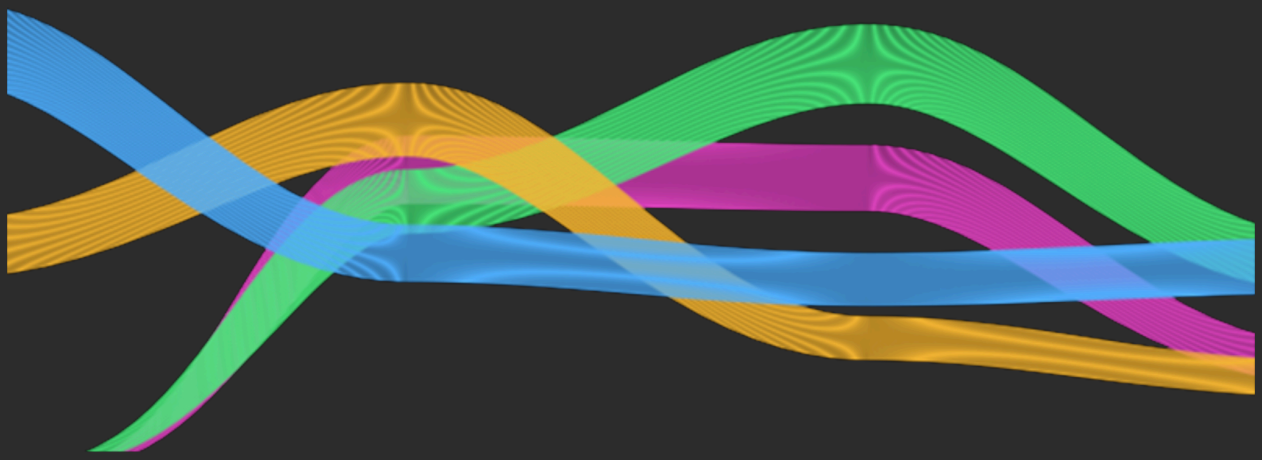

finalist

1.0.1 Manual

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2.Introduction

Thank you for choosing Finalist, the tool that makes mixing and mastering fast, fun and intuitive without the need to buy credits or pay a subscription 🙏.

Anyone who makes music has an inner mix engineer. You may not know all the techniques involved in creating a mix but you know a good one when you hear one.

I built Finalist to bridge the gap between that intuition and being able to get there yourself.

Finalist is the culmination of nearly 3 decades of successes, failures, mistakes and learnings on the path of making music and tools to make music with.

I've mixed many commercial releases. I've fallen down rabbit-holes for days on end, tweaking and overthinking, adrift on a sea of parameters and plugins.

Every blank plugin slot said 'use me'. Every parameter pulled me into thinking it was making a crucial difference. Every plugin interface made me feel some combination of a god and a charlatan. I was mixing with my eyes not my ears. My mixes were overcomplicated. I was exhausted.

It took me many years to figure out that none of this needed to be the case. It took a lot of unlearning and eventually building my own mixing engine to get out of the overcomplication.

The tools we use to mix today pull us into mixing with our eyes, not our ears. They commit us to adjusting thousands of parameters one by one. They lock us very quickly into becoming over-invested in the mix as it is because it took us so long to get to that point.

As soon as we're a few plugins down, we've already left the zone where we can try drastically different things out and see how they work.

To be clear, I say this to throw no shade on the great people who've made these fantastic tools. Many of them are my good friends. Most of them are way more talented than me as both software and mix engineers.

Mixing has evolved to be this way because of how the ecosystem has evolved. Each new innovation begets new problems, begets new solutions, begets new problems and so on. The solutions to the problems to the solutions are fractal. We end up with incredibly complex DAWs and incredibly complex plugins. What we gain in advanced capability, we lose in carefree intuition.

As a 46-and-¾-year-old boy, I still love me some carefree intuition. And I definitely love the idea of reintroducing some carefree intuition to something that has lost it - mixing.

I hope, whether this is your very first mix or you're more seasoned than a late-night kebab, that Finalist brings you many happy hours of mixing with your heart and ears, having as much fun as you do in your peak creative flow state.

Tim Exile, London, September 2025

PS no LLMs were used in writing this manual. I should have got my f*****g quill out.

3. Overview

3.1 What Is Finalist?

Finalist is a mixing and mastering tool that makes mixing fast, fun and intuitive.

As a modern music-maker, you have three mixing approaches to choose from - invest in buying and learning expensive and complicated mixing tools, hire a professional to do it or use an AI service.

Finalist is a new fourth choice: a fast, fun and intuitive system with simple controls that keep you in the creative flow state and get you a great-sounding mix when you don't have the time, skills, desire or budget to get one done another way.

Unlike an AI tool, Finalist runs on your own machine, gives you realtime feedback, many more tweakable parameters, unlimited mixdowns and never asks you to pay for credits or a subscription.

3.2 How Does It Work?

Finalist combines audio analysis with a bespoke mixing engine and a ground-breaking mix preset system. It analyses your stems then uses hand-crafted mix presets to map the analysis data onto the mixing engine.

The mixing engine uses techniques similar to well-established plugins, as well as some novel ones developed specifically for Finalist.

The key difference is that Finalist's mixing engine is built from the ground up to be controlled by audio analysis data, via mix presets. Finalist's presets control how the audio analysis data is mapped on to the mixing engine.

3.3 Goals And Values

Finalist is not designed to put mix engineers out of a job. No matter how well-designed an automated system is, it will never be better than human experience, skill and taste.

In fact my hope is that Finalist will make mix engineers' jobs easier by providing a rapid mix prototyping environment. I also hope that it will encourage more people to take the next steps towards developing the skills and taste required to master the great craft of mixing.

Intuitive tools and high skills are only mutually exclusive when the intent is to disrupt an industry by deploying already vast wealth to fund technology with the aim of accumulating yet more wealth.

If you really want to take things to the next level, go hire a mix engineer or fall down one of the infinite rabbit-holes into the amazing techniques and technologies that made the embarrassment of fantastic-sounding music we enjoy today possible!

4. Installation

1. Firstly unzip the Finalist zip file to a location of your choosing.
2. Then download, install and launch the Native Access application from Native Instruments' website here
3. Once Native Access is launched, click 'Add Serial' and enter the serial number you have received.
4. You will then be asked to browse to the location where you unzipped the file and select the folder which contains Finalist.nicnt.
5. Once you confirm the folder selection, Native Access will install Finalist.

For support enquiries related to installation, please contact Native Instruments support

5. Getting Started

5.1 Using Finalist As A Plugin In Your DAW (recommended)

The recommended way to use Finalist is as a plugin inside your DAW. This gives you a number of advantages over using Finalist in the standalone Reaktor app. The main advantage is that you will be able to use your DAW's offline render functionality to bounce your mix as fast as your processor can do it.

5.1.1 Opening A Template (recommended)

Finalist comes with a collection of template sessions for a range of DAWs:

FL Studio
Ableton
Logic
Garageband
Pro Tools
Reaper
Bitwig
Cubase

1. Make a copy of the template for your DAW of choice and open the copy.
2. Once the file has opened in your DAW, the Finalist plugin window will open up on its file drop page.
3. From here just drop your audio files to get started.

5.1.2 Manually Setting Up Finalist In Your DAW

To manually set up Finalist in your DAW

1. Create a new project, set or session.
2. Create a new channel or track.
3. In the first plugin slot on the new channel, open the Reaktor 6 plugin.
4. From Reaktor's browser window, open Finalist.

5.2 Using Finalist In Reaktor Standalone

If you wish, you can use Finalist in the Reaktor Standalone app. This is not the recommended method as you will be limited to using Reaktor's in-built tape modules to record your mix to an external file.

1. Open the Reaktor app.
2. From Reaktor's browser window, open Finalist

6. Loading Audio into Finalist

Finalist and this manual refer to audio files as stems. A stem can be any audio file that is part of a collection of between 2 and 32 audio tracks that comprise a complete audio work.

