

**Planer** is a powerful high quality **audio clipping tool** designed to provide precision control over the clipping process. **Planer** keeps under control your audio dynamics and prevents signal distortion by reducing the transient levels when the input signal surpasses a set threshold.

**Planer** provides seamless transition between hard-limiting and smooth soft-saturation thanks to its **customizable transfer function**. Moreover, its **wide oversampling range**, spanning from 16x to 256x, ensures reliable **true peak clipping** performances.



**Oversampling** in a clipper plugins is crucial for reducing distortion and aliasing artifacts caused by clipping and improves audio quality by capturing high-frequency content more accurately and minimize aliasing distortion, ensuring a cleaner clipping effects.

Aliasing is the main cause of unpleasant distortion in digital processing and it happens when you introduce harmonics above the Nyquist limit ( half your sample rate) since a clipper by its own nature adds a lot of harmonics you have to oversample you processing to you bring your sample rate very high (Planer offers a 256x oversampling option which brings you sample rate to a massive 11289600 Hz if your base sample rate is 44100Hz). When Planer is used at 256

times oversampling, aliasing goes down to -150dBs (24bit audio dynamic range is -144dB) so it makes it virtually inaudible.

Upon adding **Planer** to your project, you'll be greeted with a *sleek* (oops!) and **intuitive interface** that allows to easily access to all the Planer **parameters**:

**In:**

Controls the input level of the incoming signals.

**Link I/O:**

Connects input (In) and output (Out) levels for seamless volume control and consistent levels.

**Oversample:**

Select the the oversampling depth that better suits your needs, or just auto to let the plugin adjust it according to the sample rate of your project.

**Input Meter:**

Provides a fast and reliable display to monitor your incoming signal accurately.

**Transfer Function:**

The **Planer** transfer function defines how the input signal is transformed into the output signal as it approaches and exceeds the clipping threshold. Thanks to its flexibility, the **Planer transfer function**, allows seamless transitions between hard-limiting, characterized by sharp, aggressive distortion, to smooth soft-saturation, which delivers a more gradual, musical distortion effect.

The transfer function in Planer offers a maximum flexibility allowing to control:

**Ceiling:**

Sets **maximum amplitude level** beyond which the Planer kicks in and audio signal is clipped or truncated. Positive and negative ceiling values can be set **independently** or **linked** together (through the link switch) to achieve a symmetric ceiling.

**Knee:**

sets the **shape of the transition region** around the clipping threshold where the signal begins to be affected by the clipping process. It represents the gradual onset of clipping, with a softer knee resulting in a smoother transition and a harder knee causing a more abrupt clipping (but still lovely) effect. The knee shape can be adjusted independently for the negative and positive ceiling values, or they can be linked using the link switch.

**Clipper Meter:**

Shows the amount of level reduction that is being applied to the input signal by the transfer function, it works similarly to a gain reduction meter in a compressor.

**Output Meter:**

Provides a fast and reliable display to monitor the output (processed) signal accurately.

**Delta function:** When enabled, the Delta function permits the auditioning of the difference between the input signal and the clipped output signal, facilitating the evaluation of the clipping process's impact on the audio.

**Bypass:** temporarily disable the clipping effect, effectively bypassing the clipper and allowing the original, unprocessed signal to pass through unaffected.

If you have any questions or need assistance with the **Planer** plugin, please contact our support team by submitting a **support request** here:

<https://www.hornetplugins.com/support/submit-support-request/>

We are here to help you get the most out of our products!