Noisebud Fräs User Manual

Introduction

Fräs (or Fras, as it will appear in your DAW) is a new approach to saturation with an analog feel. The saturation algorithm isn't that special, I mean, I like the sound of it and I spent a fair amount of time tweaking it to my liking. But, it's not the sound of the saturation that makes this plugin stand out, it's how it is applied dynamically to the audio that makes it different. Fräs is built on the same frame as Shape2 Advanced. They're both based on waveshaping and how they apply the effect dynamically is based on the same concept (you'll recognize the layout and look from Shape2 Advanced). But the similarities stop there. Especially the dynamic bypass section can be used creatively in Fräs to place the distortion in the signal as you wish while in Shape2 Advanced, it's there to bypass the plugin in sections without low-end or less energy. The dynamic bypass used together with the 'Below' and 'Makeup' gain will also turn Fräs into a dynamic processor well suited for what you normally use a compressor for in mastering. I don't mean the type of compression you add to keep a signal in control, I mean the kind of compression you do to make the music live. Fräs shines at this; Do the control of dynamics with the compressor of your choice, and then bring back life using Fräs.

Lookahead

This function lets the plugin look into the future for different parts of the plugin will react before the actual audio event has occurred.

Envelope

This controls the amount of the original envelope applied to the processed signal. At 0% (far left), the processed audio doesn’t adapt to the original waveform; at 100%, the envelope of the original low-end (below the crossover) will be applied to the processed audio. This function was developed for Shape2 Advanced where it makes sense to bring back some of the original envelope to the processed low-end. In Fräs, it doesn’t make sense to use it to keep the integrity of the original envelope but the non-linearity that you can create using this, the dynamic Dry / Wet plus the Life control together can bring life to your track in a way that I haven't heard using other saturation plugins. An analog chain can have the same kind of musical randomness that creates something pleasant, the approach to achieve this in Fräs seems to work well.

EnvRelease (Envelope Release)

Adjusts the release time for the envelope follower, determining how quickly it returns to zero after the input signal drops. The range spans from 20 milliseconds to 2 seconds.

Gain Stage

This function will boost the signal before hitting the waveshapers and attenuate it by the same amount post-processing. Higher values will create more distortion. If you push the ‘x3’ button, the boost will be multiplied by 3 for more crunch.

Oversampling (OS)

One of the reasons why I wanted to try waveshaping instead of other saturation methods is that the resulting waveform is very predictable. This has the effect that aliasing is easier handled and with Fräs, most audible aliasing distortion is gone at 2x oversampling. You can still oversample using higher values if you’re bothered by things that you can’t hear. For me, it depends on what I’m working with. I usually use higher values while mastering but feel 2x is good enough (and still better than the competition) while mixing.

Shape

The waveform shapes were originally taken from Shape2 Advanced but have been altered to work better for wideband processing.

Var 1 (variable 1) — Processes the left and the right channel differently
Sta 1 (stable 1) — The base is the same as for Var 1 but treats both channels the same way
Var 2 (variable 2) — A shape that introduces a little more high-end and process the channels with small variations
Sta 2 (stable 2) — The same base as Var 2 but treat the channels the same way

Dynamic Bypass

You've seen this function in some of my other plugins in which you may not want the plugin active at less intense passages. The white meter around the knob shows the incoming signal, use the knob to set the threshold for at which level the plugin should become inactive. You'll notice that the plugin goes black and white when it's fully bypassed by the Dynamic Bypass function. I added this to make me aware of the current state to avoid tweaking things to oblivion when the plugin is bypassed. You can bypass this function with the 'BW' found in the lower right corner of the UI.

Below

This is a simple gain control you can use if you'd like another level when the dynamic bypass is below the threshold.

Sum / Difference

With this control, you can decide to place the processed signal more in the middle (sum) or widen the stereo image by placing more in the difference channel (side channel). To the left move the signal to the middle, to the right move it to the side.

Life

This is a subtle setting that exaggerates all dynamic elements in the plugin. At the max position, it introduces about 1–2 dB of extra movement. I often find myself at max, I haven't found any situation where it sounds bad.

Dry / Wet

Nothing new here, it's great when you overcooked something and want to back off without changing anything else.

Make up (makeup gain)

Kiss and make-up! The makeup gain in Fräs is placed post the loudness normalization which means you can use Fräs to simulate compression and expansion. If you also use the 'Below' gain you'll have a little dynamics monster with loads of pleasing and tweakable character.

Loudness

This will loudness-normalize the processed signal. I suggest leaving this active, the switch will be removed in upcoming versions and the loudness compensation will always be active. It has become a huge part of Fräs's DNA and sound.

BW

The interface turns black and white as the dynamic bypass turns the effect off, this is to make you aware that the plugin currently doesn’t do anything. You can turn that function off with this switch.

Delta

It plays the difference between the incoming and processed signals, which is great for a deeper understanding of what a plugin does.

Bypass

It bypasses the plugin.