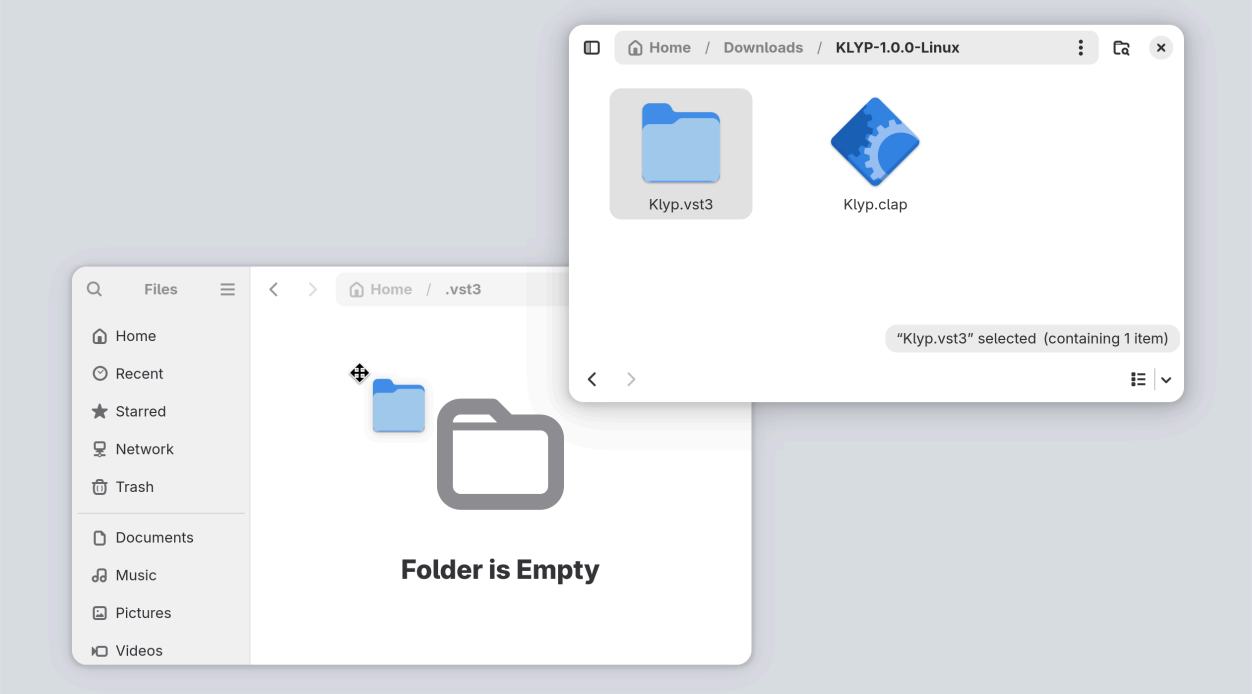
KLYP User Manual

Version 1.0.1 for Linux

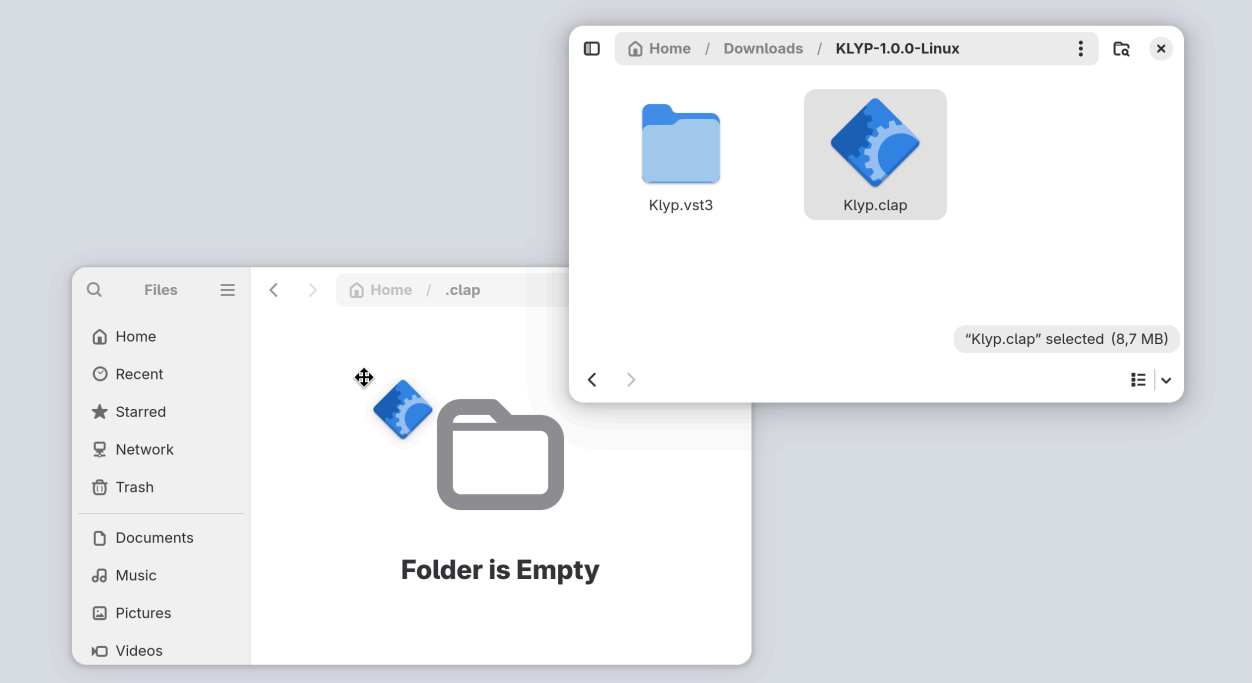
Thank you for downloading KLYP!
This manual will guide you through its installation and usage.