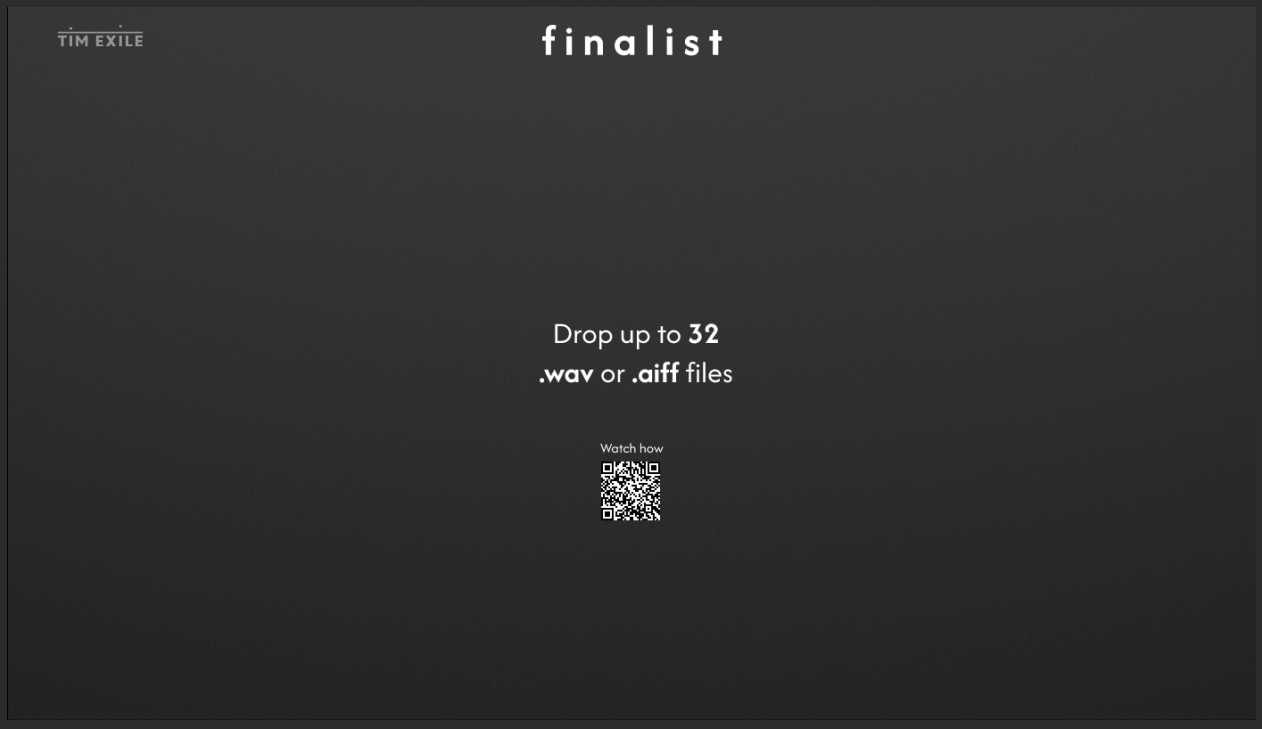
6.1 Preparing Your Audio

To prepare your audio to load into Finalist, first create a folder of stems from the project you intend to mix. It is recommended that stems have the same start point, length, bitrate and sample rate. Finalist is able to handle different lengths and bitrates but at the very least, your stems should share the same start point and sample rate. If not, your stems will play back out of sync in Finalist.

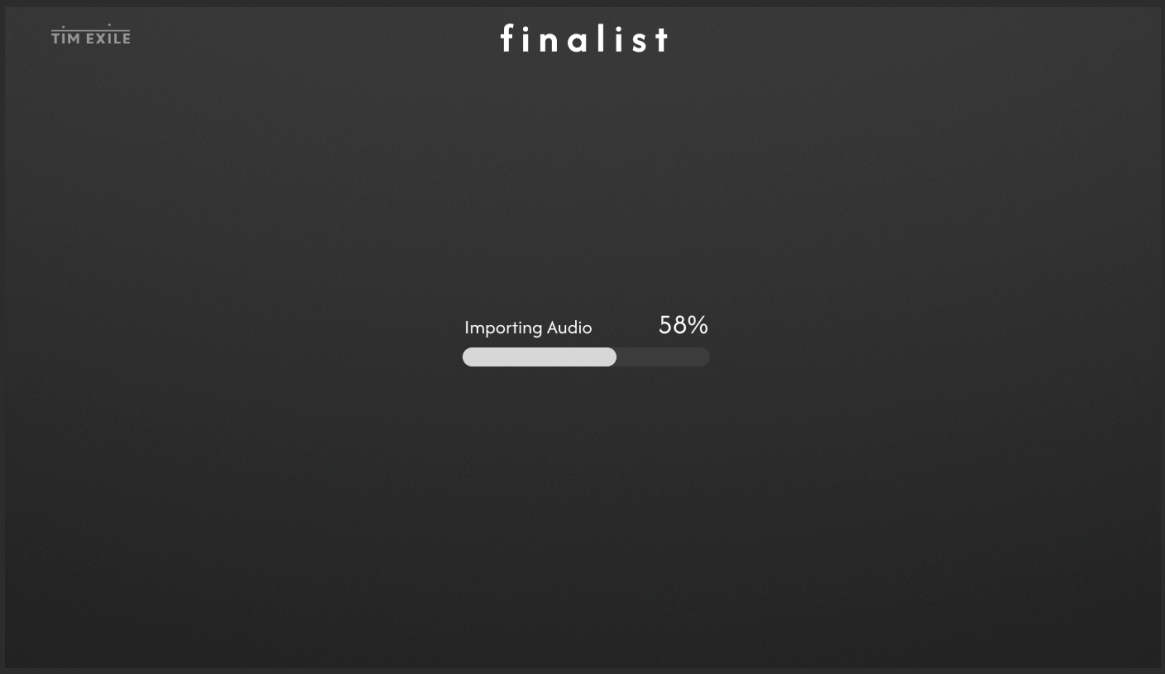
Follow your DAW's instructions to export individual stems from your project.

6.2 Loading Your Audio

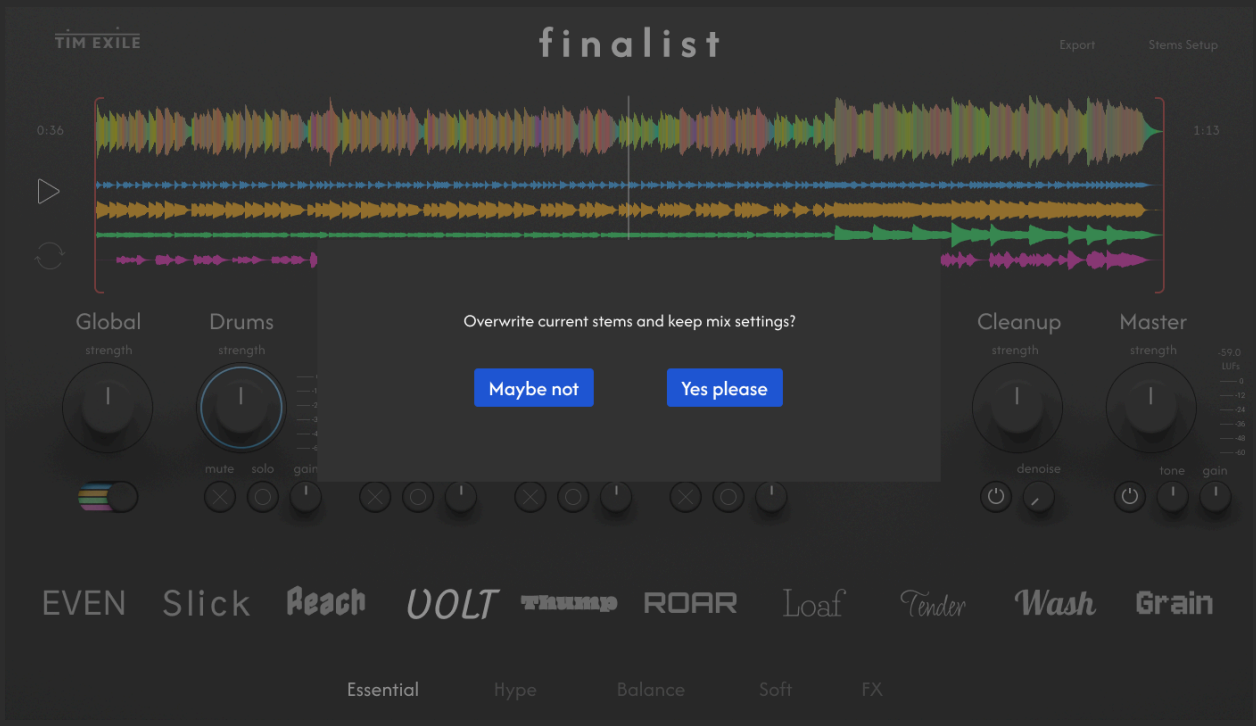
To load your audio into Finalist, select all the files you want to add to your mix then drag and drop them on Finalist's drop zone.



