

# Zykon Limiter

The best limiter that you will ever use !

## Table of Contents

- [Installation](#)
- [Intended Use](#)
- [Threshold](#)
- [Mode](#)
- [Punch](#)
- [Attack](#)
- [Release](#)
- [Channel Link](#)
- [Input/Output Gain](#)
- [LUFS Metering](#)
- [Toolbar](#)
- [Settings](#)

## Installation

To install the product, just download the demo from the zykon software store. Open the installer and follow the instructions. If the limiter is not showing up in your DAW you can check the following things: MacOs: Is the plugin being installed under /Library/Audio/Plug-Ins/VST3 or ~/Library/Audio/Plug-Ins/VST3 /Library/Audio/Plug-Ins/Components (AU)? /Library/Application Support/Avid/Audio/Plug-Ins (AAX)? If it is not there try rerunning the installer. If that didn't work - contact us - we will figure it out :) If you CAN find the limiter in one of the folders specified above you probably haven't set up these locations as plugin locations in your DAW. We recommend that you should do this since these are the official locations for installing plugins.

Windows: Check the folder C:\Program Files\Common Files\VST3 C:\Program Files\Common Files\Avid\Audio\Plug-Ins (AAX)

and see if the Zykon Limiter shows up there. If you can't find the limiter there contact us - We'll figure it out :) If it shows up there however, you probably haven't set up this path in your DAW as a Plug-In location. So please set this path as a Plug-In location in your DAW (You will save yourself a lot of trouble with other Plug-Ins as well)

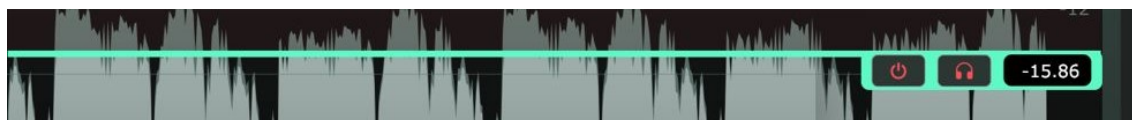
## Intended Use

The Zykon Limiter was developed to make limiting as easy as possible. We believe that making tools that are easy to use will benefit a musician more than some sort of analyzing AI that doesn't work anyways. So in order to make the most out of your limiter we recommend the following approach to limiting your master:

- Start in "Easy" mode
- Bring down the threshold until your track starts to loose too much punch
- Turn up the punch slider to a point where you can here some slight distortion
- Bring back the punch a notch
- Done!

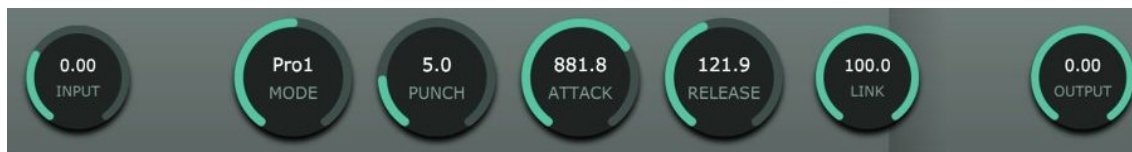
By following these steps you should have a result that is neither pumping nor distorting, determined by your own ears and liking! If you want to tweak your track further you can switch to the Pro modes and experiment with changing the dynamics of the track by using the Attack and Release controls. However we want to emphasize that you should get a good knowledge of what [Attack](#) and [Release](#) are doing before potentially ruining your track :D

## Threshold



The threshold parameter in our software controls the point at which the dynamics processing kicks in. It determines the input level at which the compressor or limiter starts reducing the signal's gain. Adjusting the threshold allows you to affect the dynamic range of your audio. Every incoming signal that goes above the threshold will be turned down to a point that it does not exceed the threshold. However the headphone button lets you activate/deactivate the make up gain. The make up gain will apply an output gain of exactly the number of decibels that you turned down the input signal with the threshold. If your threshold is at -12dB f.e. and make up gain is active, the make up gain will apply a 12 dB boost to your signal.

