and clicking on *Show Mixer Window*, or alternatively via a keyboard shortcut: *Windows* - **ctrl+1**, *Mac* - **cmd+1**.

21   File Menu

Selecting the file menu brings up a range of options. These are described below:

Import Audio

Selecting *Import Audio* opens a pop-up window allowing the user to select an audio file to use in the application. This can also be done using a keyboard shortcut: *Windows* - **ctrl+shift+N**, *Mac* - **cmd+shift+N**.

Opening an audio file can also be achieved by dragging and dropping the audio file from the file manager. DeMIX Pro supports loading of wav, aiff, mp3 and flac audio formats.

Save

Selecting *Save* saves the current project. This can also be done using a keyboard shortcut: *Windows* **ctrl+S**, *Mac* - **cmd+S**. If it is the first time the project is being saved, this opens a pop-up window allowing the user to pick a name and location for the save. This will save the project settings and all associated audio into a project folder.

If the project has been previously saved, selecting *Save* will save the current version of the project into the previously created folder.

Save As

Selecting *Save as* saves the current project under a new project name. It opens a pop-up window allowing the user to to pick a name and location for the save. This will save the project settings and all associated audio into a new project folder. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**shift**+**S**, *Mac* - **cmd**+**shift**+**S**.

Bounce Mixer Output

Selecting *Bounce Mixer Output* bounces the audio output from the mixer directly to a file. This includes all changes in volume, panning, as well as any mutes or solos. It brings up a dialogue box allowing the user to name the output file and choose the format to export. The associated keyboard shortcut for this action is: *Windows* - **ctrl**+**B**, *Mac* - **cmd**+**B**.

Export

This exports the audio from the current mixer tracks, ignoring any panning, volume, solo or mute settings. On selecting this option it brings up a dialog box asking you to select a directory to save the files to. If any track is currently selected in the mixer, you will also be able to choose between exporting all the mixer tracks or only the selected tracks. Files can be exported in WAV of FLAC, in various sample rates, quality and number of channels.

This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**shift**+**E**, *Mac* - **cmd**+**shift**+**E**.

Exported audio tracks retain all the original metadata of the original audio file, including time-stamps, for ease of importing/exporting to DAWs.

New Track

Selecting *New Track* creates a new track in the sequencer.

New project

Selecting *New project* clears the sequencer of all previous tracks and clips. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**N**, *Mac* - **cmd**+**N**.

Open project

Selecting *Open project* displays a pop-up window which allows the user to open an already existing project. In DeMIX Pro, a project file has a file extension of **.sre**, and it will be found in the project folder created when the project was originally saved. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**O**, *Mac* - **cmd**+**O**.

22   Edit Menu

Selecting the edit menu brings up a range of options. These are described below:

Undo

This undoes the previous action. Actions include importing audio, separating, splitting, deleting, selecting, dragging and duplicating. Note that the undo entry displays a description of the previous action when appropriate. Undoing edits can also be done using a keyboard shortcut: *Windows* - **ctrl**+**Z**, *Mac* - **cmd**+**Z**.

Redo

This re-does any previously undone action. Note that the redo entry displays a description of the previous action when appropriate. Undoing edits can also be done using a keyboard shortcut: *Windows* - **ctrl**+**shift**+**Z**, *Mac* - **cmd**+**shift**+**Z**.
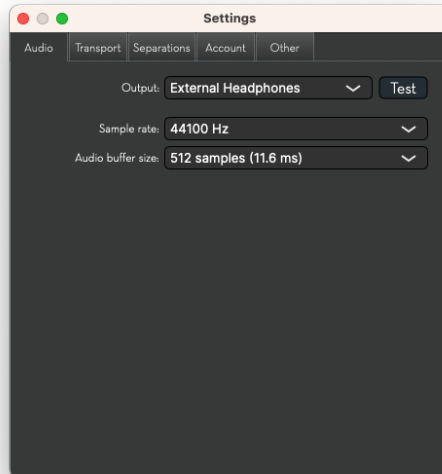
Settings

Selecting *Settings* launches a pop-up window containing a number of tabs which allow the user to make changes to the default settings for the application:

Audio Settings

Audio Settings Window

This tab contains settings related to audio playback in the application. These are:

Audio Device Type

This option is on Windows only. It typically offers the choice between Windows Audio and Direct Sound for playback of audio.

Output

This allows the user to select which of the available outputs to use for playback of audio.

Sample Rate

This allows the user to change the default sample rate for playback of audio. This is originally set by the computer that DeMIX Pro is running on. In most cases it will be 44.1kHz by default.