Finalist will then show a loading progress screen while it imports your audio, performs some initial analysis and builds waveforms.

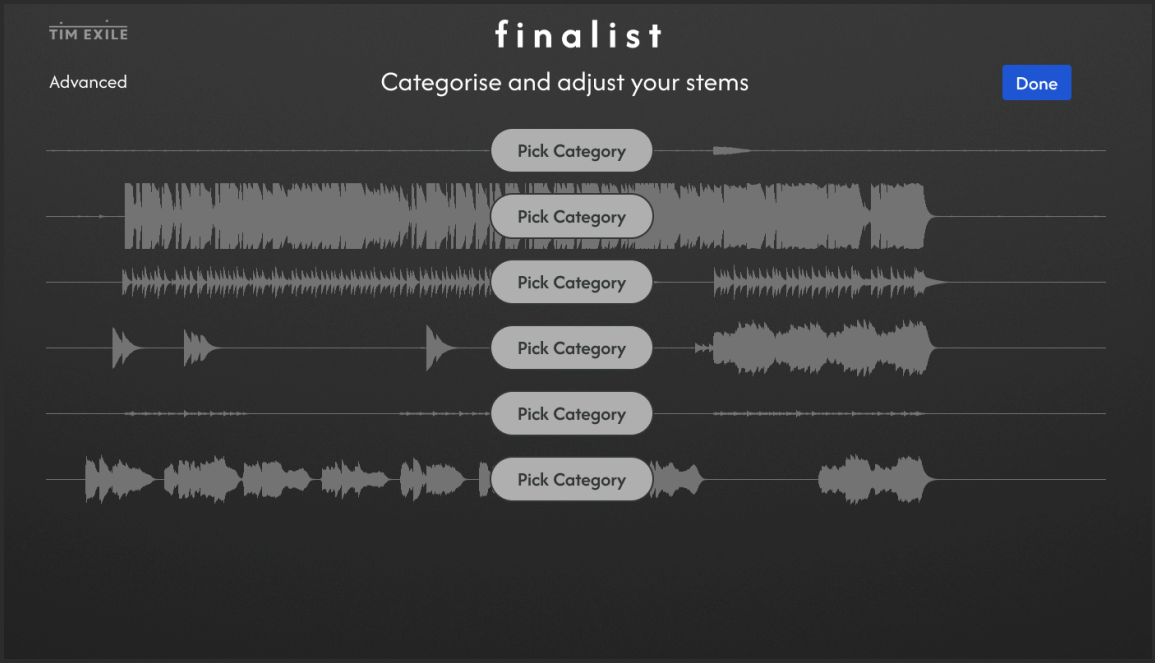


Tip: You can drop audio files on any page in Finalist, not just the file drop page. Finalist will give you context-sensitive options for how to handle those files.

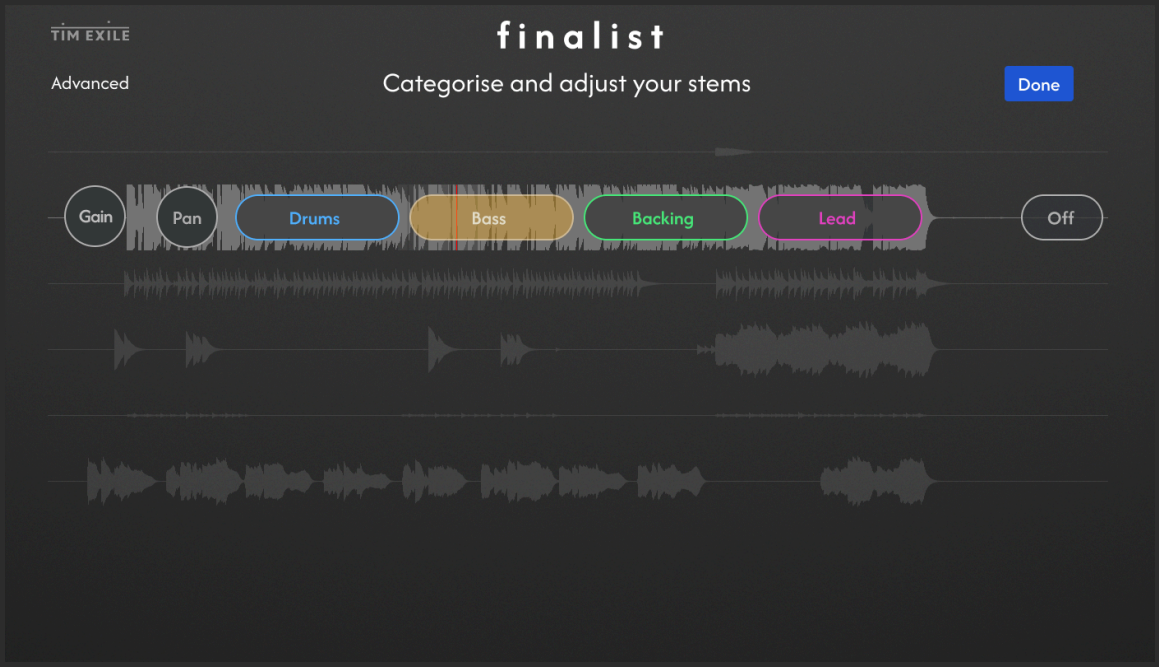


7. Categorising Stems

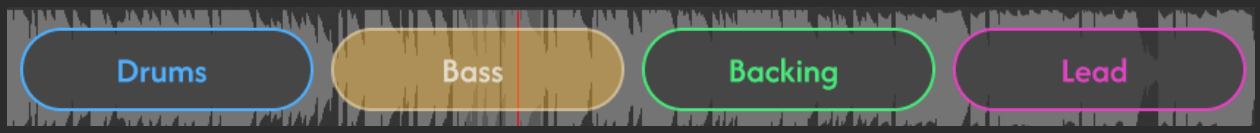
Once your stems have finished importing, Finalist takes you to the Categorise Stems page where you can set up your stems for mixing.



To audition a stem, mouse over it to hear looped sections of the stem and reveal the categorisation options.



Finalist offers 4 simple categories to choose from: Drums, Bass, Backing and Lead, as well as Off and Aux, if configured. The Aux channel is explained later in this manual.



Tip: These categories are guides to the system about how it should place a stem in the mix, rather than specific descriptions of an instrument or part.

If you're having trouble deciding how to categorise an element, try your best guess. If it doesn't work, you can easily come back to the Categorise Stems page and change your mind.

Here is a rough guide to how to categorise your stems:

7.1 Drums

Anything rhythmic and percussive but not melodic or harmonic.

7.2 Bass

Anything that is predominantly low-frequency. Bass guitars, bass synths, 808s. If you have multiple bass parts playing at the same time, consider categorising the part with the most prominent low frequencies as Bass and the other ones as either Backing or Lead.

7.3 Backing

Anything that plays a supporting role to whatever you categorise as Lead. Chords, pads, sound FX, backing vocals, risers, hits, reverbs and other processing.

7.4 Lead

Anything that is designed to command the most attention in the mix. Vocals, hooks, synth and guitar leads and solos.

If you dropped more than 16 stems on Finalist, make sure to navigate to the second page to categorise the second page of stems.

