



Noisebud Quill User Manual



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About

Quill is a versatile single-band compressor, initially made for parallel mastering compression duties but it has its place while production/mixing too. It can produce everything from gentle and transparent to distorted extremes. I wanted a compressor that didn't take forever to set up. To achieve that I focused on having direct access to all controls (kind of an analog workflow), and, I wanted controls to quickly exaggerate the compression to easier hear the effect for fast decision making. That's how the curve control came to life. At first, it consisted of the 'Exp' (exponential) and the 'Crush' curve where the 'Exp' was the intended working mode and 'Crush' was the exaggerated curve to better hear the compression. I had so much fun with the 'Crush' curve that I implemented two additional curves and all of a sudden Quill turned into a whole other kind of compressor than first intended.

The Sidechain panel

The signal passes through the Sidechain filters before it hits the peak follower that controls the compression. If you leave the filters at their default position the signal that hits the peak follower will be pretty much the same as what you hear. The controls here are almost self-explanatory, they do what the title says:

- **HP** (High-Pass) - This will High-Pass the signal to the chosen value.
- **LP** (Low-Pass) - This will Low-Pass the signal to the chosen value.

The following three controls are for a one-band parametric EQ to further push the sidechain signal and make the compressor focus on a specific frequency or frequency range.

- **Hz** - the parametric EQ frequency.
- **Gain** - the amount of gain (+/-) at the chosen frequency.
- **Q** - the width of the parametric EQ.

And last we have the Preview button

- **Preview** - push this to hear the signal that will control the compression.

The Compressor Panel

I'm going to start with the controls but don't skip the last part about how to use/understand the visual feedback in the scope at the top of the compressor panel.

- [How to read the scope](#)
- **Amount** - this has the same use as the threshold control in other compressors. I choose not to call it threshold since Quill doesn't have a threshold, the compressor part is always active no matter the strength of the signal. however, It will react very similar to a threshold control so it's not a problem to think of it as such.
- **Makeup** - make-up gain for the compressed signal.
- **Attack** - how fast will the compressor react to peaks found by the peak follower (a really fast attack will add tons of modulation distortion).
- **Release** - set the time you want the compression to release once engaged (fast release times will also add modulation distortion).
- **Curve** - sets the curve applied to the peak follower, or the curve of the compression to use other words.
 - Exp - exponential
 - Lin - linear
 - dB - another exponential flavor
 - Crush - also exponential but x10

The Mix Panel

- **Delay** - This control will delay the compressed signal up to 40ms, since the sidechain is not delayed the compressor is able to react before the actual peak has been played which can be very useful with material with poorly controlled dynamics.
- **Blend** - Balance the amount of dry signal for parallel compression.
- **Channel Link** - at 0% the channel works entirely separated from each other, at 100% the compressor uses the sum (mono) information for both channels. Unlinked compression can add depth and width but may also sound unnatural.
- **Bypass** - Bypasses the plugin

Intended use and how to read the compressor panel Scope



You can use and read the scope as you find fit but in the following text, I'll take you through the intended use of Quill and the scope.

The first step, set up your sidechain filters.

The idea here is to let the compressor attenuate the most unpleasant things in your mix, leaving the things that already sound pleasing. So, the settings vary depending on what you want to achieve and the sound of your mix but let's say that you want to de-harsh and glue a mix. Use the sidechain preview function to listen to the mix. First, we'll cut away some of the low-end to avoid pumping (we'll avoid pumping by letting the compressor react less to low-end content in the mix), let's put the High-Pass (**HP**) to about 200hz. Your mix will now sound a bit thin with the preview button engaged. Since the mix is a bit harsh sounding we use the parametric EQ to boost harsh frequencies around 3kHz a couple of dB's to make the compression more sensitive to audio in this region. Now, your mix sounds both thin and even more harsh than before, it's time to de-click the sidechain **Preview** Button to hear the processed signal again.

How to read the scope

Before we start setting up the compression we'll take a quick look at the scope

- **The yellow line** at the top - shows the peak follower. The compressor 'Curve' will be applied post the peak follower so it will stay the same no matter which curve you choose.
Due to differences between Windows and macOS, this line may have another color on Macs (this will be fixed at some point).
- **The black waveform** - this is the waveform of the incoming audio.
- **The white waveform** - this is the waveform of the compressed signal. It's placed behind the original black waveform so that you easily see when the compressed signal gets louder than the original. You won't see it if it's quieter than the uncompressed signal, you see it as a white outline when at about the same level (this is where you probably want to be).

Setting up compression

Let's start with everything in the compressor panel set to default but put the **'Blend'** knob in the Mix Panel to 100% wet (we will just hear the compressed signal for now). Slowly start to raise the **'Amount'** knob until you clearly see the yellow line in the scope start to react to the signal and you feel the level going down. Try to switch from **'Exp'** to **'Crush'** if you have a hard time hearing the compression. The same thing goes for setting **'Attack'** and **'Release'** time, you may get to the kind of compression you want faster if all compression settings are made with the **'Crush'** mode selected. When **'Amount'**, **'Attack'**, and **'Release'** are set to your liking you may go back to **'Exp'** or try any of the other curves before we adjust the **'Makeup'** gain. When you selected your preferred curve adjust the **'Makeup'** so that the white waveform looks like an outline of the black waveform, which means that the compressed and the original audio is at about the same level. This way it's easier to hear if you actually achieved what you wanted with the compression without getting fooled by loudness. It's also better while using parallel compression since when using the **'Blend'** control the level stays intact no matter how much of the wet or dry signal you blend in. I find that I almost always prefer the **'Blend'** control at least at 50% dry signal, more often it's at 75% dry signal with a pretty hard compression.

Everything above is how I use it, use these guidelines as a starting point, and as you get more comfortable with all settings I'll encourage you to find your workflow!

Hope you like Quill as much as I do!
/Johannes