

Gluon

Classic bus compression. Modern control.



User Manual

Product version 1.0.0

Welcome

Gluon is a free compressor for mix buses, drum buses, parallel tracks, and individual sounds. Set the amount and timing of compression, limit its depth with Range, blend the dry signal with Mix, and use an independent output clipper or limiter when you need a different peak shape.

Gluon Map brings the instances in your session into one view. Check their settings and levels, adjust one track, or move a control across all discovered instances while keeping their relative differences. The next page shows how it works.

Gluon is independently developed. Its console-compression inspiration is a musical starting point, not a promise to match another plug-in. All controls are available without an account, activation, trial, or paid feature lock.

Quick start

- 1 Insert Gluon on a bus or track and play the loudest part of the material. Leave **External in** off unless you have routed a sidechain signal in your DAW.
- 2 Choose **Classic Glue** from Presets for a gentle starting point, or begin with Default preset. Keep **Compression** on.
- 3 Lower **Threshold** until the gain-reduction meter moves. For a subtle bus setting, try listening around 1-2 dB of reduction; the right amount depends on the material.
- 4 Set **Attack**, **Ratio**, and **Release** by ear. Use **Range** to cap how far compression can go, then **Mix** to blend the compressed and dry paths.
- 5 Press **L** beside MakeUp and play ten seconds to estimate a fixed level match. Fine-tune MakeUp by ear afterwards.
- 6 If needed, enable **Out limiter** and choose Hard Clipper, Soft Clipper, or Limiter. Match loudness before using **Bypass** to compare.



The main view places compression and timing at left, gain reduction in the center, and output and detector controls at right. Example values in the image are illustrative.

Gluon Map

Open **Gluon Map** in the top bar to see Gluon instances loaded from the same plug-in module in the same host process. The first row is **CURRENT**. Other rows use track names supplied by the DAW when available. Map shows settings, input/output peaks, and Bypass for each discovered instance, including instances whose editor windows are closed.

GLUON

 Gluon map





All instances12

GLOBAL CONTROL

NAME

Thrsh

Ratio

Attack

Release

Range

MakeUp

Mix

∞ Link

S-Ch.

F.type

Freq

Bypass

In/out

CURRENT	-28	10:1	1	0.1	-20	+10	35	80	OFF	HP	60	☐	
Kick	-18	4:1	10	0.1	-6	+3	100	100	OFF	HP	0	☐	
Snare	-16	4:1	3	0.2	-8	+4	100	100	OFF	HP	80	☐	
Drum Bus	-14	2:1	30	Auto	-4	+2	100	100	OFF	HP	90	☐	
Bass	-20	4:1	10	0.2	-8	+4	100	100	OFF	LP	2k	☐	
Lead Vocal	-22	4:1	3	0.1	-10	+5	100	100	OFF	HP	120	☐	
Backing Vocals	-24	2:1	10	0.4	-6	+3	100	100	OFF	HP	150	☐	
Guitar Bus	-18	2:1	20	0.2	-4	+2	80	80	OFF	HP	100	☐	
Synth Bus	-16	2:1	30	0.4	-4	+2	70	60	OFF	LP	8k	☐	
Reverb	-26	4:1	1	0.6	-8	+2	100	100	ON	BP	1k	☐	
Mix Bus	-12	1.5:1	30	Auto	-3	+1	100	100	OFF	HP	60	☐	
Master Bus	-10	1.5:1	30	Auto	-2	+1	100	100	OFF	HP	90	☐	

Map shows CURRENT, other discovered instances, relative Global Control arrows, Bypass, and in/out peak bars. Names and values in this image are examples.

Drag a value vertically to edit that instance. The **GLOBAL CONTROL** arrows change every discovered instance relative to its own current value, including CURRENT. For example, a Threshold arrow moves each threshold by 1 dB while retaining the differences between tracks. Values stop at their legal limits. The Bypass arrows are different: either arrow flips every row's existing Bypass state, so a second click restores the previous combination.