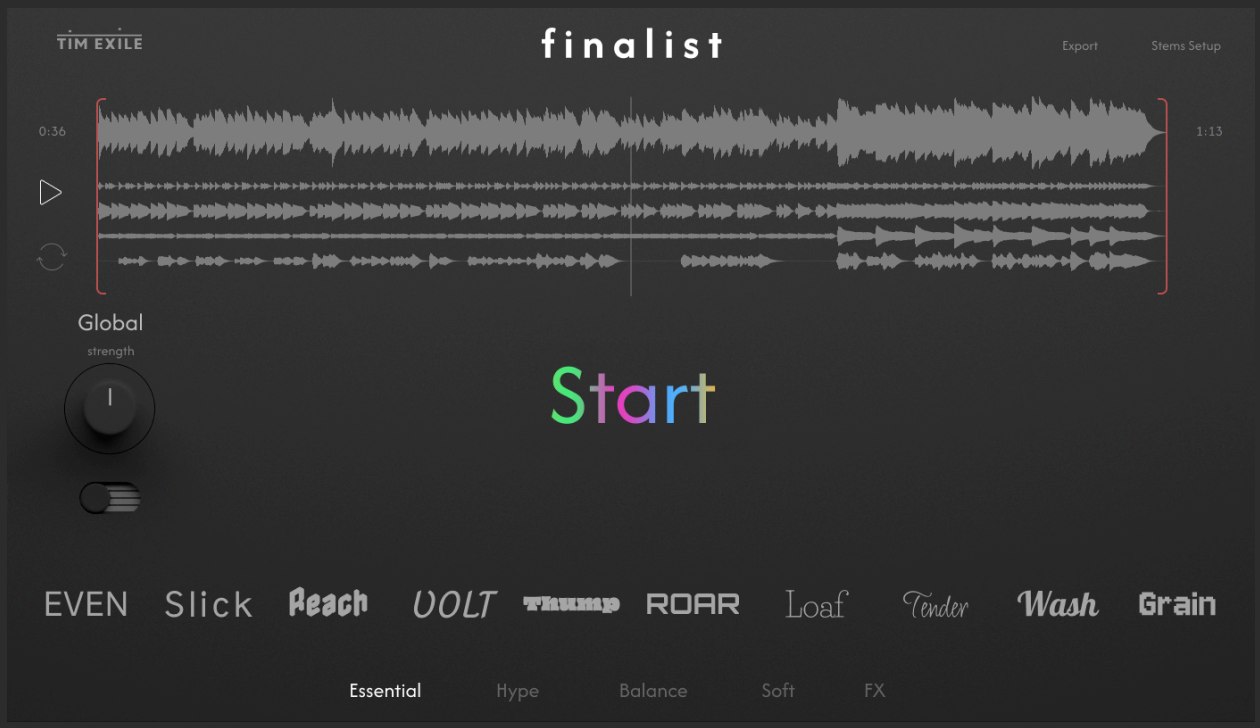
Once you have categorised your stems, hit the Done button. Finalist will proceed to analyse your audio in order to prepare for your mix.

8. The Basics Of Setting Up Your Mix

In this section we'll cover the basics you need to know to set up your mix.

8.1 Starting The Engine

Once Finalist has finished analysing your audio, it will take you to the main Mix page where it will start playback of your unmixed track.



To start the engine, either

1. Hit the large Start text icon in the centre
2. Hit the Mix enable button
3. Or select a preset from the preset browser

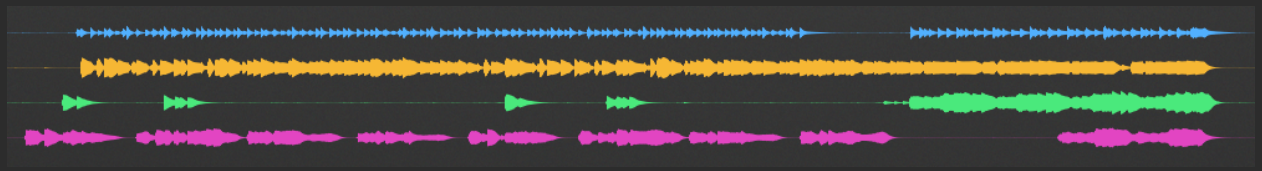
Once the engine is started, you will instantly hear the effect of the currently selected mix preset on your stems.

8.2 The Waveform Display

With the mix engine enabled, the interactive waveform display turns from monochrome to full colour.

The uppermost waveform displays an aggregate of all the group waveforms. Its colour changes over time, driven by the relative level of each of the groups at any one point.

The next four waveforms are the group waveforms:



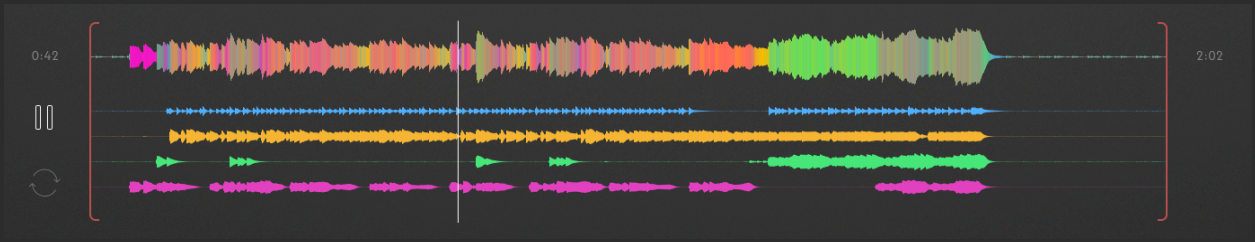
Blue = Drums
Yellow = Bass
Green = Backing
Pink = Lead

If the Aux channel is enabled, a fifth group waveform will appear in the corresponding colour to how the Aux is configured.

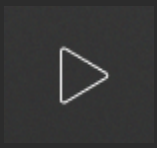
8.3 Playback control

Playback in Finalist is primarily controlled by the host environment. If you're running Finalist as a plugin in your DAW (recommended), Finalist's play state and position will lock to your DAW's transport. If you're running Finalist in the Reaktor standalone app, its playback will be controlled by the Reaktor transport in Reaktor's header.

In addition to host playback control, Finalist's playback can also be controlled in a number of ways by interacting with the waveform display.

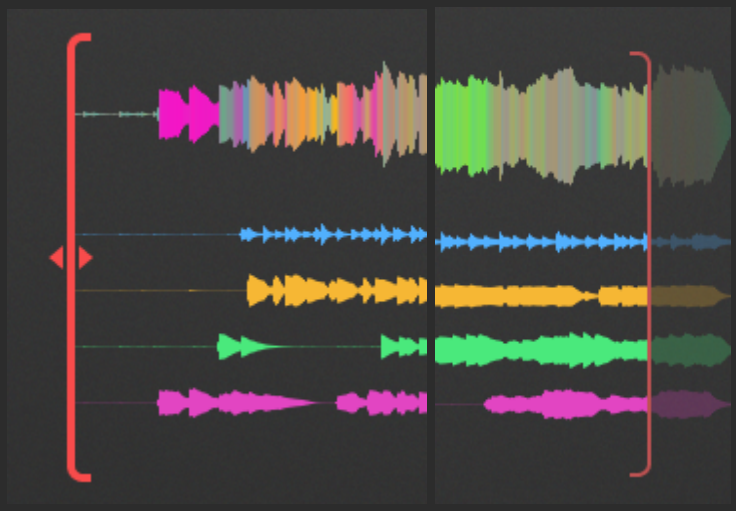


8.3.1 Play/pause



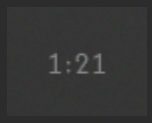
Clicking on the play / pause button to the left of the display will toggle playback between play and pause.

8.3.2 Setting Start And End Points



To the left and right of the waveform display, there are two red handles defining the start and end points of the playback range. Click and drag these to adjust the start and end points.

8.3.3 Time And Length



To the top left of the waveform, a numeric readout displays the current play position in seconds. To the top right of the waveform, a numeric readout displays the total length of the track.

8.3.4 Scrubbing

Clicking and dragging on the uppermost waveform initiates scrubbing through the full track. If the transport is currently paused, this is momentary and ends once the mouse is released.

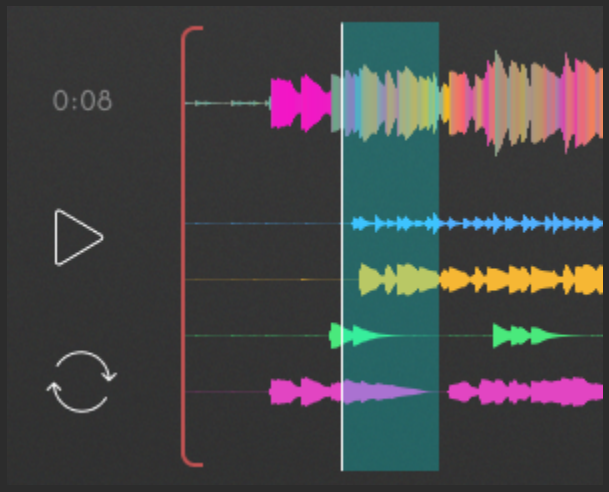
If the transport is playing, releasing the mouse will let the transport continue from the last dragged point. If playback was initiated from the host, this will cause the transport's position to become desynced from the host. In order to re-establish sync, stop and restart the host transport.

