TBPAClip

Manual

TBProAudio 2025

1 Introduction

TBPAClip is a DAW plugin that offers extensive and flexible control over the **clip** process. The way the clipping is done is easily adjusted, like a soft-saturated or hard-limiting brick wall.
In addition, **TBPAClip** provides a **saturator** before the clipping stage to warm up the audio material.

By using **TBPAClip** in your music production process you benefit from the following advantages:

- single-band/multi-band saturator/clipper in one plugin
- advanced symmetric and asymmetric clipping functions
- saturation before clipping, both optional
- extensive clip tone control
- x256 oversampling for aliasing free processing

In **single-band** mode, the signal is first sent to the saturation stage and then to the clip stage. Both can be switched on/off individually. The clip stage can work either in **single** or **dual clip** mode. The dual clip mode provides individual ceil and tone controls for the positive (P) and negative (N) part of the audio signal.

In **multi-band** mode, the signal is divided into three bands. Each band has its own input volume, input level meter, saturation/clip stage, mix control, and output volume. The combined signal is then sent to an additional volume control and the output level meter.

2 Features

TBPA Clip offers following features:

- single/multi band clipper
- single/dual clipper operation
- 6 clip types
- advanced clip response
- single/multiband saturator
- 6 saturation types
- up to x256 oversampling
- flexible gain-staging
- saturation and clip score
- EBU R128 measurement
- mid/side processing
- final clip stage
- DC blocker
- extensive monitoring options like mid/side, delta and unity gain
- smart silence processing
- parameter A/B
- parameter modulation at audio rate
- free GUI scaling

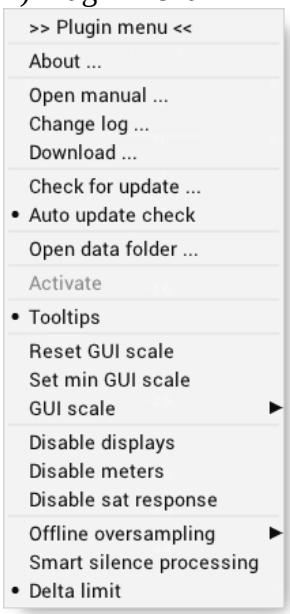
3 Overview

Plugin menu: the plugin menu provides access to more plugin information, the manual, tool-tips control and more plugin options.
Multiband: The multiband button enables multiband operation of TBPAClip.
Presets: the preset menu provides access to default, factory and user presets.
Peak/spectrum/clip response view: provides access different views
Input ceiling: this section provides the input meter and controls for clip ceiling.
Oversampling: sets oversampling up to x256
Input section: this section provides controls for input volume and channel selection
Preamp/saturation: this section provides controls for saturation process.
Clip section: this section provides controls for the clip process.
Dual clip mode: It treats the positive and negative part of the signal individually.
Output section: this section provides controls for signal mix, output volume.
Loudness/clip/sat score: this section shows loudness information or the current clip and saturation scores.
GUI scale: click and drag with the mouse to scale the GUI. For quick scaling, double-click.

4 TBPAClip controls

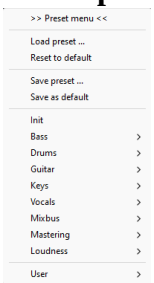
4.1 Top area

1) Plugin menu



About: Displays various plugin information.
Open manual: opens this manual.
Change log: opens the web site with the change log information.
Check for update: checks if there is a newer version of this plugin is available.
Open data folder: Opens the local data folder.
Activate: Activates the plugin with license key information.
Tooltips: enables/disable display of tool tips if the mouse is moved over a GUI control.
Reset GUI size: resets the GUI size to default.
Set min GUI size: sets the GUI size to default.
GUI scale: sets the GUI to various scale factors.
Disable displays/meters/sat response: disables GUI animations.
Offline oversampling: sets options for offline oversampling.
Smart silence processing: enables DSP saving during signal idle.
Delta limit: limits loudness during delta monitoring to avoid signal over-shots.

