



Multiband compressor and expander for mastering, built to be dialed in by ear as much as by number.

USER MANUAL

Version 1.7.12 · Windows & macOS · VST3 / AU / Standalone

This manual covers every function in Tripressor, including the ones marked **PRO** (AI calculator and upward expander). If your edition does not include them, just skip those sections: the rest of the manual applies as written.

SIDE KEY SYSTEM · sidekey.fr

Welcome aboard

Tripessor is a three band multiband compressor (Low, Mid, High), built around a feedforward topology in the spirit of a classic studio compressor, and completed by an independent upward expander. Nothing exotic in the principles, everything in the execution.

This manual is written to be read once, start to finish, then reopened only when you need one specific setting. It opens with a numbered guided tour of every module (so you know what each control actually does, not just what it claims to do), and closes with a set of mastering tips drawn from real use of the plugin, not from a press release.

Contents

01	The control bar	p. 3
02	A compression band	p. 4
03	Expand mode PRO	p. 5
04	The THD Valve module	p. 6
05	Presets, A/B and Bypass	p. 7
06	Options menu, general settings	p. 8
07	The AI calculator PRO	p. 9
08	Mastering tips	p. 10
09	Technical sheet and credits	p. 12

One band, three times over. Low, Mid and High share the exact same controls. Understand one band and you understand all three.

01. The control bar

Everything that concerns the unit as a whole: input, output, linking between bands and how the spectrum is split. Nothing here acts on a single band.



- 1 **Tripresor logo** click to open the About window
- 2 **Bypass** momentary, active while the button is held
- 3 **A / B** two full sets of settings, compare in one click
- 4 **Left VU source** In, Out or THD
- 5 **Left VU meter** old school needle, dB scale
- 6 **Right VU source** In, Out or THD
- 7 **Right VU meter**
- 8 **Link In** links Input across all three bands
- 9 **Link Out** links Output across all three bands
- 10 **XLO** Low / Mid crossover
- 11 **XHI** Mid / High crossover
- 12 **AI, Analog, Linear, Options** AI toggle, crossover type, settings
- 13 **Power** main power for the whole unit

Link In and Link Out never link two bands set to different modes (one band in Comp and one in Expand stay independent, even while linked). Nobody wants to turn the wrong knob by accident.

02. A compression band

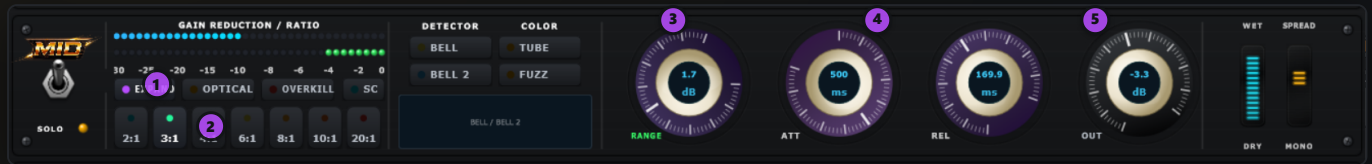
Low, Mid and High are three identical copies of the same module. What follows describes the Low band in Comp mode: Mid and High work exactly the same way, only the name changes.



- | | |
|---|--|
| 1 Band name Low, Mid or High | 2 Solo isolates the band to set the crossover by ear |
| 3 Gain reduction / Ratio 36 LEDs, 0.1 dB each | 4 Comp / Expand switches which set of controls is shown |
| 5 Optical long, program dependent release | 6 Overkill 1176 all buttons in character |
| 7 SC listens to the external sidechain bus | 8 Ratio 2:1 to 20:1, seven steps |
| 9 Detector HP / Bell filters the detection signal, not the audio | 10 Color Tube / Fuzz per band harmonic saturation |
| 11 Detector graph visualizes the active filter | 12 Input pre gain before compression |
| 13 Attack | 14 Release |
| 15 Output makeup gain, shared by Comp and Expand | 16 Wet / Spread dry/wet blend and stereo width |

03. Expand mode

Every band hides a second compressor. Well, not quite: more of an inverted compressor, one that lifts quiet signal up toward the threshold instead of crushing loud signal down. This is what upward expansion means.