8.3.5 Solo-Scrubbing

Clicking and dragging on the group waveforms initiates solo-scrubbing through The selected group. This behaves exactly the same as scrubbing described above, however

with solo mode enabled. The group currently soloed changes according to the waveform you're currently dragging over.

8.3.6 Looping

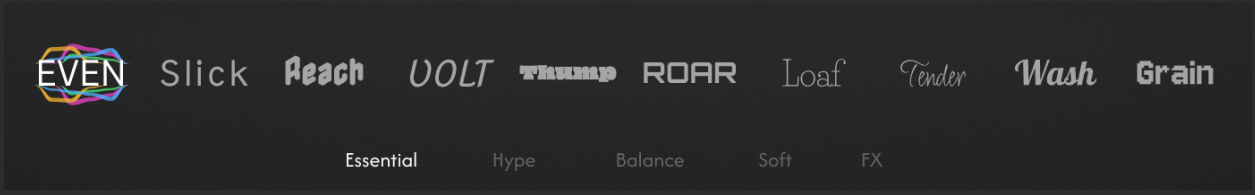


If you want to focus on a particular section of your track to dial in your mix, a 5-second section of the track can be looped. Double click at the start of the section to enable the loop. Single-click or drag anywhere on the waveform to move the loop start point. Double-click to toggle it off again.

You can also enable or disable the loop functionality by clicking on the loop icon below the play/pause button.

8.4 Selecting Presets

The Collection and the Preset selectors are found in the lower section of the main Mix page.



Click on a collection to reveal its presets. Click on a preset to recall it.

There are five Collections, each containing 10 presets

8.4.1 Essential

A broad range of styles from balanced (Even, Slick, Reach) to hype (Volt, Thump, Roar) and soft (Loaf, Tender, Wash, Grain)

8.4.2 Hype

Savage, Bang, Grunt, Squash, Slam, Halo, Brute, Scorch, Brick and Hog are hot and loud presets suited for EDM, Trap, Hiphop and hard rock styles.

8.4.3 Balance

Tight, Poise, Axis, Open, Crisp, Sheen, Ray, Bare, Glue and Root are more balanced presets suited for pop, down-tempo and vocal or melody-led music.

8.4.4 Soft

Deep, Galaxy, Float, Buried, Feather, Drift, Haze, Velvet, Wrap and Ember are softer presets more suited to ambient music.

8.4.5 FX

Chewed, Ripped, Lid, Flip, Null, Oops, Fuzz, Wrong, Skew and Snip are all creative FX presets offering extreme manipulations for creative experimentation.

8.5 Adjusting The Modules

There are 8 modules spanning the centre of the main Mix page, each providing a simple set of controls to adjust your mix.

Tip: Module adjustments are not reset by switching mix presets. The module adjustments operate as macro controls a level above the mix presets so your adjustments are always remembered.

8.5.1 Global

8.5.1.1 Strength

The large mix knob controls the global strength of processing of all the other modules. Turning this knob causes the strength knobs on all the other modules to show an offset to their value. At its default 12 o'clock position it has no effect on the other module strengths.

8.5.1.2 On/Off

Beneath the large Global strength knob is the mix enable toggle. Clicking this toggle turns the mix processing on and off.

8.5.2 Drums, Bass, Backing, Lead

The Drums, Bass, Backing and Lead modules control their respective stem groups. They each have a large strength knob, a smaller Gain knob and Mute and Solo buttons.

8.5.2.1 Strength

Each module features a large strength knob which controls the strength of processing applied. At its default 12 o'clock position the mix preset parameters are passed to the mix engine unchanged. Turning the knob down reduces the strength of mix processing. Turning the knob up increases the strength of mix processing.

Below each module's large strength knob are Mute and Solo buttons and a Gain knob.

8.5.2.2 Mute

The Mute button mutes its respective stem group.

8.5.2.3 Solo

The Solo button solos its respective stem group. Multiple Solo buttons can be activated at once, summing all active solo groups.

The Solo buttons also work in sync with the solo-scrubbing functionality as described above. Solo-scrubbing a waveform overrides any pre-existing solo button states.

8.5.2.4 Gain

The Gain knob increases or decreases the gain of the respective stem group by the amount displayed.

8.5.3 Aux

The Aux module, when enabled, functions as a fifth stem group featuring the same controls as the Drums, Bass, Backing and Lead modules.

The Aux module is explained in greater depth later in this manual

8.5.4 Cleanup

The Cleanup module provides two processes to help clean up a mix. It has a large Strength knob, a smaller Denoise knob and an On/Off button.

8.5.4.1 Strength

The large Strength knob controls the processing strength of an algorithm which reduces frequency band conflicts between stem groups.

Tip: This algorithm has the greatest effect on material with a lot of parts competing for the same frequency bands. If the mix material has been carefully arranged, the effect of the Cleanup algorithm will be less perceptible. Even when its impact is inaudible, the Cleanup algorithm can help increase headroom and loudness in a mix by eliminating masked audio signals.

8.5.4.2 Denoise

The second Cleanup function is a noise reduction algorithm, controlled with a smaller knob below the large strength knob.

The noise reduction algorithm helps reduce background noise in noisy recordings. In some cases it can also help tighten up a mix that has a lot going on in the background.

8.5.4.3 On/Off

The On/Off button toggles the Cleanup process on and off.

8.5.5 Master

The Master module applies a mastering chain to the summed outputs of the stem groups. It offers a large Strength knob, a smaller Tone and Gain knob and an On/Off switch.

8.5.5.1 Strength

The large Strength knob controls the strength of processing applied by the master chain. At its default 12 o'clock position the master preset parameters are passed to the mix engine unchanged. Turning the knob up increases the level of mastering processing. Turning it down reduces it.

8.5.5.2 Tone

The Tone knob adjusts the overall tonal balance of the output. At its default 12 o'clock position the tone remains unchanged. Turning the knob to the right yields a brighter tone. Turning the knob to the left yields a duller, warmer tone.

8.5.5.3 Gain

The Gain knob adjusts the gain of the output of the mastering chain before it hits the output limiter.

Tip: Above 3dB boost, the gain knob activates an additional matrix of limiters operating at other nodes in the mix and mastering chain in order to maximise loudness for genres that require competitive loudness. At extreme settings this can lead to a densely saturated sound.

On/Off

The On/Off button toggles the Master process on and off.

9. Exporting Your Mix

Once you've set up your mix, there are a number of methods to export it. The recommended method is to use your DAW's offline render functionality, but you can also record the output live into your DAW. If you're using Finalist in the Reaktor standalone app, you can use Reaktor's inbuilt tape player module to record your mix to a file.

Tip: If you want to change the resolution or format of the file you're exporting, you can do this in your DAW. Finalist adopts your DAW's sample and bitrate settings.

9.1 Using Your DAW's Offline Render Function

To use your DAW's offline render function to export a mix:

1. Make sure you have your Start and End Points set correctly in Finalist. When you render your mix offline, playback will start from the Start Point marker set in Finalist and will end at the End Point marker.
2. Note the play length of the track displayed in Finalist to the top righthand side of the waveform display. You can also open the Export page which gives you export instructions. The instructions on that page will tell you the length of your track.
3. In your DAW's transport, select the length of the track, starting at the very beginning. If you do not start at the beginning, the render will start part way through your track.
4. Now follow your DAW's process to trigger its offline render function.

9.2 By Recording Live Into Your DAW

To record live into your DAW:

1. Create a new audio track in your DAW
2. Set the outputs of Finalists channel to connect to the inputs of your new audio track
3. Follow steps 1 through 3 in *Using Your DAW's Offline Render Function* above
4. Arm recording on your new audio track
5. Start recording

Tip: If you want to perform additional actions on your final recorded file, such as creating a fade in / out or further edits, you can now do this on your recorded file.