The Map checkbox is checked when that instance is bypassed. The table scrolls when there are more rows than fit; the title, Global Control, and column headings remain fixed. Click the close icon to return to the compressor.

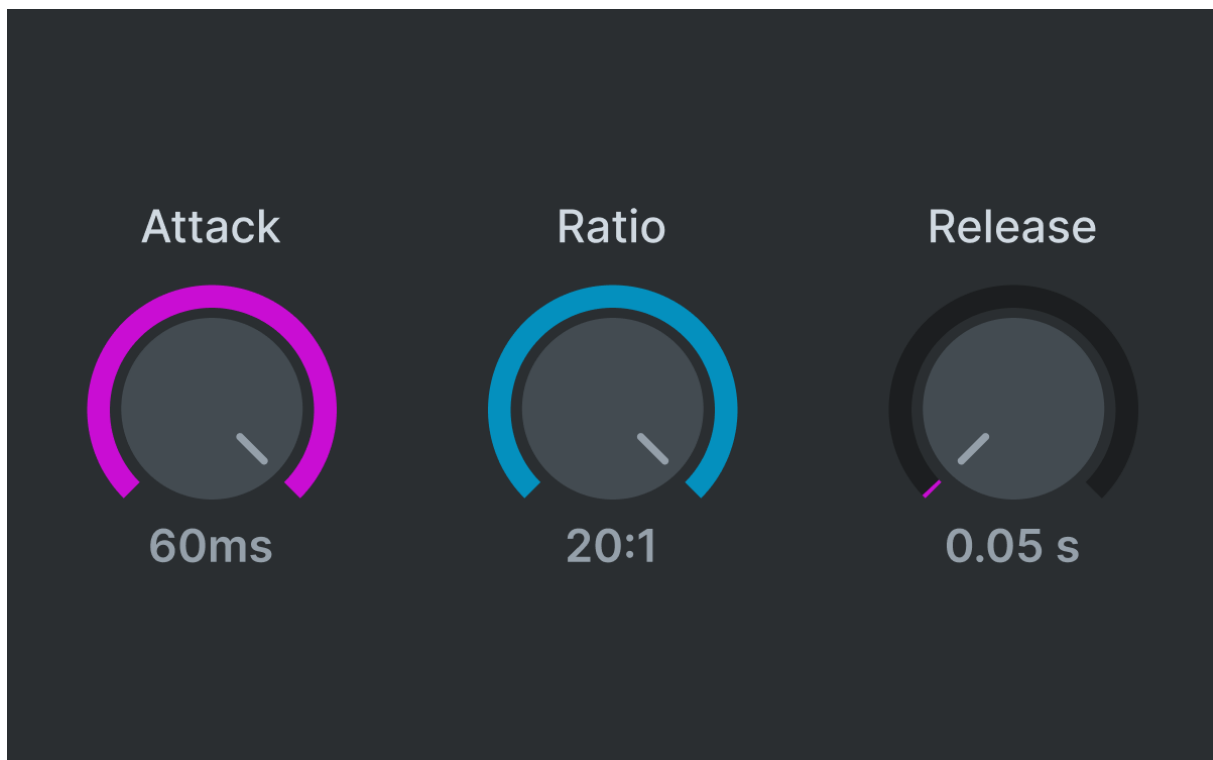
Map discovers instances only within the same loaded plug-in module and host process. Different formats or separate sandbox processes may not see each other. If a DAW keeps several projects in one process, Map may show instances from more than one project. Map sends control changes; it does not route audio between tracks.

Shape the compression

Threshold sets the level around which compression begins. Turn it down to get more gain reduction. **Ratio** changes both the strength and the shape of that onset: 1.5:1 and 2:1 begin more gently, sometimes below the displayed threshold, while higher ratios make the transition firmer.

Attack changes how quickly compression responds. A slower setting can let an initial hit through; a faster one can restrain it. On sustained material, changing Attack can also change the reduction that builds after the initial hit. The waveform matters: two sounds with the same peak level may produce different gain reduction.