- 1 **Expand engaged** the LED and the knobs turn purple
- 2 **Expand ratio** its own value set, independent from Comp
- 3 **Range** replaces Input: ceiling of the boost in dB, 0 by default
- 4 **Attack / Release** timing dedicated to the expander, up to 500 ms of attack
- 5 **Shared Output** one makeup gain, whichever mode is on screen

What matters here

Comp and Expand run at all times, together, on every band. The Comp / Expand button does not switch anything off: it simply chooses which set of controls sits under your fingers. The compressor keeps reducing loud signal while you dial in the expander, and the other way around. You always hear the full chain, never half of it.

Range at zero switches the expander off, plain and simple: that is the default state when the plugin opens. Bring it up gradually, not with one generous turn of the knob at three in the morning.

04. The THD Valve module

A single stage of harmonic saturation, applied after the three bands are summed. Not a per band shaping tool: a final coat of varnish, the one that glues a mix together at the end of the chain.



- 1 THD logo
- 2 Soft / Tape / Iron / Air four saturation characters
- 3 Activity light
- 4 Dial 1
- 5 Dial 2
- 6 Dial 3

The four characters

S Soft

The most discreet of the four. Rounds off peaks without drawing attention, built to stay invisible on a finished master.

T Tape

Gentle magnetic tape compression. Adds body in the low mids, useful on a mix that is missing some glue.

I Iron

Transformer saturation, more assertive. Use it when the mix needs a bit of character, not a full disguise.

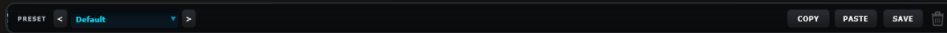
A Air

Favors the upper harmonics. Brings back shine on a mix that sounds a little dull, without reaching for an EQ.

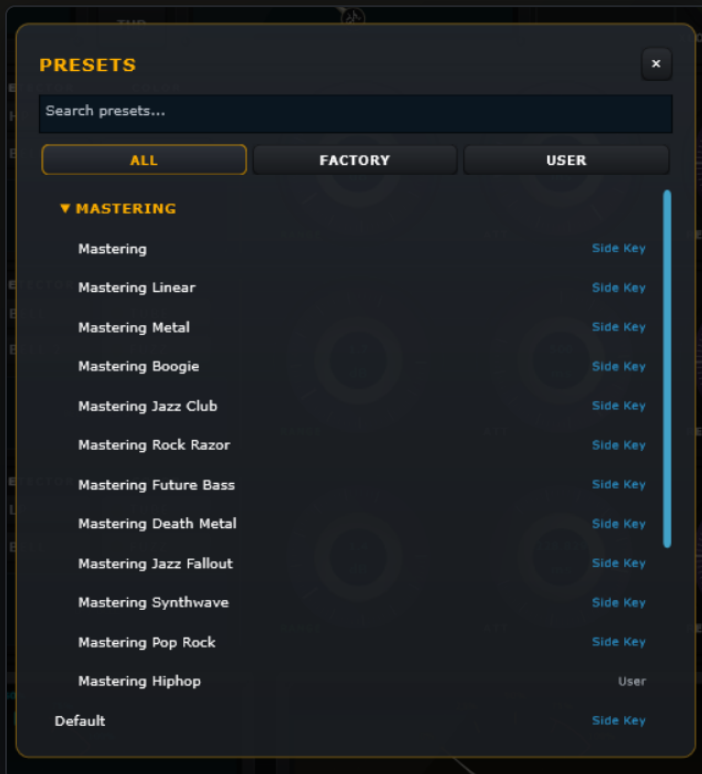
A True Peak safety ceiling protects the saturation against any audible overshoot: you can push Drive without worrying about a last minute accident.