9.3 By Using Reaktor’s Inbuilt Tape Module

Reaktor offers an inbuilt tape recorder that can be used to record its output and save it to a file:

1. Enable Reaktor’s Tape Recorder module by clicking the tape icon in the top righthand corner of Reaktor’s interface
2. Click the folder icon to name a file and set a destination folder to record to
3. Make sure you have your Start and End Points set correctly, that the play position is dragged to the very beginning, and that playback is currently stopped.
4. Click the tape module’s small record button circle to arm recording
5. Click the tape module’s play button to start recording
6. Click the play button in Finalist’s interface
7. Wait for the track to finish playing, then click the small triangle play button in Reaktor’s tape module
8. Your file will now be ready to play back in the destination you set

Congatulations, you’ve made your first mix with Finalist!

10. Advanced Mixing Techniques

Now that we've covered the basics, let's dive into some of Finalist's more advanced features which lurk just below the surface to give you extra tweaking superpowers!

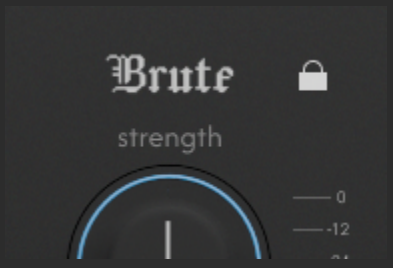
10.1 Using Module Locks

When you hover over a module's title, an unlocked padlock icon appears.

Clicking this locks the respective module to the current preset, displaying a locked padlock next to the module's title. While enabled, mix preset changes will no longer affect this module.

Additionally, if a module is muted or solo mode is active but not enabled on one of the stem group modules, the module will also be temporarily locked until it is either unmuted or solo mode is deactivated.

As soon as a module's locked preset deviates from the currently-selected mix preset, the module's title will change to the font of the preset which the module was locked to. When you hover over the module, the title will change to the title of the preset it was locked to.



Tip: Module locks are a super-power for quickly customising your mix. Try auditioning mix presets and listening to how they sound on each of the stem groups. If you find a preset that, for example, works well on the drums but the other groups not so well, lock the drums and continue browsing through presets, repeating the process for the other groups.

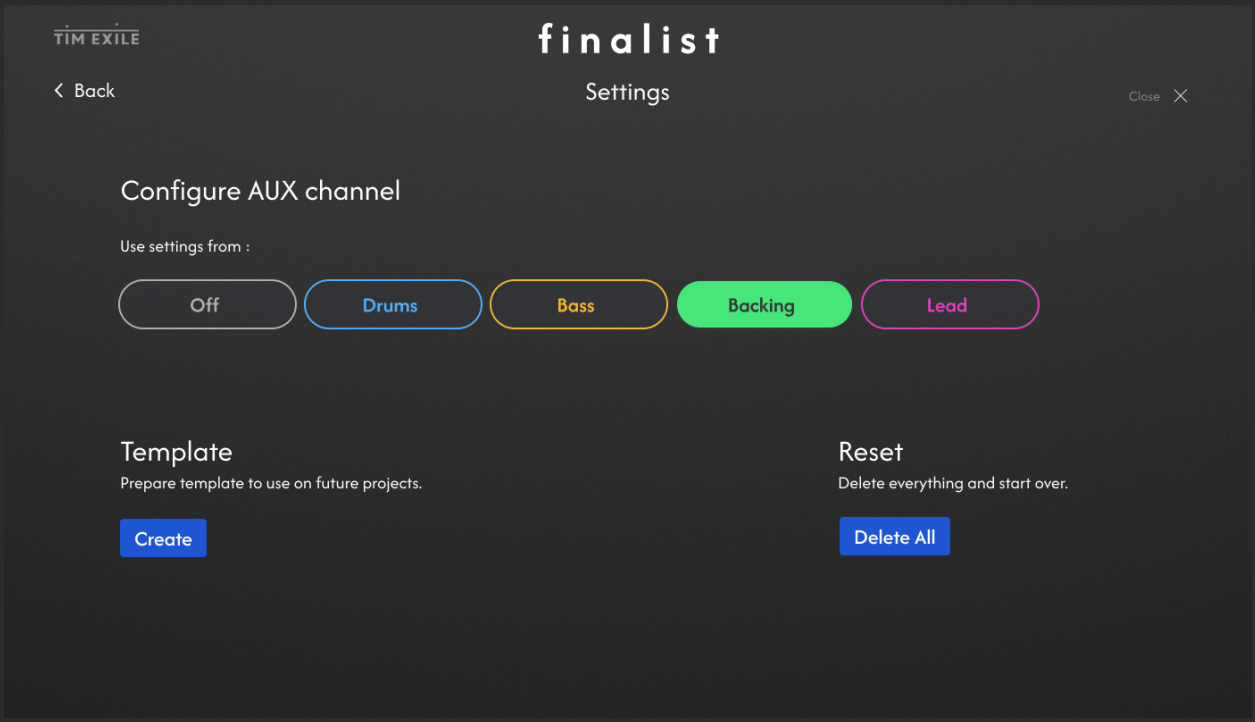
10.2 Using the Aux Channel

The Aux channel offers an additional channel in case you want to create more separation between elements in your mix.

Tip: The Aux channel is disabled by default for the sake of simplicity. In most cases, a good-sounding mix can be achieved just by using the 4 main groups, but don't let that stop you from trying it out.

10.2.1 Enabling The Aux Channel

The Aux channel configuration controls are located on the Advanced settings page which can be accessed by clicking Advanced on the Categorise Stems page, or by clicking Enable on the Aux module on the main Mix page.



By default, the Aux module is configured in its 'Off' state. Selecting Drums, Bass, Backing or Lead enables the Aux channel and configures it to adopt the parameters of the selected stem group.

Once configured, click 'Back' or 'Close' to return to the Categorise Stems page.

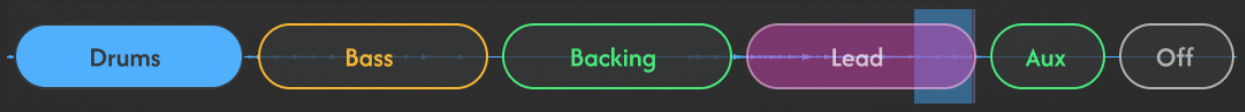
Tip: When the Aux channel is enabled, the Aux and its corresponding group level are both automatically attenuated by -4dB. So for example, if you configure Aux as Backing, both the Aux and Backing channels will be attenuated by -4dB. This is because the energy of

the material is being distributed across two groups but the analysis and mix preset engine are treating the material on each group as if it was summed to a single group.

In testing, it was found that a -4dB attenuation was the most widely acceptable attenuation level to yield a balanced mix in most conditions. As a result, when using Aux channels, you may need to make heavier use of the stem group Gain controls.

10.2.2 Recategorising Stems

Once the Aux group has been enabled, an additional Aux category will show up when you mouse over a stem. To recategorise a stem, follow the same procedure as detailed in the initial stem setup.



10.2.3 Reanalysing

Once you've categorised your stems, hit the Done button in the top righthand corner of the Categorise Stems page. This will trigger a reanalysis of the stems. Once the reanalysis is complete, you will be taken back to the main Mix page.

Tip: Whenever stem settings are changed, the system needs to perform a reanalysis in order to match the updated dynamic and frequency profile of the stem groups to the mix presets.

10.3 Adjusting Stem Gain And Pan In Stem Setup

As well as configuring the Aux channel and recategorising stems, the levels and pans of stems can be adjusted on the Categorise Stems page.