Release controls recovery between events. Fixed times are nominal settings, not the time until reduction reaches zero; adjacent values need not produce proportional recovery speeds. **Auto** combines fast and slow recovery, retaining some history of earlier audio. Listen across a phrase: a dense run of hits can recover differently from one isolated hit. Gluon offers Attack from 0.01 to 60 ms, Ratio from 1.5:1 to 20:1, and fixed Release from 0.05 to 2 s plus Auto.



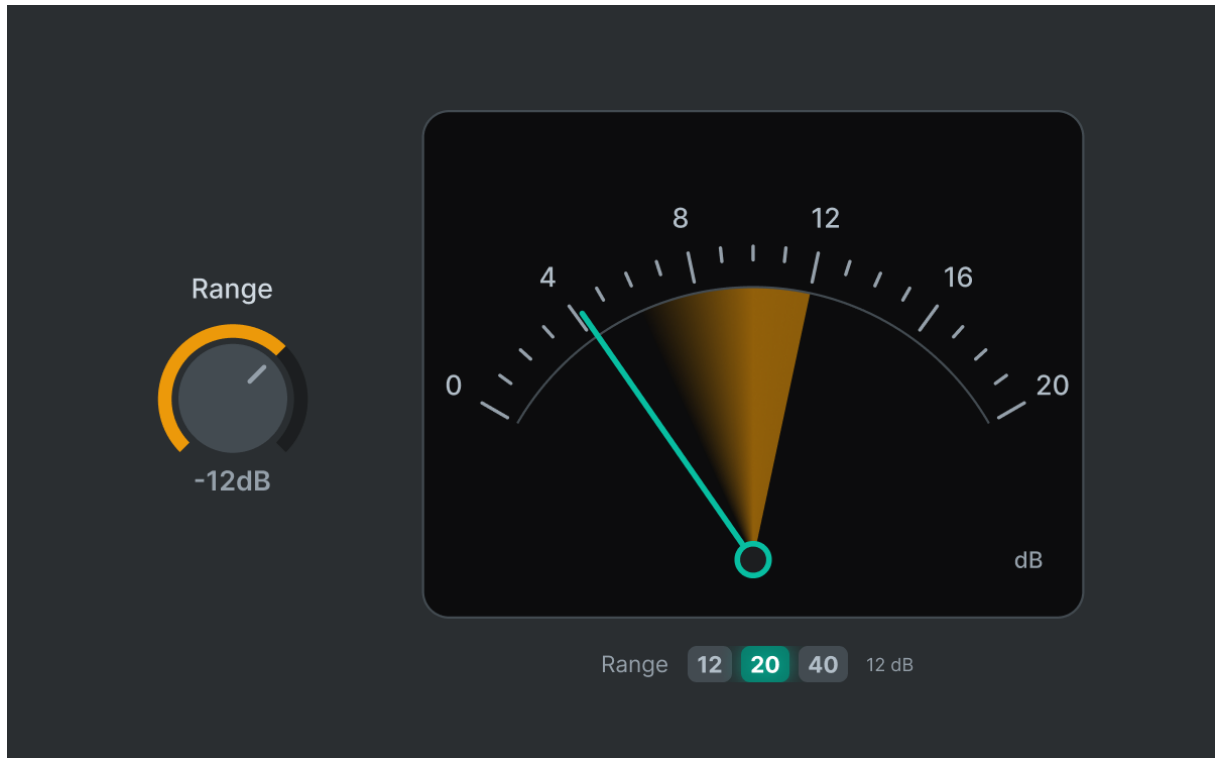
Attack, Ratio, and Release are direct selectors. The image shows example positions, not a recommended preset.

The center needle and numeric display show compressor gain reduction in dB. The compact **in** and **out** bars at the top show signal peaks. The 12, 20, and 40 dB buttons change only the gain-reduction meter's display scale; they do not change the sound or the selected Range.

TIP: Adjust Threshold while the loudest section plays, then check quieter sections. If only occasional hits need strong control, try a smaller Range before changing the timing again.

