

AIVA COMPRESSOR

Version 2.9 | 64-Bit Dynamics Processor (VST3)

---

1. OVERVIEW

Aiva Compressor is a precision 64-bit dynamics processor designed to handle everything from transparent surgical peak control on individual tracks to cohesive analog-style mix bus gluing.

Featuring a dual-architecture engine, the plugin houses two independent compressors in one interface—each with its own dedicated parameter memory bank—paired with calibrated vintage-style ballistic VU metering and a transparent 64-bit Butterworth sidechain high-pass filter.

Key Highlights

- **Dual Operating Modes:** Seamlessly switch between **Universal** (ultra-fast surgical compression) and **Bus Comp** (classic stepped VCA mix-bus gluing with subtle harmonic warmth).
- **Independent Memory Banks:** Switching between Universal and Bus Comp automatically saves and recalls separate parameter settings for each mode.
- **Calibrated Vintage VU Meters:** Dual `-30` to `+3` `VU` ballistic meters with automatic **Mono / Stereo** track detection, peak LED indicators, and selectable **IN / OUT / GR** monitoring.

- **64-Bit Sidechain High-Pass Filter:** Prevents low-end kick and sub-bass energy from over-triggering compression.
- **Zero-Latency & Anti-Click Processing:** Sample-accurate gain smoothing ensures artifact-free transients even at the fastest `0.01 ms` attack setting.

---

2. INSTALLATION & ACTIVATION

System Requirements

- **OS:** Windows 10 / 11 (64-bit)
- **Format:** VST3 (64-bit)
- **Host:** Any VST3-compatible DAW (Studio One / Fender Studio Pro, Cubase, Reaper, Ableton Live, FL Studio, etc.)

Installation

1. Run **`Aiva_Compressor_Setup_v2.9.exe`** as Administrator.
2. Follow the on-screen instructions. By default, the plugin installs to: `C:\Program Files\Common Files\VST3\Aiva Compressor.vst3` 3. Restart your DAW or rescan your VST3 plugin folder.

License Activation

1. Load **Aiva Compressor** onto an audio or bus track.
2. Enter your 19-character license key (format: `AIVA-XXXX-XXXX-XXXX`) into the activation field.
3. Click **ACTIVATE**. Once verified, your license is stored locally on your machine (`%AppData%\AivaAudio\AivaCompressor.license`) and will remain active across all projects.
4. After payment is confirmed, we will send you an email with the license key within 48 hours.



---

3. DUAL-MODE ENGINE & MEMORY BANKS

At the top right of the interface, the **UNIVERSAL / BUS COMP** toggle switches the internal topology, metering backlight, and control behavior:

Feature	UNIVERSAL Mode (Cyan)	BUS COMP Mode (Amber / Orange)
Character	Clean, fast, surgical dynamics control	Classic VCA console mix-bus glue with subtle analog harmonic saturation
Detection	Peak-weighted (`75% Peak / 25% RMS`)	Balanced glue detection (`45% Peak / 55% RMS`)
Ratio	Continuous (`1.0 :1` to `20.0 :1`)	Stepped (`2 :1`, `4 :1`, `10 :1`)
Attack	Continuous (`0.01 ms` to `250 ms`)	Stepped (`0.1`, `0.3`, `1.0`, `3.0`, `10`, `30 ms`)
Release	Continuous (`5 ms` to `2000 ms`) + *Manual / Auto Dual*	Stepped (`100`, `300`, `600 ms`, `1.2 s`, `Auto`)
Knee	Selectable (*Hard 0 dB*, *Soft 6 dB*, *Wide 12 dB*)	Fixed musical console curve (`8 dB`)

Smart Dual Memory: *Each mode stores its own independent settings. You can dial in aggressive vocal compression in* ***Universal*** *mode, switch to* ***Bus Comp*** *to test glue settings, and switch back to* ***Universal****—all of your previous knobs and dropdowns will be instantly restored.*

---

4. CONTROLS & PARAMETERS

Top Header Bar

- **UNIVERSAL / BUS COMP:** Toggles between the continuous Universal compressor and the stepped Bus Compressor.
- **BYPASS:** Engaging Bypass routes the unprocessed audio cleanly through the plugin while keeping input/output VU meters active for accurate level comparison.