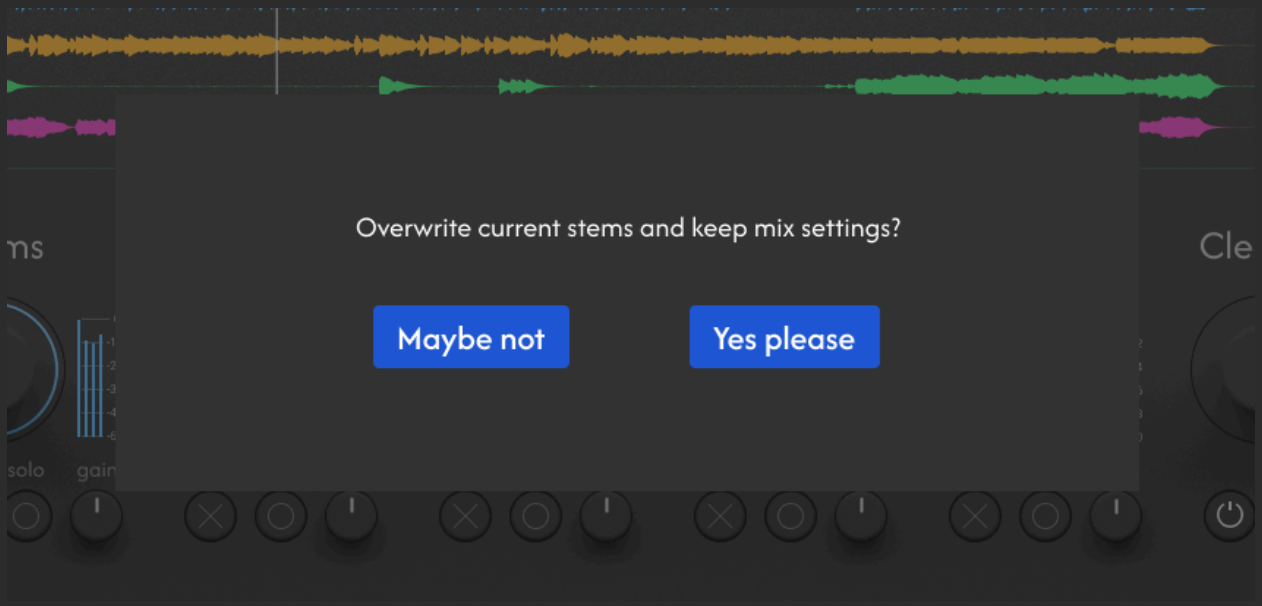
To access these controls, hover over the stem you want to adjust. On the lefthand side there is a gain and a pan knob which you can use to dial in the required adjustment. Drag the Gain knob up and down, drag the Pan knob left and right.

Once you've performed your adjustment, hit the Done button in the top righthand corner of the Categorise Stems page. This will trigger a reanalysis of the stems. Once the reanalysis is complete, you will be taken back to the main Mix page.

Tip: Since adjusting stem gain happens before reanalysis, this will only affect the relative levels of stems within a group. If a stem has been increased by 6dB, the system will detect the higher overall level of the group and attenuate it accordingly.

10.4 Reimporting Stems

If you want to make updates to the stems you uploaded, you can drop your updated stems on Finalist. In this scenario, Finalist will retain all your mix settings.



It will ask you to confirm that you want to overwrite your original stems. It will then perform the import and take you to the Categorise Stems page where you can recategorise your stems as outlined earlier in the manual. Once your stem recategorisation is complete, hit Done. Finalist will reanalyse your stems and take you to the main Mix page.

10.5 Bouncing Out Stems

As well as the master output, Finalist offers separate outputs for the stem groups: Drums, Bass, Backing, Lead and Aux. When running Finalist as a plugin in your DAW, you can connect these separate outputs to their own audio channels or busses for further processing, or to record the individual processed stems.

In your DAW, the multiple outputs appear as:

Reaktor 2: Drums
Reaktor 3: Bass
Reaktor 4: Backing
Reaktor 5: Lead
Reaktor 6: Aux

Tip: The multiple outputs from Finalist sum together to be exactly the same as the main stereo output. This is because the effect of the mastering chain, although responding to the sum of all the stem groups, is also propagated to the individual group outputs.

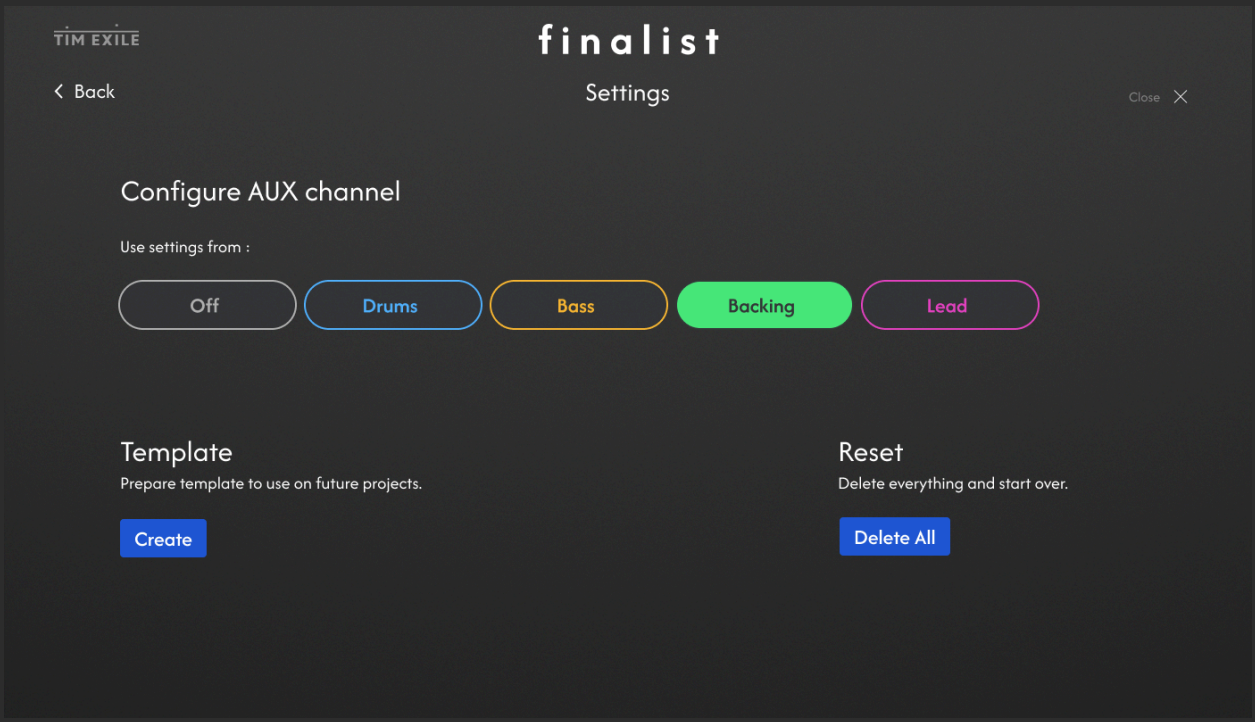
Offering this feature is a unique advantage of a closed box mixing engine. This is technically impossible to achieve in a DAW. This unlocks the possibility of releasing stem packs for your releases that sound exactly the same as the master file when summed together, opening up opportunities for releasing music to be used in DJ platforms that support stems.

Until now, the only viable route to create stems that summed perfectly to the master was AI stem separation, which comes with its own tradeoff in terms of quality and artefacts.

10.6 Creating A Mix Template

If you arrive at a customised mix of your material that makes heavy use of module adjustments, locks, the Aux channel and other customisations, you may want to create a template for future mixes.

To do this, click ‘Stems Setup’ on Finalist’s main Mix page to return to the Categorise Stems page, then open the Advanced settings page.



At the bottom of the Advanced page is a Create Template button. Clicking this launches a dialog box which asks for your confirmation to delete the current stems, retain the mix settings and return Finalist to its Stem Drop page.

Once Finalist has returned to its stem drop page, you can save this template as a User Preset in Reaktor, or save your DAW project as a template file.

10.6.1 Saving Your Template As A User Preset In Reaktor

To save your Finalist mix template as a User Preset in Reaktor:

1. Click the magnifying glass icon to open Reaktor's browser sidebar
2. Click to the Presets list icon at the top of the header to open the preset browser
3. Click the User icon beneath to access the User presets
4. At the bottom of the User presets sidebar, click the Add button
5. Give your preset a name and hit enter

Now your mix template will be available to you whenever you load up Reaktor.

10.6.2 Saving Your Template As A DAW Project

To save your Finalist mix template as a DAW project, simply save the current DAW project as a different file and give it an appropriate name.

You may also be able to create a template inside your DAW which can be selected as an option whenever you start a new project. Whenever you load this template project, you will be able to immediately drop your new stems on Finalist's drop page.