Keep movement with Range and Mix

Range limits the depth of gain reduction. It also shapes the detector response as compression approaches that limit, so reducing Range can change the feel of transients. At Full (70 dB), it does not constrain normal compression. Lower it when a setting has the timing and movement you like but takes too much level away on the strongest hits. The selected value is a ceiling, not a target for the meter: a 6 dB Range can result in less than 6 dB of reduction. At 0 dB, the compressor applies no gain reduction.



Range limits compression depth; the 12, 20, and 40 dB buttons select the meter's viewing scale. The values shown are illustrative.

Mix blends the dry input with the compressed path: 0% is dry before the optional output stage, and 100% is fully compressed. MakeUp belongs to the compressed path, so its effect also depends on Mix. Try a stronger compression setting with a lower Mix for parallel body, then compare at a similar perceived level.

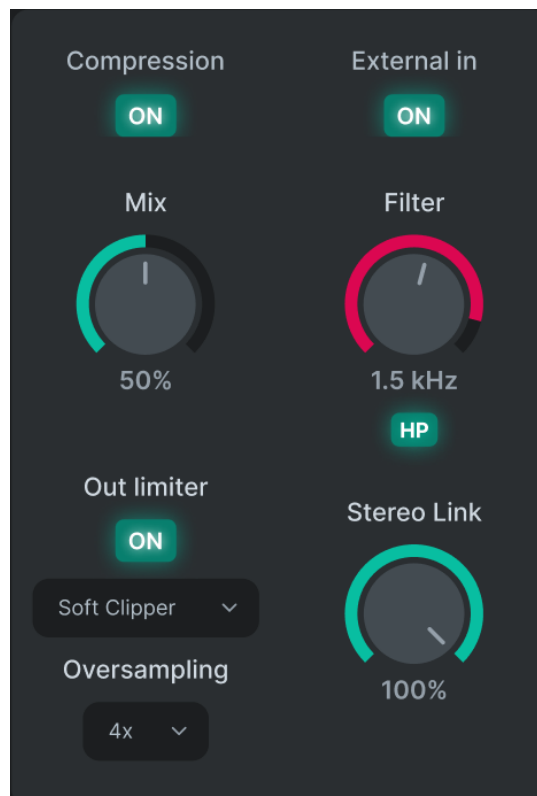
The **Compression** switch disables compressor gain reduction and MakeUp. The independent output stage can still process audio. **Bypass** in the top bar bypasses the whole plug-in, including the output stage; the dry comparison remains latency aligned with the selected output configuration.

Control the detector

The sidechain decides when the compressor reacts; the main audio is still what you hear. Leave **External in** off to detect the track itself. To compress from another source, route that signal to Gluon's external sidechain input in your DAW, then turn **External in** on. External sidechain availability and routing depend on the host and plug-in format.

Filter changes only the detector signal. Click its small mode button to cycle **HP**, **BP**, and **LP**. HP can keep low-frequency energy from dominating the detector; BP focuses it around a selected band; LP emphasizes energy below the cutoff. Set the frequency with the Filter knob. At **Off**, filtering is bypassed while the chosen mode is remembered. The frequency range is Off to 20 kHz.

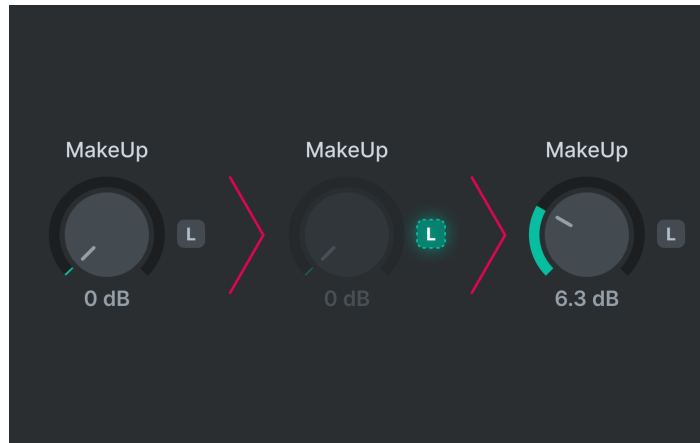
Stereo Link sets how much the two channels share detection. At 100%, the stronger channel drives linked gain reduction; reducing it lets the channels react more independently. Start linked on a stereo bus, then listen for changes in stereo movement before reducing the value.



