

# H160 compressor limiter



The H160 compressor is a modern software emulation of a classic dynamic compressor, renowned for its ability to provide precise and effective control over the dynamics of instruments such as drums, bass, and other percussive elements. The original design was highly regarded for its simplicity and effectiveness, with its hard knee compression ensuring a firm and punchy sound, making it ideal for achieving well-defined audio with strong impact. This

compressor has earned its place in countless recording studios due to its ability to add character and presence to instruments without sacrificing their natural sound.



In the H160, we have faithfully replicated the behavior of the original hardware compressor, including the sonic nuances that define its distinctive character. This includes the analog

saturation, fast response times, and its precise dynamic control. However, understanding the needs of modern music production, we have integrated a range of additional features that make the H160 a versatile and powerful tool for mixing and mastering in digital environments. New features include input and output level controls, an auto-trim system for quick gain optimization, parallel compression through dry/wet control, and automatic oversampling to



ensure the highest signal quality. These functionalities work alongside the classic compressor parameters, expanding its capabilities and making it a plugin that fits seamlessly into both traditional and modern production workflows. Additionally, with the flexibility offered by the analog saturation controls and full plugin bypass, the H160 can also be used as a refined analog emulator to add warmth and color to your mixes.

## Parameters:

**Threshold:** Sets the threshold above which the signal is compressed. Once the signal exceeds the threshold, the compression kicks in with a hard knee curve, ensuring firm and immediate control. The "above" and "below" LEDs visually indicate when the signal is above or below the threshold.

**Compression (Ratio):** Controls the compression ratio, adjustable from 1:1 to 20:1. This allows precise regulation of the compression intensity on signals that exceed the threshold.

**Output Gain:** Adjusts the output level of the compressed signal, ranging from -20 dB to +20 dB. This control is useful for compensating for the gain reduction caused by compression or for boosting the compressed signal.

**Compression On/Off:** Enables or disables the compression while keeping the analog signal path active. This allows the H160 to be used as an analog saturator without engaging the compressor.

**Meter (Input, Output, Gain Reduction):** The VU meter can be set to display the input level, output level, or the amount of gain reduction applied by the compression, providing immediate visual feedback.

**Input Trim:** Adjusts the input signal level, allowing you to optimize the saturation and behavior of the analog section. This control lets you set the gain before the signal reaches the compressor, with a range of -20 dB to +20 dB.

**Output Trim:** Adjusts the output signal level after compression, useful for balancing the final volume after compression or saturation, with a range of -20 dB to +20 dB.

**Auto Input Trim:** Automatically adjusts the input signal level to achieve an optimal range between 0 and +3 VU. This saves time and ensures accurate results during the initial setup.

**Link I/O:** Links the input and output trim controls. When activated, any adjustment to the input level is automatically compensated by the output level, maintaining a consistent overall signal volume.

**Auto GR (Gain Reduction) and GR Target:** This feature allows you to directly set the desired amount of gain reduction. The H160's algorithm will automatically adjust the threshold to achieve the target level of Gain Reduction.

**Dry/Wet:** Controls the balance between the compressed (wet) and original (dry) signals. Perfect for parallel compression, it allows you to mix the original dynamics with the processed signal, achieving a more natural and controlled sound.

**Oversampling:** Improves signal quality by reducing aliasing and distortion. H160 offers an automatic setting that adjusts the oversampling factor based on the project's sample rate, with manual options for 2x, 4x, and 8x oversampling.

**Analog:** Toggles the analog saturation emulation, adding the characteristic warmth and color of the original hardware unit.

**Hiss:** Controls the emulation of the analog hiss generated by the original circuit. It can be turned on or off depending on user preference, adding an extra touch of analog authenticity.

**Auto Make-Up Gain:** Automatically adjusts the output gain to compensate for any volume loss caused by compression. This feature is particularly useful for maintaining consistent signal levels without manually adjusting the output gain.

**Bypass:** Completely bypasses the plugin, allowing you to quickly compare the processed sound with the original signal without disabling the plugin.