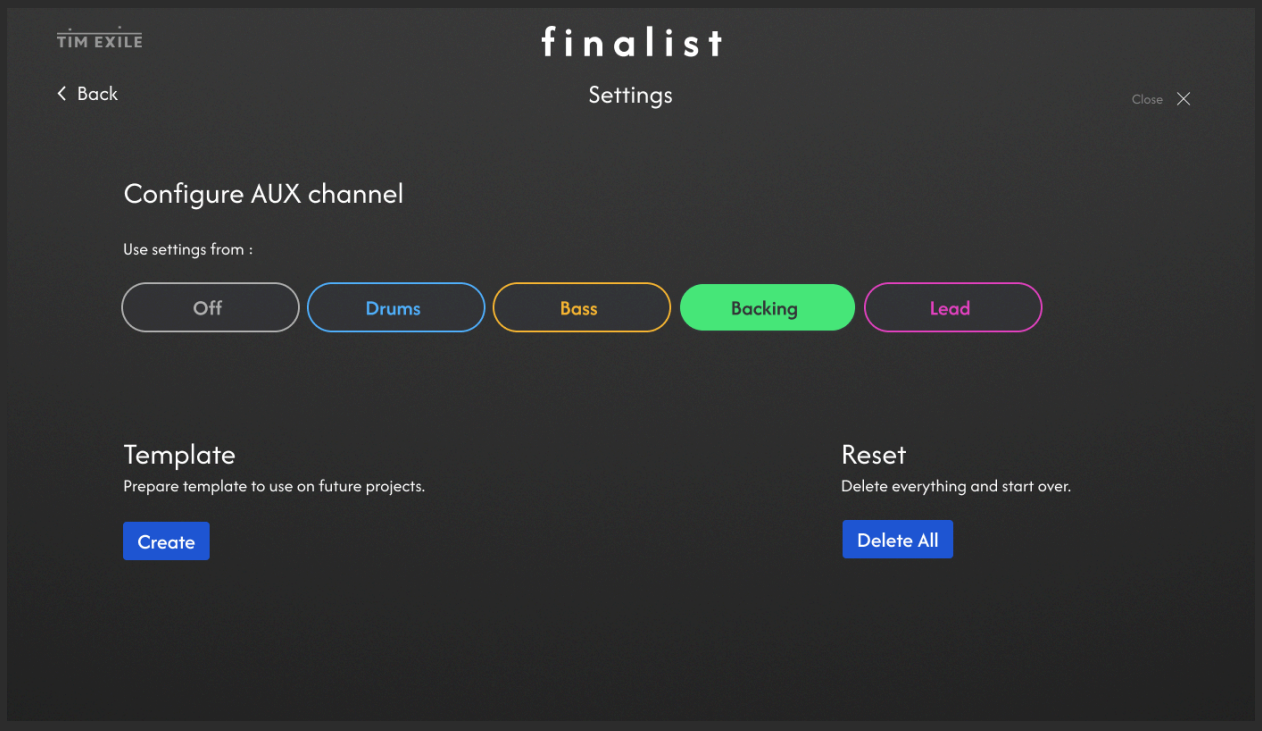
Once import, analysis and categorisation are complete, your mix template will automatically be applied to your new stems.

10.7 Deleting Everything And Starting Over

If you ever need to delete everything, including stems, categorisations and mix settings, you can achieve this in two ways, either by deleting everything inside Finalist, or loading one of the 4 initial mix templates which ship with Finalist.

10.7.1 Deleting And Starting Over In Finalist

To delete and start over in Finalist, hit Stems Setup to return to the Categorise Stems page. Click Advanced to open advanced settings. Now hit the Delete All button. You will be asked to confirm. On confirmation, Finalist will delete all stems and settings and return to the Stem Drop page.



11. Troubleshooting

Finalist is not fool-proof! Any system with automation has its limits.

Finalist is also developed in Reaktor, an environment with its own limitations. While Reaktor is incredibly powerful for developing bespoke DSP (Digital Signal Processing) and audio applications, there are some features expected of modern User Interfaces which it is not capable of delivering.

Every effort has been made to provide the fastest, most accurate and intuitive experience possible, but there's always room for improvement.

This section helps you navigate any problems you might run into and find workarounds to the limitations of the system.

11.1 Audio Loading Problems

Reaktor is capable of loading correctly-formatted .WAV and .AIFF files of any resolution from 11kHz 16-bit up to 192kHz 32-bit floating point and beyond. It doesn't support any compressed formats such as MP3, AAC, OGG or FLAC.

However in testing, it has emerged that Reaktor is unable to load some audio files. On investigation, this is not a resolution issue, rather an issue with how the file's metadata has been formatted.

In particular, files recorded in mono on hardware recorders such as the 1010 Bluebox or Tascam Model 12 mixer seem not to be recognised correctly by Reaktor and therefore Finalist.

Native Instruments are aware of the issue but as of writing have not been able to confirm whether this issue will be actioned for a fix.

In the meantime, if you encounter an audio file that will not load into Reaktor, using a batch converter such as Presonus Audio Batch Converter is recommended. You can also load the files into your DAW and re-export them. Thankfully, it seems files exported from all major DAWs can successfully be loaded into Finalist.

11.2 User Interface Limitations

Much effort has been put into delivering a modern app experience with the Reaktor framework. There is room for improvement in some areas and not in others.

During beta-testing, many have already requested greater flexibility around how stems are loaded, such as loading stems one at a time or reuploading individual stems in the Stem Categorisation page without needing to repeat categorisation. This is possible. It will require some refactoring and therefore some effort, but it is planned once the launch campaign is complete.

Another common request has been file name labels on the stems. Unfortunately this is beyond the capabilities of Reaktor. Reaktor is unable to handle text strings and therefore has no way of exposing file names to the structure. To compensate for this, extra effort has been made to make it easy and intuitive to audition the content of a stem by viewing its waveform and hovering over it.

If you run into any issues, please send a mail to bugs@timexile.com detailing the problem you're running into.

11.3 Mix Level Problems

Finalist's mix analysis engine isn't fool proof! If you're having problems balancing levels in your mix, or sounds are popping out in extreme and unexpected ways, here are some good things to know and some strategies to apply.

11.3.1 Switching Presets And Using Module Locks

The first method to solve level problems is to try different presets. You may be able to find a preset that works for the stem group you're looking to find a solution for. If you find a preset that works for a certain stem group, try using the module lock to lock that stem group to that preset so you can explore other presets for the other stem groups and modules

11.3.2 Understanding The Limits Of The Analysis Engine

The analysis engine pulls out 60+ audio features per stem group and uses these to set up the mix engine to achieve the result mapped by the mix preset.

11.3.2.1 Uneven Distribution Of Program Material

One key assumption the system makes is that there is a fairly even distribution of fairly similar material throughout the play length of the stem group. The system is robust to larger variations such as a long intro followed by a long track, but stem groups that feature just a very short section of program material in a long period of silence may end up being over-amplified in the mix.

11.3.2.2 Longterm Variations In Dynamic Profile

In another case, if the dynamic and frequency range of material varies significantly throughout the stem group over longer ranges, this may cause some parts of the material to pop out of the mix while others are more buried.

Generally speaking, the analysis system does a good job of identifying if there's a wide dynamic range in a certain frequency band and compensating for this. However, the system is unable to separate material into sections with different attributes. If your track has two distinct sections and you're having trouble getting the system to give you a balanced level, try using the Aux channel to separate out the stems from the two sections.

11.3.2.3 High Noise Floors

The final known case where problems can occur with the analysis phase is in material with a very high noise floor. Specifically, if your material's noise floor is significantly above -60dB, this can cause problems with the analysis as the system begins to detect the noise as program material. Some strategies have been implemented to minimise this, but if you're getting signals jumping way out of the mix, this could be a possible culprit.

11.4 Audio Quality Problems

If you're having issues with audio quality, in most known cases, this will be down to the combination of the preset used, the program material and the output gain level set.

Finalist uses analog modelling algorithms to add warmth to the stem groups and mastering chain. The amount of this processing changes from preset to preset.

In general, presets from the Hype collection drive the analog modelling algorithms harder, which may lead to stronger artefacts from some material. By contrast, many of the Balance and Soft presets use a lot less analog modelling. But not all - notably Grain and Ember both employ a lot more analog warmth. You will be able to tell if a given preset is introducing artefacts on a given stem group or master chain by dialing the strength knob fully anticlockwise to zero.

In addition to the analog modelling circuits, Finalist uses a brickwall limiter algorithm at multiple nodes in the summing chain as well as the final output stage to help achieve maximum loudness.

When driven to extreme levels, this can manifest as a saturated sound. When boosting the Master output gain beyond 3dB, be careful to listen out for degradation in the audio in the form of a saturated sound, pumping or transients beginning to disappear in the mix.

12. Acknowledgements

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