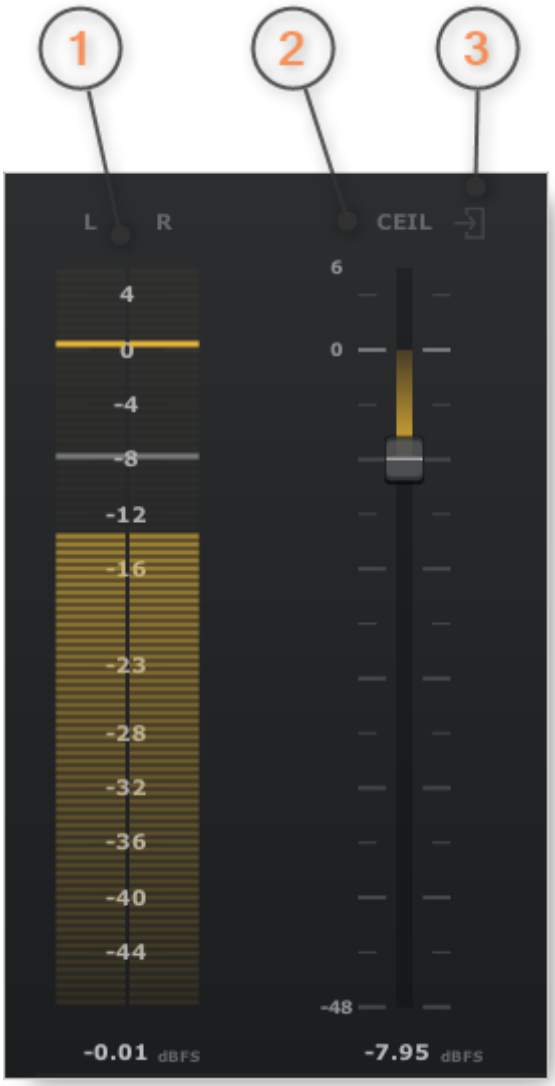
2) The **A/B switch** button switches between the two plugin states the A and B. Compare two different plugin states without having to save a preset.
3) The **A/B copy** button copies the A plugin status in B or vice versa.
4) The **multiband** button enables multiband operation
5) Preset menu
Load preset: loads a preset from disk.
Reset to default: sets plugin state to default.
Save preset: saves current state as preset to disk.
Save as default: saves the current plugin state as plugin default.
Factor presets: selects from the various preset categories.



User presets: lists all user created presets.

6) Previous/next preset: activates previous or next preset.
7) Company logo: click to rearm demo timer (see chapter 7 of this manual).
8) Plugin activation status: icon indicates the plugin activation status.
9) Check for plugin update: click to check for plugin updates.

4.2 Ceil section



1) The **Input meter** shows the signal strength right after the input fader. Mouse click resets measurement. Mouse wheel changes the meter scale.
2) The **Ceil fader** controls the clip ceiling of the clip stage. If clip dual mode is enabled separate ceil faders for positive and negative parts of the signal are provided.
3) The **CO** button sets the output level to the inverse ceil level. This ensures that the peak level of the output signal is same as the input signal (before input fader).

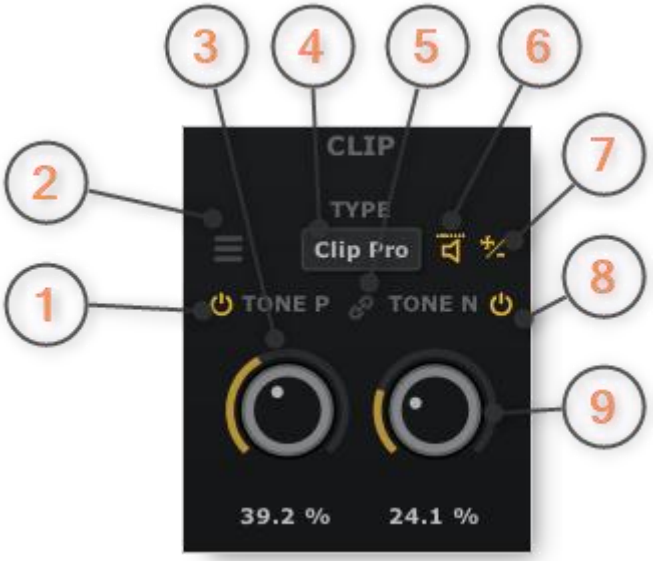
4.1 Input section

1) The **OS** menu sets oversampling rate of the plugin. TBPAClip can oversample up x256. Please watch the CPU meter of the DAW to not overload the CPU. Oversampling reduces aliasing effects drastically.
2) The **Volume** knob sets the input volume of the processing chain.
3) The **Channel** menu sets the channel operation mode of clip and saturation stage. It reduces the processing to either left, right, mid or side signal.

4.1 Saturation section

1) The **Power** button activates the saturation stage.
2) The **Drive** knob controls the amount of saturation. If set to off, the signal is passed through.
3) The **Type** menu selects the saturation type: tube and tape with variations. Tube saturation produces even and odd harmonics, tape saturation only produces odd harmonics.
4) The **Feedback** knob controls the amount of the processed signal fed back to the saturation stage.