Installation

To install the VST3, move `Klyp.vst3` into your VST3 folder.
Choose `~/.vst3` to install the plugin for your user.
Choose `/usr/lib/vst3` for system-wide installation.



To install the CLAP, move `Klyp.clap` into your CLAP folder.
Choose `~/.clap` to install the plugin for your user.
Choose `/usr/lib/clap` for system-wide installation.



Overview

KLYP's user interface is streamlined, easy to use, and takes an interactive approach to soft clipping. It provides visualization to help you see what effect the plugin has on your audio.

At a glance, KLYP's interface mainly consists of:

Controls	Sliders that affect KLYP's clipping curve.
Antialiasing Settings	Menu to apply settings that reduce aliasing.
Visualizers	Cohesive, rich visualizers that are interactive.

The following sections go over each of these in detail.

Controls

The sliders in this section affect KLYP's clipping curve.

PRE-GAIN Boosts or attenuates the incoming audio.
SOFTNESS Interpolates the clipping curve between hard and soft.
The higher the softness, the less harsh the distortion.
THRESHOLD Changes at what level audio starts to clip.

Drag on a slider to change its value.
Drag on it while holding the `shift` key to fine-tune its value.
Click on it while holding the `ctrl` key to reset it to its default value.
Double-click it to type in its value.

Antialiasing Settings

Antialiasing reduces aliases, which are unwanted frequencies that ocurr as a natural consequence of digital distortion.

KLYP uses linear-phase oversampling to antialias while eliminating cramping in the upper frequencies. High factors of oversampling increases CPU use and leads to increased latency as well as subtle pre-ringing. KLYP also provides antiderivative antialiasing for a lower-cost improvement on top of oversampling.

Select the Antialiasing dropdown to access these settings.

OVERSAMPLING Controls the factor by which audio is oversampled.
For instance, when 2x oversampling is enabled in a host with a 44.1 kHz sample rate, audio is processed at 88.2 kHz.

ANTIDERIVATIVE Controls whether antiderivative antialiasing is used.

Visualizers

Visualizers are KLYP's superpower. They are not just information-rich and interactive, but they play together cohesively. The following sections go over each visualizer in detail.

Clipping Curve

The clipping curve plots out the distortion that KLYP applies.

The X axis corresponds to the input level.
The Y axis corresponds to the output level.

As audio runs through KLYP, this curve behaves like a peak meter. The filled in portion of it visualizes the input level.

Oscilloscope

The oscilloscope shows the waveform of the output audio. Behind it, the input audio waveform is faintly visible.

Threshold Line

The threshold line visualizes the audio level where clipping takes place.

The thin red line is the threshold, the point of full saturation of clipping. It directly corresponds to the `THRESHOLD` parameter.

The filled in portion below it is the non-linear area. It grows when the `SOFTNESS` parameter is turned up. Within this area, audio is distorted, but not directly clipped.

All of KLYP's visualizers are scaled to each other. This means, for instance, that the threshold line applies to the clipping curve, as well as the oscilloscope.

Changelog

Version 1.0.1

Version 1.0.0

Initial release.