Audio Buffer Size

This controls the audio buffer size of the application. If playback is skipping or stuttering, then increasing the buffer size can help eliminate these problems.

Transport Settings
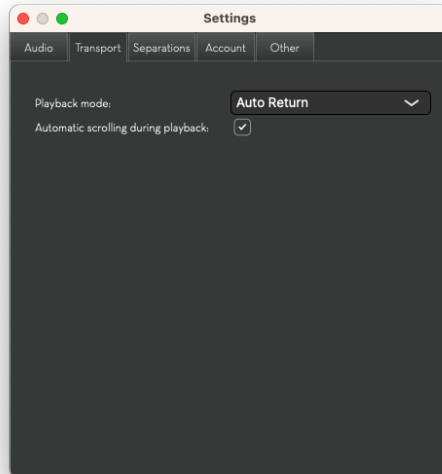
Transport Settings Window

The transport settings tab allows the user to change how the application behaves during playback.

Playback Mode

When *Auto Return* is selected, pressing stop or pausing playback will return the playhead to its previous position before playback started. When *Persistent* is selected, then the playhead will remain at the current position when pausing or stopping occurs.

Automatic Scrolling during playback

When checked, the waveform area of the sequencer will scroll automatically to always keep the playhead visible.

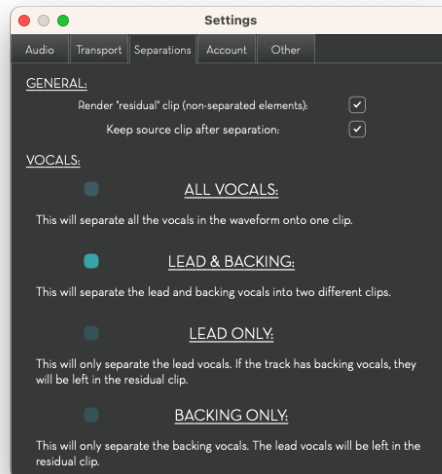**Separation Settings**

Separation Settings

This tab contains the current settings for all the separation models (including the vocal mode settings). The vocal settings are described in detail in Section 7 *Vocals*. The setting *Keep source clip after separation* ensures that the original source clip will not be deleted when it is no longer used in the separation progress. The setting *Render residual clip (non-separated elements)* returns the non-separated elements of the separation too. This is enabled by default. More information about the residual can be found in the Section 15 *Residual*.

Licence Settings

This tab contains licence and user information. This will display the user's ilok account id or email address and the licence code. The "Switch Account" button will open the login window. This will allow the user to switch licences if they have another licence.
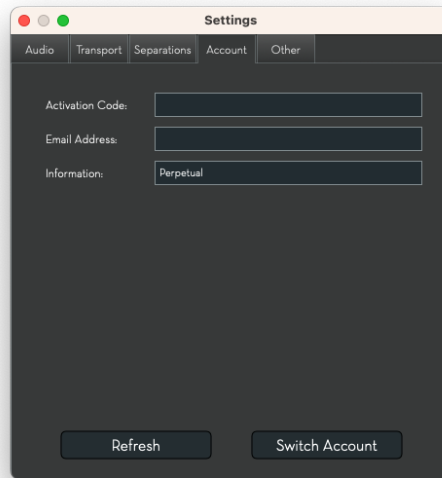
Licence Settings

Select All

This selects all tracks and clips in the sequencer. This can also be done using a keyboard shortcut: *Windows* - **ctrl** + **A**, *Mac* - **cmd** + **A**.

Deselect All

This deselects all tracks and clips in the sequencer. This can also be done using a keyboard shortcut: *Windows* -**ctrl** + **shift** + **A**, *Mac* - **cmd** + **shift** + **A**.

Split Clip

Allows for splitting of the selected clip. This option is only enabled if there is a selected clip. The clip will be split at the playhead. This can also be done using a keyboard shortcut: *Windows* - **S**, *Mac* - **S**.

Duplicate

This duplicates the selected tracks or clips. If a track is selected, a new track will be created with all the clips. If multiple tracks are selected, each selected track will be duplicated, with the clips inside. If a clip is selected, it will create a new track with the clip inside. If multiple clips are selected, it will create a new track with the selected clips. If multiple clips are selected across multiple tracks, multiple tracks will be created. This can also be done using a keyboard shortcut:*Windows* - **ctrl**+**D**, *Mac* - **cmd**+**D**.

Delete

Deletes the selected clip or track. Deleting will only be enabled when a track or clip is selected. This can also be done using a keyboard shortcut: *Windows* - **delete**, *Mac* - **delete**.