4.2 Clip section

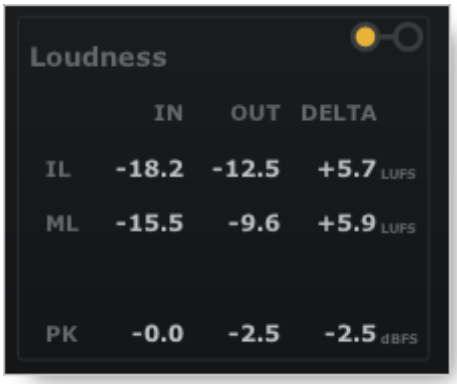


1/8) The **Power** button activates the clip section or clip positive/negative dual clip mode) stage.
2) The **Preset** menu manages user defined clip settings.
3) The **Tone** (or **tone P** in dual mode) knob controls the clip response of the signal. If set to off, the signal is passed through.
4) The **Type** menu selects the clip type: type 'clip 1-3' are classic clip functions based on tanh, sin and exp math functions. 'Clip Pro' is designed for low aliasing operation. 'Clip advanced' provides full control over the clip response. Please see below for more information.
5) The L**ink** button links the tone P and tone N controls.
6) The **Unity gain** button reduces the output signal by the input volume to hear the output signal at the same loudness level.
7) The **Dual mode** button enables dual clip operation. In dual clip mode the positive and negative part of the signal are treated by individual ceil and tone controls.
9) The **Tone N** knob (only in dual clip mode available) controls the clip response of the negative part of the signal. If set to off, the signal is passed through

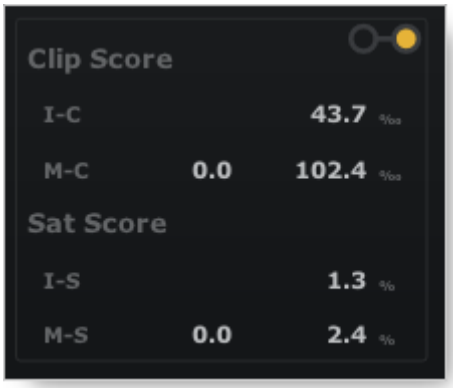
4.3 Output section

1) The **Mix** knob determines the portion of the processed and unprocessed signal.
2) The **Volume** knob sets the input volume of the processing chain.

4.4 Loudness/score section



The **Loudness** page shows the input, output and delta values of Integrated Loudness (IL) and Momentary Loudness Max (ML). Below the max peak values are displayed. Click on the upper right bars to switch to score view.



The **Clip score** shows the proportion that was clipped. The page provides the integrated (aka program, start to stop) score (I-C) and the momentary/momentary max score (M-C).

The **Saturation score** shows the portion of the saturated signal, similar to the clip score. The page provides the integrated (aka program, start to stop) score (I-C) and the momentary/momentary max score (M-C).

The score values are quantitative measures of the clipping and saturation process and help evaluate the performance of specific tone and drive settings.

4.5 Support functions

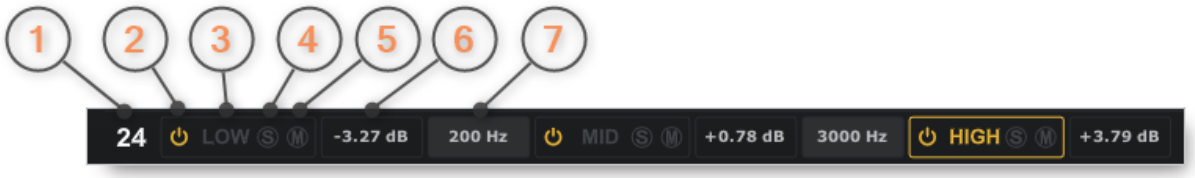
1) The **Monitor** button enables listening to the processed signal only. This is helpful if the channel mode is set to left or mid signal processing or if the multiband mode is enabled. In multiband mode the signal of the selected band is sent to the plugin output.
2) The **Delta** button enables listening to the delta signal (processed minus unprocessed signal).
3) The **DC block** button enables filtering of the DC part of the signal, after saturation and clipping.
4) The **Final ceil** button enables additional clipping after the saturation and clip stage. The final ceil stage cuts over-shots caused by the down-sampling filter of the oversampling module or the combined multi-band signal. In multi-band mode the ceil level is controlled by the main ceil level.
5) The **Bypass** button enables volume compensated listening to the input signal (equal loudness).
6) The **DAW sync** button enables reset of measurement with DAW start.
7) The reset button resets manually loudness measurement and scores.