05. Presets, A/B and Bypass

Three navigation tools that look like nothing much, and without which no serious mastering decision is really possible.



The preset bar (arrows, name, copy, paste, save, trash) stays available at all times at the bottom of the window. The full browser opens when you click the preset name.



Factory presets

A good fifteen starting points built around genres (Metal, Jazz, Synthwave, Hip Hop and so on) plus two neutral mastering presets, one Analog, one Linear. None of them are meant to be left as is: they are starting points, not solutions.

A / B, the real decision tool

Two complete sets of settings, one click to switch. Your ear adapts to a treatment within seconds: without regular A/B checks, you will almost always end up over compressing without noticing it.

Bypass

Momentary, not latching: it stays active only while you hold the button down. Handy for a quick back and forth while listening, without any risk of forgetting the plugin disabled for the rest of the session.

06. Options menu, general settings

Reached from the settings icon on the control bar. The General section is purely about comfort of use, the AI section is covered on the next page.



1 Window Size

Window scale from 75 to 100 percent. Purely cosmetic, no effect on the sound.

2 Linear Mode CPU Budget

Trade off between precision and latency in Linear crossover mode. Low CPU for real time mixing, High CPU for the final bounce.

3 AI Mastering Target

Loudness target in LUFS for the main streaming platforms, or a custom value. Guides the AI calculator, nothing more: the result stays fully adjustable afterward.

4 AI Compression Mode

From Soft to Hard: the overall intensity the AI aims for in compression.

5 AI Attack / Release Character

From Smooth to Punchy: the personality of the proposed dynamics.

6 AI Gain Reduction

From Smooth to Hard: how much gain reduction the AI allows itself to propose.

7 AI Scope

What the AI button is allowed to recalculate: Crossover, Detectors, Compression. Turn off whatever you have already set by hand so the AI leaves it alone.

07. The AI calculator

One click on AI Learn, a few seconds of listening, and Tripressor proposes compression, expansion, sidechain detection and crossover settings consistent with what it hears. It does not replace your decisions, it just saves you from starting on a blank page.

1 AI Style

Per band output offset consistent with a given musical style (Bass, Loud, Rock, Pop, Electronic). A mix signature, not a compression.

2 AI Fidelity

Dynamically corrects the balance between the three bands, based on what is actually measured. Combines with Style without conflict, the two corrections add together.

3 AI Expand, three controls, three jobs

- **Amount** drives Range only, the size of the boost.
- **Mode** drives Ratio only.
- **Character** drives Attack and Release only, with Smooth being slow and Punchy fast, the opposite of the convention on the compression side.

The screenshot shows the 'OPTIONS' dialog box with a close button (X) in the top right corner. The settings are organized into several sections:

- GENERAL**
 - WINDOW SIZE**: Buttons for 75%, 80%, 85%, 90%, 95% (selected), and 100%.
 - LINEAR MODE CPU BUDGET**: Buttons for LOW CPU (selected), MEDIUM CPU, and HIGH CPU.
- AI**: A row of three buttons: CROSSOVER, DETECTORS, and COMPRESSION (selected).
- AI STYLE (OUTPUT BALANCE)**: Buttons for OFF, BASS (selected), LOUD, ROCK, POP, and ELECTRONIC.
- AI FIDELITY (RESTORE ORIGINAL TONAL BALANCE)**: A single button labeled FIDELITY.
- AI EXPAND MODE**: Buttons for OFF, SOFT, MEDIUM, and HARD (selected).
- AI EXPAND ATTACK / RELEASE CHARACTER**: Buttons for OFF, SMOOTH, MEDIUM (selected), and PUNCHY.
- AI EXPAND AMOUNT**: Buttons for OFF, SMOOTH, MID, and HARD (selected).

A 'CLOSE' button is located at the bottom center of the dialog.