The right panel holds External in, detector Filter and mode, and Stereo Link. It also contains the independent output controls.

Match level with MakeUp Learn

MakeUp raises the compressed path after gain reduction. For a quick comparison, press **L** next to MakeUp and play ten seconds of representative material. Gluon measures the input and the compressor-plus-Mix result, then sets one fixed MakeUp value. The button returns to idle when the measurement ends; it is not continuous automatic gain control.

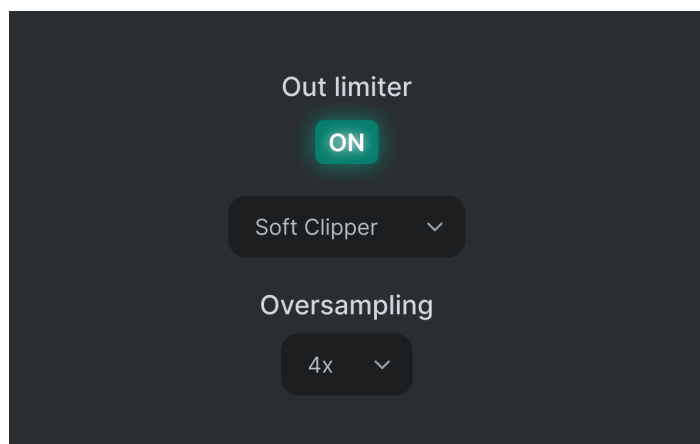


Press L, play ten seconds, then review the fixed MakeUp value and fine-tune by ear.

Press L again to cancel. If the input is silent or the measurement is insufficient, MakeUp stays unchanged. Changes to the sound while learning cancel that run so an old result cannot overwrite the new setting. Run Learn again after changing Threshold, Ratio, Range, or Mix. Learn measures before the output clipper or limiter, so compare final loudness again if you enable the output stage.

Shape peaks after the blend

Turn on **Out limiter** to enable the independent output stage. Choose **Hard Clipper**, **Soft Clipper**, or **Limiter** from its menu. It follows the compressor and Mix, and can remain on even when Compression is off. The **Oversampling** selector applies to this output stage only: Off, 2x, 4x, or 8x. The default selection is 4x; the output stage itself is off by default.



Output mode and oversampling are independent of the Compression switch.

Output mode and oversampling can change plug-in latency. Let your DAW update delay compensation after changing them, especially when comparing parallel tracks or recording through the plug-in. Gluon reports the selected output configuration's latency even when the output stage is switched off, so an on/off comparison keeps its timing.

Presets, comparison, and project state

The Presets menu contains Default preset, five factory starting points, and your saved presets. Set Threshold for the actual source and review MakeUp before deciding that a preset works. The gain-reduction figures below are listening targets, not fixed results.

- **Classic Glue** (2:1, 10 ms, Auto): Gentle cohesion for a mix or instrument bus, or backing vocals. Start around 1-2 dB of gain reduction on louder passages, then level-match.
- **Gentle Level** (1.5:1, 60 ms, 2 s): Slow, smooth control for pads, strings, keys, or sustained stems. Start around 1-2 dB of gradual reduction; check that a quiet phrase after a loud one recovers naturally.
- **Drum Punch** (4:1, 20 ms, 0.1 s): Drum bus or breaks with the initial hit left room to come through. Start around 2-4 dB of reduction on main hits while keeping the contrast with ghost notes.
- **Parallel Body** (8:1, 3 ms, 0.05 s, 30% Mix): Strong compression adds body and tails beneath the original drum transients. Set roughly 6-10 dB of reduction on the wet path; for a separate return, use 100% Mix and blend with the return level.
- **Room Crush** (20:1, 0.03 ms, 0.1 s): Deliberately aggressive compression for room mics, ambience, or a drum layer. Try 10-15 dB of reduction as an effect starting point, then back off if the room turns into unwanted noise.

