



Introduction

Welcome to Freak-Q, an equalizer specialized on sound design.

Freak-Q is basically a graphic equalizer with 2048 bands. Although this is technically not accurate it helps to understand what this device does and how it affects the signal. Instead of actual filters to split the signal into bands, Freak-Q is based on a fast Fourier transformation. Keep in mind that all 2048 bands are always fixed and equally placed across the frequency spectrum and therefore using a higher samplerate will lower the resolution. The quality stays the same, but it will sound different.

To change the amplitude of every frequency band this plugin gives you the ability to draw curves and modify them with automatable parameters to an extend that has never been done before. This creates interesting and often unpredictable results, which makes this plugin good for experimentation. This equalizer is not designed to balance a mix, it is meant to distort the frequency spectrum and to create harmonics or weird filtered sounds.

This device can boost the signal by a large amount if you're not careful, using a limiter is probably a good idea. Generally you can make the most out of this plugin by applying it to a rich signal and adding distortion and compression afterwards.



Curve Module

Each of the 4 available curve modules are identical. The curve editor is on the left and on the right you can find automatable parameters that modify the curve in different ways. The amount, offset and scale parameters are being updated in audio rate to allow the highest precision possible. With that you can draw very quick spikes and movements to create and shape transients.



- 1 Mute and solo buttons. Muting deactivates processing for the curve and the behaviour of the solo button can be changed in the master section.
- 2 Set up a mono or a stereo curve and select the channel for the editor. Change the grid size with the numbers below.
- 3 Overwrite the curve of the non selected channel with the selected one. Switch the curves of both channels around. Copy, paste, invert and reset.
- 4 The editor itself. Double click or shift click to add points. Hold cmd (ctrl on Windows) to snap to the grid. Hold alt to modify curvature. Hold shift while moving points to not allow points to cross over.
- 5 Modulation. Select a curve and apply it to the amount, offset and scale parameters.
- 6 The amount will apply this curve to the resulting curve (has no effect for modulations). The offset moves the curve up and down in the spectrum. The scale zooms the curve and its repetitions in and out. Pinch and spread are variations of offset and scale.
- 7 The source frequency will scale the curve to fit in the desired frequency range. It compensates for different samplers. The amplitude parameters can offset how much the curve is boosting or cutting the frequencies. Use the frequency limit parameters to only affect a part of the spectrum.



Master Section



- 1 The curve can be applied to the frequency spectrum with a linear scale, logarithmic scale or by using an experimental hybrid scale that focuses on the mid range.
- 2 Choose between Left / Right or Mid / Side processing.
- 3 Display Solo will exclusively display the soloed curve in the display to the right. Audio Solo will additionally solo the curve in the audio processing.
- 4 Because of the audio processing all automations are slightly delayed depending on the samplerate. By using High Latency the delay is compensated and automations will be in sync. The quality of the audio processing itself doesn't change with this setting, but the overall latency of the device will increase.
- 5 Set up custom colors or use automatic colors, which will use the active Live skin.
- 6 The resulting curve after all processing and modulations. Click on this area to deactivate it. You can zoom the display with the labels at the bottom and on the right.
- 7 The master parameters are identical to the curve module parameters. They will offset the values for every curve before the actual processing and modulations.