

ECHELON AUDIO

GRIP

Precision Compressor — User Manual



The GRIP interface. Hover any knob, button or toggle in the plugin for a quick tip; this manual covers every control in full.

GRIP is a reference-grade compressor with seven styles (FET, Opto, VCA, Vari-Mu, Modern, Upward and TTM), Character saturation, a 3-band sidechain EQ, full channel routing (Stereo / M-S / L / R / Mid / Side), up to 32× oversampling, and auto-threshold / attack / release / gain helpers. Drag the transfer curve to set the threshold and watch the live operating point.

Global & Header Controls

Control	What it does
Style	Compressor topology — FET, Opto, VCA, Vari-Mu, Modern, Upward or TTM, each with its own character.
Learn Intensity (G/N/H)	Target before pressing Learn: Gentle, Normal or Hard.
Learn	Analyse the incoming audio and auto-set the threshold/settings for the chosen intensity.
A / B	Hold two complete settings and click to compare them.
Preset ◀ ▶	Browse presets; the name in the middle is the current preset.
Bypass	Bypass the whole plugin to compare against the dry signal.
About (?)	Open the About panel with version and credits.
Transfer Curve	Live input→output display. Drag up/down to set the threshold; the comet shows the operating point.

Controls

Main Compression

The core dynamics controls. Drag the transfer curve in the display to set the threshold visually.

Control	Range	What it does
Threshold	-60 ... 0 dB	Level where compression begins. Lower means more of the signal is compressed. Draggable on the curve.
Ratio	1:1 ... ∞:1	How hard signal above threshold is compressed. 4:1 = 4 dB in → 1 dB out; ∞:1 is limiting.
Upward	0 ... 100%	Upward compression — lifts quiet passages below threshold instead of pushing peaks down.
Attack	0.05 ... 100 ms	How fast compression engages after the signal crosses threshold. Fast catches transients; slow lets them through.
Release	5 ... 2500 ms	How fast compression recovers after the signal drops back. Short = punchy/pumpy, long = smooth.
Knee	0 ... 72 dB	Width of the transition into compression. Wide (soft) is gentle and transparent; 0 (hard) is abrupt.
Range	0 ... 200%	Limits the maximum gain reduction so compression never exceeds a set depth.

Control	Range	What it does
Hold	0 ... 500 ms	Time the compressor stays fully engaged before it begins releasing.
Mix	0 ... 100%	Dry/wet blend for parallel (New York) compression.
Lookahead	0 ... 20 ms	Delays the audio so the detector reacts before transients hit. Adds latency.

Character

An optional saturation stage for colour and glue.

Control	Range	What it does
Character	Off / Tube / Diode / Bright	Saturation type blended onto the signal.
Drive	0 ... 100%	Drive into the Character stage — more harmonics and colour.
Drive Route	Pre / Post	Whether Character runs into the detector (Pre) or on the output (Post).

Sidechain Spectrum

Shape what the compressor listens to so it reacts only to the frequencies you want.

Control	Range	What it does
HP Cut	0 ... 500 Hz	Sidechain high-pass — stops lows from triggering the compressor (less bass pumping).
Bell	60 ... 12000 Hz	Frequency of the sidechain bell — focus compression on a specific band.
Gain	-18 ... +18 dB	Gain of the sidechain bell — boost so that band triggers more, cut for less.
LP Cut	1 ... 20 kHz	Sidechain low-pass — stops highs from triggering the compressor.
Ext Key	On / Off	Compress from an external sidechain input instead of the track itself.
Listen	On / Off	Monitor the sidechain signal so you can hear what the detector reacts to.

Routing & Auto

Channel processing, oversampling and the auto-helpers.

Control	Range	What it does
Link	0 ... 100%	How tightly the channels share gain reduction. 100% locks the stereo image; lower is more independent.
Channel	ST / M-S / L / R / Mid / Side	Which part of the signal is processed.
Oversampling	Off ... 32×	Higher reduces aliasing on fast compression at the cost of CPU.
Auto Thr	On / Off	Continuously set the threshold from the program level.
Auto Rel	On / Off	Adapt the release time to the material (program-dependent).
Auto Atk	On / Off	Adapt the attack time to the material.
Auto Gain	On / Off	Match output loudness to input so you judge tone, not level.
Det Peak	Peak / RMS	Detector mode — Peak is fast and transient-accurate; RMS is smoother and level-based.
Delta	On / Off	Solo only what the compressor is removing.

Echelon Audio · GRIP · double-click any knob to reset it; drag the curve to set the threshold.