4.6 Multiband

Overview

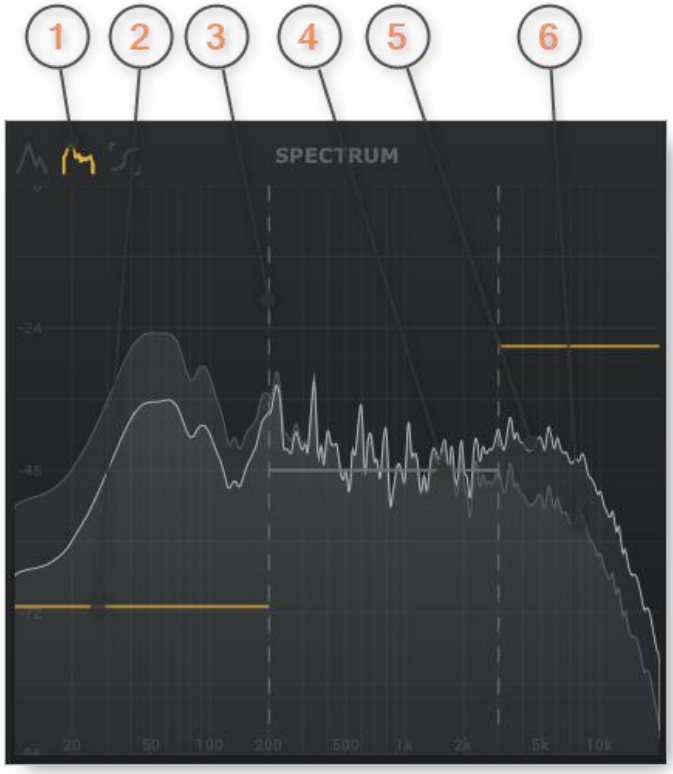
1) The **Multiband** button enables multiband operation of TBPAClip. The signal is split into 3 adjustable frequency bands, each with a saturation and clip processor.
2) The **spectrum** display shows the input and output spectrum. Additionally it offers the possibility to adjust the crossover frequencies and output level of each band.
3) The **multiband** controls provide functions like band active, solo, mute and output level. The controls for the crossover frequencies are placed between the band controls.
4/5/6/7) Each **band** has its own input/sat/clip/mix controls
8) In multi-band mode the **Main** volume knob provides an additional volume control of the combined signal
9) In multi-band mode the main C**eil** knob controls the ceil level of the final clip stage.

Multiband controls



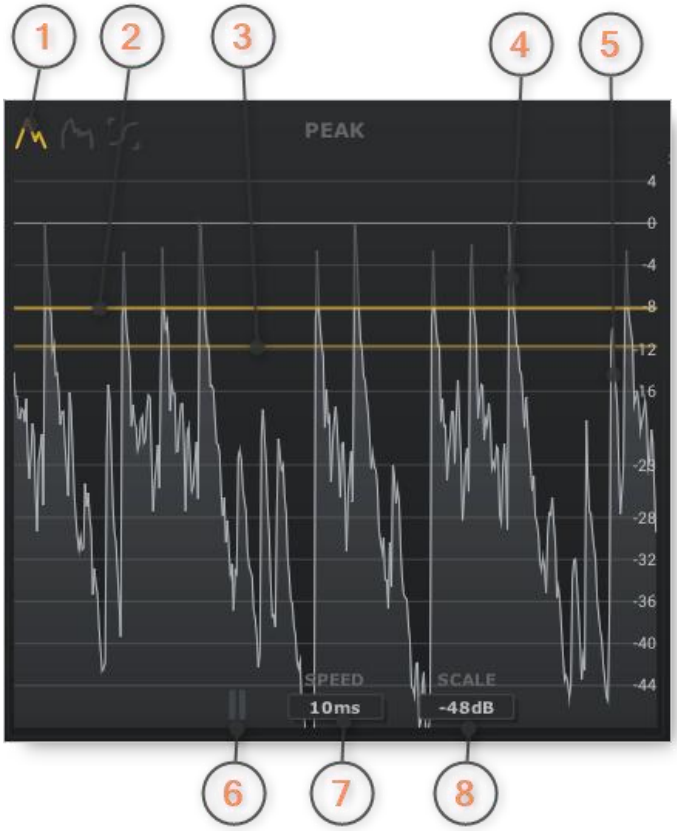
1) The **Filter slope** menu selects the slope the crossover filter: either 24dB/Oct or 48dB/Oct. The filter design is based on Linkwitz–Riley (IIR).
2) The **Active** button actives the processing of the frequency band including saturation and clip.
3) The **Band selector** selects the active frequency band and displays related controls.
4) The **Solo** button solos the frequency band.
5) The **Mute** button mutes the frequency band.
6) The **Output volume** value box sets the output level of the specific band
7) The **Crossover frequency** value box sets the crossover frequency between the frequency bands.