Vintage VU Metering & Center Panel

- **Left & Right VU Meters:** Displays real-time ballistic levels from `-30` to `+3 VU` (calibrated to `0 VU = 0 dBFS` reference). On **Mono** tracks, the left meter automatically switches to **MONO** mode while the right meter dims to **INACTIVE (MONO)**.
- **PEAK LED:** Illuminates red whenever the channel signal approaches digital clipping (`-0.5 dBFS`).
- **IN / OUT / GR Switches:** Selects the signal source displayed on the analog needles:
  - **IN:** Pre-compression input level.
  - **OUT:** Post-compression, post-output gain level.
  - **GR (Default):** Gain Reduction amount in decibels.
- **Digital GR Readout:** Located at the bottom of the center panel, displaying exact real-time gain reduction in `-dB` regardless of which needle source is selected.

Dynamics Controls (Bottom Row)

1. **THRESHOLD (`-60.0 dB` to `0.0 dB`):** Sets the level above which compression begins.
   - **Knee Dropdown *(Universal Mode)*:** Selects transition smoothness around the threshold (**Hard 0 dB**, **Soft 6 dB**, or **Wide 12 dB**).
1. **RATIO:** Determines how much gain reduction is applied once the signal exceeds the threshold (`1.0:1` to `20.0:1` in Universal; stepped `2:1`, `4:1`, `10:1` in Bus Comp).
2. **ATTACK:** Controls how quickly the compressor reacts to transients (`0.01 ms` to `250 ms` in Universal; stepped `0.1 ms` to `30 ms` in Bus Comp).

3. **RELEASE:** Controls how quickly the compressor returns to unity gain after the signal drops below the threshold (`5 ms` to `2000 ms` in Universal; stepped `100 ms` to `1.2 s` or `Auto` in Bus Comp).
    - **Release Mode Dropdown *(Universal Mode)*:** Choose **Manual** for fixed release timing, or **Auto Dual** for program-dependent dual-stage release that prevents pumping on dynamic material.
5. **MIX (`0.0 %` to `100.0 %`):** Blends the dry uncompressed signal with the wet compressed signal for instant parallel compression.
    - **SC HPF Dropdown:** Engages a 64-bit Butterworth Sidechain High-Pass Filter (**SC: Off**, **60 Hz**, **80 Hz**, **100 Hz**, **120 Hz**, or **160 Hz**) so heavy sub-bass does not trigger unwanted pumping.
6. **OUTPUT (`-12.0 dB` to `+24.0 dB`):** Clean makeup gain applied after the Mix stage to level-match your processed signal.

---

5. QUICK TIPS & WORKFLOW

- **Mouse Wheel Precision:** Use your mouse wheel over any knob for fine continuous adjustments in **Universal** mode, or crisp click-by-click step switching in **Bus Comp** mode.
- **Double-Click Reset:** Double-click any knob to instantly return it to its default value.
- **Drum Bus Glue:** Switch to **Bus Comp**, set **Ratio** to `4 :1`, **Attack** to `10 ms` or `30 ms` (to let punchy snare and kick transients pass through), **Release** to `Auto` or `100 ms`, and engage **SC: 80 Hz** or **100 Hz**.
- **Vocal Control:** Use **Universal** mode with **Soft 6 dB** knee, **Ratio** around `3:1 – 4:1`, **Attack** `1–5 ms`, **Auto Dual** release, and adjust **Threshold** for `3–6 dB` of gain reduction on the **GR** meter.

Thank you for choosing Aiva