23   Separation Menu

This menu contains a number of options that can be applied to the current track.

Apply Separation

This will open the separation workflow, allowing the user to choose models to run.

Cancel All Separations

This will cancel all the current separations. During a *Local* separation, cancelling will require a few seconds as it is likely that a piece of audio will be processing and need to finish before cancelling.

Switch to Cloud/Local mode

This will switch to the other mode. If currently in cloud mode, this will switch to local mode. If currently in cloud mode, this will switch to cloud mode. Local mode is set to default.

24   View Menu

This contains a number of options related to what is displayed in the application.

Show Mixer Window

Selecting this will make the mixer window visible. Selecting it again will hide the mixer window. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**1**, *Mac* - **cmd**+**1**.

Toggle Queue

This will show/hide the queue panel in the side bar. This can also be done using a keyboard shortcut: *Windows* - **shift**+**0**, *Mac* - **shift**+**0**.

Toggle Selected Clips

This will show/hide the selected clips panel in the side bar. This can also be done using a keyboard shortcut: *Windows* - **shift**+**9**, *Mac* - **shift**+**9**.

Scroll during Playback

When selected, the multi-track view and spectrogram view will update their display to follow the playhead during playback.

Sequencer Zoom In

This will increase the zoom in the sequencer horizontally. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**=**, *Mac* - **cmd**+**=**.

Sequencer Zoom Out

This will decrease the zoom in the sequencer horizontally. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**-**, *Mac* - **cmd**+**-**.

Sequencer Reset Zoom

This will reset the horizontal zoom of the clips in the sequencer. It will reset to the show all the clips in the sequencer. This can also be done using a keyboard shortcut: *Windows* - **ctrl**+**0**, *Mac* - **cmd**+**0**.

Increase Track Size

This will increase the vertical size of all the tracks in the sequencer. This can also be done using a keyboard shortcut: *Windows* - **=**, *Mac* - **=**.

Decrease Track Size

This will decrease the vertical size of all the tracks in the sequencer. This can also be done using a keyboard shortcut: *Windows* - **-**, *Mac* - **-**.

25 Help Menu

This contains a window about the software, along with online support. Please visit audiosourcere.com/support for more information about logging in and troubleshooting issues.

26 Keyboard Shortcuts

Transport Controls	*Windows*	*Mac*
Play/Pause	**spacebar**	**spacebar**
Forward 1 second	**→**	**→**
Forward 10 seconds	**alt+→**	**alt+→**
Forward to End	**ctrl+→**	**cmd+→**
Backwards 1 second	**←**	**←**
Backwards 10 seconds	**alt+←**	**alt+←**
Return to start	**ctrl+←**	**cmd+←**
Toggle looping	**L**	**L**

Edit		
Undo	**ctrl+Z**	**cmd+Z**
Redo	**ctrl+shift+Z**	**cmd+shift+Z**

Track		
New Track	**ctrl+T**	**cmd+T**
Merge	**ctrl+shift+ M**	**cmd+shift+ M**
Select All	**ctrl+A**	**cmd+A**
Deselect All	**ctrl+shift+A**	**cmd+shift+A**
Mute All Selected Tracks	**shift+M**	**shift+M**
Solo All Selected Tracks	**shift+S**	**shift+S**
Duplicate	**ctrl+D**	**cmd+D**
Delete	**del**	**del**

Clip		
Merge	**ctrl+shift+ M**	**cmd+shift+ M**
Split	**S**	**S**
Select All	**ctrl+A**	**cmd+A**
Deselect All	**ctrl+shift+A**	**cmd+shift+A**
Duplicate	**ctrl+D**	**cmd+D**
Delete	**del**	**del**

View		
Show Mixer Window	**ctrl+1**	**cmd+1**
Toggle Queue	**shift+O**	**shift+O**
Toggle Selected Clips	**shift+9**	**shift+9**
Sequencer Zoom In	**ctrl+=**	**cmd+=**
Sequencer Zoom Out	**ctrl+-**	**cmd+-**
Sequencer Reset Zoom	**ctrl+O**	**cmd+O**
Track Increase Size	**=**	**=**
Track Decrease Size	**-**	**-**

File Management		
Import Audio	**ctrl+shift+O**	**cmd+shift+O**
Save	**ctrl+S**	**cmd+S**
Save as	**ctrl+shift+S**	**cmd+shift+S**
Bounce Mixer Output	**ctrl+B**	**cmd+B**
Export	**ctrl+shift+E**	**cmd+shift+E**
New Project	**ctrl+N**	**cmd+N**
Open Project	**ctrl+O**	**cmd+O**