Spectrum display



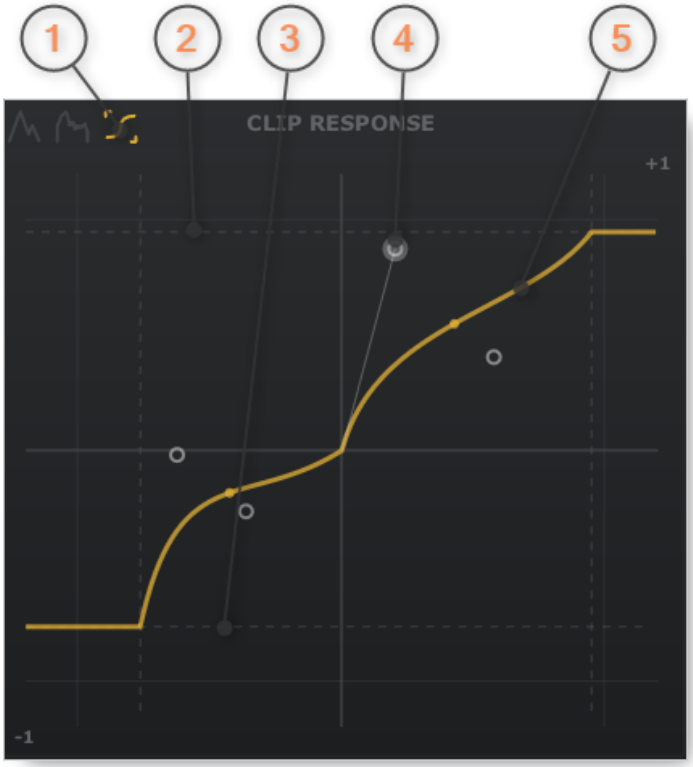
1) Enables spectrum view
2) Click and drag to adjust band output volume level. Click to select band. Shift-click to deactivate band. Double-click to set to default value
3) Click and drag to adjust crossover frequency. Double-click to set to default.
4) Inactive band. Audio in this band is not processed.
5) Output spectrum
6) Input spectrum

4.7 Peak level display



1) Enables peak level display. If multiband is enabled, the content of the selected band is displayed.
2) Ceil level, or Ceil P level if clip dual mode is enabled.
3) Ceil N level, if clip dual mode is enabled.
4) Input peak level
5) Output peak level
6) Pause display
7) Display speed
8) Display scale

4.8 Clip response display



1) Enables clip response display
2) Ceil level, positive signal
3) Ceil level, negative signal
4) Shape control handle, if clip type is set to Clip advanced
5) clip response

5 Minimum System Requirements

- Windows 7, OpenGL 2 GFX card
- Mac OS X 10.11, Metal GFX card
- SSE2 CPU
- Win: 32/64 Bit VST, 32/64 Bit VST3, 32/64 Bit CLAP, 32/64 Bit AAX
- OS X: 64 Bit VST, 64 Bit VST3, 64 Bit CLAP, 64 Bit AU, 64 Bit AAX
- Tested with: Cockos Reaper, Steinberg Cubase/Nuendo/Wavelab 6+, FL Studio 12+, PT2018+, Reason 9.5+, Studio One, Ableton Live
- For latest information please visit www.tbproaudio.de

6 Demo mode versus Registered Mode

In demo mode (without activation) the plug-in mutes audio every 90 seconds for a short period. This could be circumvented by clicking on the "TBProAudio" logo within 90 seconds.

7 Plugin activation

The plugins needs to be activated to remove demo restrictions. Please go to www.tb-proaudio.de to purchase the activation key. After purchase you will receive an email from TBProAudio with either the (zipped) activation key file or the activation key in text form. Go to the plugin menu->Activate plugin. Please follow the steps described here: https://www.tbproaudio.de/support/productactivation. After successful activation the key symbol shown in the GUI appears in golden color.

8 Conclusion

So finally if you have any questions or suggestions just let us know. And have fun with our tools and visit us here: www.tbproaudio.de.

Your team from TBProAudio :-)