## More Controls...



## Mode

The Mode parameter lets you choose between 3 different modes. Easy mode is for everyone who wants quick and easy (duh) results. See [intended use](#) for more infos. The Pro1 and Pro2 modes allow you to work on the dynamics of the track a little bit more and offer a smoother but more cpu intensive processing. We recommend to try using the Pro modes with high attack and medium release times if you opt for maximum loudness. (Also check out the maximum loudness preset)

## Punch

The "Punch" feature is designed to enhance the transient response of your audio material. By applying carefully tuned adjustments to the transient signals, you can emphasize the initial impact of sounds, making them stand out more prominently in the mix. This can be particularly useful for drums, percussion, and any other elements requiring greater attack and impact. Try to use Punch in the Pro modes with a high Attack and a low Release - This can really make things pop!

## Attack

The attack time parameter governs how quickly the dynamics processor responds once the incoming signal surpasses the set threshold. A shorter attack time can result in quicker compression or limiting, effectively controlling rapid transients. On the other hand, longer attack times can allow more of the transient portion to pass through before the processing engages, potentially preserving more of the original dynamics.

## Release

The release time dictates how long it takes for the dynamics processor to return to its normal state after the input signal falls below the set threshold. A shorter release time can result in faster recovery, while a longer release time allows the processor to gradually release the gain reduction. Adjusting the release time helps you tailor the dynamic behavior to better match your audio material and musical context.

## Channel Link

The channel linking feature enables you to link the dynamics processing settings of multiple channels together. This ensures that the same processing parameters are applied to all linked channels simultaneously. Channel linking is particularly useful when working with stereo tracks or when you want to maintain consistent dynamics across multiple related audio sources.

## Input/Output Gain

The input and output gain controls allow you to adjust the level of the incoming signal before it reaches the dynamics processor (input gain) and after it has been processed (output gain). Properly setting these gains is crucial for achieving optimal dynamics processing without introducing unwanted distortion or noise.

## LUFS Metering

The LUFS (Loudness Units Relative to Full Scale) metering provides valuable insights into the perceived loudness of your audio material. By measuring the integrated loudness over time, you can ensure that your content adheres to loudness standards and maintains a consistent volume level across different tracks or sections.



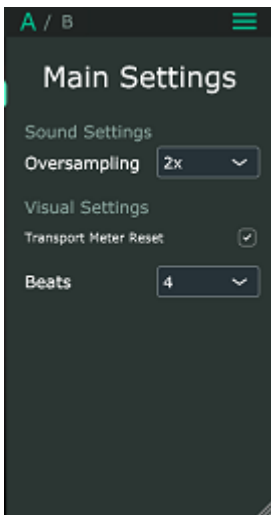
## Toolbar



The toolbar hosts a set of essential controls and shortcuts that streamline your workflow. You have the possibility to Undo/Redo your parameter changes and save presets. The A/B feature allows you to compare settings of the limiter easily. On the right hand side you can find the settings menu which lets you adjust further sound and visual settings of the limiter.

## Settings

The settings menu allows you to customize various aspects of the software to match your preferences and requirements. From interface themes and display options to advanced configuration settings, the settings menu empowers you to tailor the software's behavior to your specific needs.



### Sound settings

**Oversampling:** Oversampling increases the internal samplerate of the limiter and cuts away potential artefacts that can occur due to distortion. You can choose between 1x (no oversampling), 2x and 4x oversampling. In theory higher oversampling rates are possible but not necessary for limiting. We recommend to use 2x oversampling since it gives you the best ratio between cpu usage and sound quality. With higher oversampling rates you will process more and more of an "assumed" signal generated by an interpolator which can lead to it's own special artifacts. By the way increasing/decreasing the oversampling will not affect the ability of the limiter to handle true peaks.

### Visual settings

**Transport Meter Reset:** In default mode the limiter will reset metering if the playback position in your DAW changes. This might not always be wanted so you can turn it off and back on here.

Beats: Defines the number of beats shown in the visualizer window. You can choose between 4, 8, and 16.

Head over to Zykon Software to get the [latest limiter version](#) !