

Welcome to **HoRNet MultiBandCompressor**, a powerful multiband compressor designed to achieve a more transparent and controlled mix and to drag your music out of the muddiness!

Multiband compression is a powerful tool that allows you to control the dynamics of different frequency ranges independently. Unlike traditional compressors that operate on the entire audio spectrum, a multiband compressor divides the audio signal into multiple bands, each with its own set of compression parameters.

Audio signals often contain a wide range of frequencies, and different instruments or vocals may have varying dynamic characteristics.

The HoRNet **MultiBandCompressor** addresses this complexity by enabling you to apply compression selectively to specific frequency bands.

**MultiBandCompressor** has 4 bands with their dedicated parameters that can be set individually.



At the lower section of the **MultiBandCompressor** GUI, you may find the primary tabs that provide access to the four bands, each tailored to a specific frequency range: **Low** (for the lower frequency), **Low Mid** (for the lower-middle frequency), **High Mid** (for the High-Medium frequency) and **High** (for the high frequency).

Additionally, each band has a customizable frequency range that you can control using the **crossover commands** located above the monitor.

Each band tabs has its own compression parameters:

**Bypass** and **Solo**: for bypassing or soloing the selected band;

**Attack** and **Release**: Control the speed at which compression is applied and released. Faster attack times can emphasize transients, while longer release times provide a smoother, more transparent compression;

**Threshold**: Determines the level at which compression begins (is graphically showed for each frequency by the pink line in the monitor). Adjust the threshold for each frequency band to specify when compression should engage;

**Ratio**: Sets the amount of compression applied once the signal exceeds the threshold. Higher ratios result in more pronounced compression. Experiment with different ratios for each frequency band to achieve the desired balance;

**Knee**: controls the smoothness of the transition from uncompressed to compressed signals for each frequency band. A "soft knee" setting results in a gradual transition, while a "hard knee" setting produces a more abrupt onset of compression;

**Gain**: adjusts the output level for each frequency band after compression, allowing you to control the balance and overall volume of specific frequency ranges in your audio;

**Exp**: the expander switch activates the expansion function for each frequency band, allowing for increased dynamic range by reducing gain for signals below a threshold. This feature enhances clarity and natural dynamics in specific frequency ranges of the audio material;

Above the 'frequency tabs' section in the **MultiBandCompressor** GUI, the **monitor** provides real-time information on the current multiband compression. The selected band is highlighted, and its associated threshold is indicated by a **pink line**. The **bluesky bold line** represents the comprehensive compression curve, offering an immediate insight into the dynamics of the ongoing compression process.

Above the monitor section, the **Crossover Frequencies** define boundaries between different frequency bands in the MultiBandCompressor GUI. Adjusting these points allows precise segmentation of the audio signal, enabling targeted compression for each frequency range, and providing flexibility in sound shaping.

At the top of the plugin GUI, you may find several global functions:

The **Auto Attack/Release** function analyzes the audio input signal's characteristics dynamically adjusting the attack and release times for all the frequency bands. This function provides optimal compression settings in real-time.

The **Auto Threshold**: automatically determines the optimal threshold level for all the frequency bands;

The **Auto Ratio** dynamically adjusts the compression ratio for all the frequency bands based on the input signal. It aims to ensure a balanced and transparent compression by automatically setting the ratio according to the characteristics of the audio content;

The **Oversampling** function for reducing aliasing artifacts and enhancing the accuracy of signal processing;

The **input/output** levels in the plugin allow you to set the input and output levels, and these levels can be linked by using the **Link I/O** switch for streamlined control.

The **bypass** for globally bypassing the plugin.

We hope you enjoy exploring the features of the **HoRNet MultiBandCompressor** plugin, finding new ways to shape and enhance your musical creations. Happy producing!