Choose **Save Preset...** to name and store the current sound. New presets appear in the menu; a repeated name receives a distinct file rather than replacing the earlier preset. Hover over a user preset to find its delete action. Factory presets cannot be deleted. On macOS, user presets live in `~/Library/Application Support/nClear/Gluon/Presets/`; on other systems they live under the user's application-data folder in `nClear/Gluon/Presets/`.



The top bar provides Presets, A/B, Undo/Redo, Copy/Paste, meters, and Bypass.

A/B holds two temporary sound variants in the open editor. **Undo/Redo** steps through local edits. **Copy/Paste** transfers compatible Gluon sound settings through the clipboard to another instance. A/B and local history are editor-session tools; save a preset or DAW project to keep settings for later.

DAW project state and Gluon presets save the sound controls, including sidechain, output mode, and oversampling. Whole-plug-in Bypass, meter display scale, theme, window scale, and A/B history are outside portable presets. The meter scale is kept per instance in the host project; theme and window scale are shared Gluon preferences.

Settings and updates

Click the gear icon to open Settings. **Appearance** offers Dark UI and Light UI, plus 0.75x, 1x, 1.25x, 1.5x, and 2x interface scales. If your DAW keeps the previous window size after a scale change, close and reopen the plug-in window. Theme and scale are interface preferences, independent of the sound stored in a project or preset.

The update icon and **Check now** open the official nClear updates page in your browser. **Check for updates automatically** is off by default. If you opt in, Gluon checks when its editor opens, no more than once a week after a successful check. It sends the installed version and basic system/host information; it does not send personal, project, or audio data. Updates are offered as links, not downloaded or installed automatically.

In Settings, **Copy Tech-Data** places plug-in and system details on the clipboard for a support request. Visit <https://plugins.nclear.pro/support.html> for support and FAQ. Include the DAW, operating system, Gluon version, steps to reproduce the issue, and the copied tech data when relevant. Do not include private projects or audio unless you choose to share them.

Formats and installation

- **macOS 12.0 or later, Apple Silicon and Intel:** VST3, AU, and CLAP. The macOS download provides an installer with selectable formats; quit the DAW before installing, then reopen or rescan it.
- **Windows 10/11 x64:** VST3 and CLAP. Extract the download and copy the complete supported format into the standard plug-in folder, then rescan the DAW.
- **Linux x64:** VST3, LV2, and CLAP, built against Ubuntu 24.04. Copy complete bundles into the corresponding user plug-in folders, then rescan. Linux DAW compatibility is experimental.

Install only the formats your DAW uses, and avoid duplicate user and system copies. Gluon requires a compatible DAW; there is no standalone application.

Troubleshooting

Little or no gain reduction

Check that **Compression** and the plug-in itself are not bypassed. Lower Threshold while playing a loud section. If **External in** is on, verify that the DAW sends a usable sidechain signal. Check whether Range is set near 0 dB or Mix is near 0%, which can make compression hard to hear even when the detector is active.

Learn leaves MakeUp unchanged

Play a representative signal for the full ten-second measurement. Silence or too little usable input leaves MakeUp alone. If you changed a sound parameter or preset during the measurement, press L and start again.

Map does not show another instance

Confirm that both instances use the same Gluon plug-in format and run in the same host process. Some DAWs isolate plug-ins in separate processes; Map cannot discover across that boundary. A closed editor is fine if its processor is still loaded.

A mode change affects timing

Output mode and oversampling affect reported latency. Give the DAW a moment to update delay compensation after a change. When recording or doing parallel processing, check the host's latency and monitoring settings.

A preset or copied setting will not load

Gluon accepts current compatible Gluon settings. A file from a different product or incompatible format is rejected rather than partly applied. Save a new preset from the current version and retry.

For installation details and current downloads, visit <https://plugins.nclear.pro/>. For support, use <https://plugins.nclear.pro/support.html>.