



Redu(p)cer  
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VST Plug-in documentation



## Introduction

Morfiki's **Redu(p)cer** is a versatile bit-reducer and decimator type plug-in with unique morphing abilities. Combining it with additional filters and stereo spread functionality we achieved effect processor, that is fun and exciting to play with.

*Features include :*

- stereo processing ( lowpass , hipass & decimator have spread parameters )
- quantizer
- decimator
- all parameters are controlled by **MORFIKI preset system** (the system itself is described below)
- easy parameter value reset-functionality (for spread controls) – by double clicking on parameter's name.
- moderate cpu usage

## Installation

To install redu(p)cer ,simply copy „*Redupcer.dll*” file into your vst plugins folder.

## Words of caution

**WARNING!** Redu(p)cer plugin can generate **extremely** high levels at its output (for example ,it can be caused by setting a high attenuation/resonance of filters) – it is recommended to set a limiter/soft clipper plugin in a fx plugin rack of your DAW right after the Redu(p)cer.

## Signal flow

Signal is routed as follows:

**hipass filter => quantizer => lowpass filter => decimator => gain control (volume)**

Where the *hipass section* is the first signal block ,and the *gain control* last one. All signal blocks work in stereo (L & R channels are processed separately).

## Basic usage

Redu(p)cer looks quite complex at first glance ,but basic usage reveals all the secrets. We can divide our plug-in into **6 sections** – those are as follows:



a) **Hipass filter section** – First in the chain of processed signal ,12db/oct filter with considerable attenuation at higher **resonance** values. **Hp spread** parameter shifts the cutoff frequencies for the left and right channel (ie. a spread value represents decrease in one channel and increase in the other at the same time).



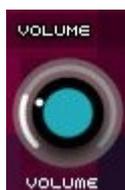
b) **Quantizer** – Quantizes dBFS value of the input signal (processed already by a hipass filter). The **Quant** parameter represents the number of quant levels in the dynamic range. **Notice:** Qunantizer works different at different signal levels (for example, at low signals tweaking the quant parameter above particular values will result in no signal at the output).



c) **Lowpass filter section** – This module is similar to the one described in section a) ,with the exception that its a lowpass type filter. The **lp spread** parameter works the in the same way.



d) **Samplerater** – A decimator unit ( samples & holds the signal with the frequency lower than the sample rate ,specified by the **freq redu** parameter ). **Fr spread** works in the same way as in previous sections.



e) **Volume** – controls the output volume.

f) **Morfiki preset system controls** – see the Morfiki preset system section for details.

## What's a MORFIKI preset system?

**MORFIKI** is the system of parameter control. It's the basic idea behind plugin series, we are going to release. Our goal, is to let You manipulate Your sound easily, without lines of weird automation.



Every preset has five **MORFIKI** sub-presets. Use **MORPH** knob to slide between them. Use **SHOW** buttons to switch between sub-presets A-E. If **MORPH LINK** button is active - **MORPH** knob will follow. Use **COPY** buttons to copy knobs state from selected sub-preset.

It's so simple !

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## Credits

*Morfiki Team 2008 (Dominik Popiński & Jacek Majer) : <http://morfiki.blogspot.com/>*

*Made with SynthEdit SDK*

*Modules by: D. Haupt ,P. Schoffhauzer ,D. Larkin and K. Lynch*