A single click on AI Learn calculates and applies compression and expansion for all three bands at the same time. Switch freely between Comp and Expand on any band afterward, without ever having to run the analysis again.

How it measures

The analysis relies on the signal's Crest Factor, the gap between peak and average level, measured band by band over a clip several seconds long. A signal that is already squashed calls for a different treatment than one that is still dynamic: that difference is what the AI reads before it proposes anything.

08. Mastering tips

None of this is a required method. It is simply what, in practice, saves time and avoids regrets on the next day's playback.

1 Start with the crossover frequencies

Before touching a single ratio, use each band's Solo to listen to Low, Mid and High individually, and set XLO and XHI based on the actual content of the track, not a template value found on a forum. Once the frequencies are set, compare Analog and Linear: the former for its responsiveness, the latter for its phase neutrality.

2 Over compress on purpose

Push Ratio, gain reduction and a short Release well past reasonable, just long enough to hear where the compressor starts pumping and where its signature becomes obvious. Once you have found those limits by ear, back off gradually until you land on the right balance. Finding the edge first is faster than slowly creeping up from zero.

3 Set Release before Attack

Release decides whether the compression disappears into the track or announces itself. Slower, it stays discreet; faster, it adds energy, even pumping if that is the effect you are after. There is no universal value, only a value that fits the song. Once Release is set, Attack becomes a far more intuitive control for shaping transients.

4 Trust your ears

Every rule in this chapter exists to be broken the day the track asks for it. Nothing written here replaces attentive listening. The right setting is the one that serves the music, not the one that follows the procedure to the letter.

5 The AI calculator as a starting point **PRO**

Whether you are just starting out or you have been mastering for twenty years, AI Learn speeds up the search: a transparent compression in a few seconds, a heavier version the next moment, several behaviors compared without reprogramming each band by hand. A starting point, never a finish line.

6 Check in with A/B often

The ear adapts to compression within seconds. Frequent A/B checks let you judge objectively instead of giving in to habit, and a few tenths of a decibel can sometimes be the whole difference between subtle and excessive.

7 The expander: powerful, demanding **PRO**

Unlike a classic expander, Tripressor's version only steps in where the compressor is no longer reducing anything. Its job is to put a little dynamics back after the compression stage, not to create a second, separate treatment. In mastering, a Range of 0.3 to 3 dB covers most use cases, depending on the style of music.

Used with restraint, it brings back movement, openness and breathing room to the mix. Pushed too far, it produces an agitated, extreme sounding dynamic, with noticeable pumping and a master that loses coherence. Subtlety, here more than anywhere else, is your best friend.

8 In mastering, less is often better

Tripessor is capable of heavy treatment, which does not mean you should reach for it every time. Small adjustments spread across several parameters almost always sound more natural than an extreme correction on a single control. When in doubt: pull back a little, compare more, and let your ears make the final call.

09. Technical sheet and credits

Architecture	Multiband, 3 bands (Low / Mid / High), feedforward topology
Crossover	Analog (minimum phase) or Linear (linear phase, FIR), switchable
Crossover amplitude accuracy	0.01 dB, in both Analog and Linear
Compression	7 discrete ratios, 2:1 to 20:1, per band
Upward expansion	Independent per band, its own Range, Ratio, Attack and Release PRO
Detection	High pass filter and dual Bell per band, external sidechain per band
Character	Optical (long, program dependent release) and Overkill (1176 all buttons in)
Saturation	THD Valve, Soft / Tape / Iron / Air, single global stage, True Peak safety
AI calculator	Compression, expansion, sidechain, crossover, platform loudness targeting PRO
Formats	VST3, AU, Standalone
Systems	Windows and macOS
Interface	Resizable from 75 to 100 percent

Standard edition and Pro edition

Both editions share the exact same compression engine, the same expander and the same interface. Only the Pro edition includes the AI calculator. This manual documents everything: if a section carries the Pro tag and your edition does not include it, just move on to the next one.

Thanks for reading this far. That is rare, and it always shows in the final result.