

# RESONANT REVERB

## User Manual

Épica Audio · In collaboration with Joe Chiccarelli

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## Introduction

Resonant Reverb is a creative plate reverb plug-in developed by Épica Audio in collaboration with Joe Chiccarelli. It is designed to give producers, engineers and sound designers access to the unique expertise and techniques behind decades of albums crafted by Joe Chiccarelli.

Unlike conventional reverb processors, Resonant Reverb incorporates resonant High-Pass Filters (HPF) and Low-Pass Filters (LPF) both before and after the reverb engine. This dual-filter architecture enables you to determine exactly which frequencies enter the reverb and to shape the colour and character of the processed signal at the output.

## Compatibility

### PLUGIN FORMATS

- VST
- AAX
- Audio Unit / Component

### SUPPORTED OPERATING SYSTEMS

- macOS
- Windows

Resonant Reverb is compatible with any DAW that supports the plug-in formats listed above.

## Signal Flow

Audio passes through the plug-in in the following order:

**Input Signal** → Pre Reverb Filter → Plate Reverb Engine → Post Reverb Filter → **Output**

Each module includes its own bypass control, giving users complete freedom to combine and shape the processing path as they wish.

## Interface Overview

The plug-in interface is divided into four sections:

- Pre Reverb Filter
- Reverb Engine
- Post Reverb Filter
- Output Section

Each section is described in detail below.

### 1. Pre Reverb Filter

The Pre Reverb Filter shapes the input signal before it reaches the reverb engine. Featuring smooth filter slopes, adjustable Q controls and rich harmonic distortion, it can be used subtly for tonal balance or pushed creatively to add resonance and character before the signal enters the reverb path. This section can be enabled or bypassed independently, allowing the signal to pass either filtered or unprocessed into the reverb path.

We recommend using the filter to control which frequencies feed the reverb, helping shape the space more precisely. Together with Joe Chiccarelli, we also discovered that exaggerating the resonances can create uniquely expressive textures and tonal character.

Parameter	Range	Description
<b>HPF Freq</b>	20 Hz – 20,000 Hz	Sets the cutoff frequency of the High-Pass Filter. Higher values remove more low-frequency content before the reverb is applied.
<b>HPF Q</b>	Variable	Controls the resonance of the HPF. Higher Q values create a pronounced emphasis around the cutoff frequency, producing a more focused, resonant character.
<b>LPF Freq</b>	20 Hz – 20,000 Hz	Sets the cutoff frequency of the Low-Pass Filter. Lower values remove more high-frequency content before the reverb is applied.
<b>LPF Q</b>	Variable	Controls the resonance of the LPF. Higher values create emphasis near the cutoff frequency.
<b>Bypass</b>	On / Off	Enables or disables the entire Pre Reverb Filter section.

## 2. Reverb Engine

At the core of the plug-in is a plate-style reverb engine capable of producing everything from tight ambience to long, atmospheric decays. Inspired by the processing chains and techniques Joe Chiccarelli has refined over decades, the reverb engine also features an 1176-style compression stage under the hood, adding density, movement and character to the reverberated signal. The engine can be bypassed entirely, allowing the plug-in to function as a stand-alone resonant filter.

Parameter	Range	Description
<b>Reverb On/Off</b>	On / Off	Enables or bypasses the reverb engine. When disabled, the signal passes through the filter sections only.
<b>Mix</b>	0% – 100%	Controls the balance between the dry and reverberated signal within the reverb section. 0% is fully dry; 100% is fully wet.
<b>Width</b>	Variable	Controls the stereo width of the reverberated signal. Narrower settings produce a focused, mono-compatible image; wider settings expand the reverb across the stereo field for a more immersive result. Particularly effective on pads, vocals and atmospheric textures.
<b>Pre-Delay</b>	0.02 ms – 300 ms	Sets the time between the original signal and the onset of the reverb tail. Shorter values produce a tighter sound; longer values increase separation between the dry signal and the reverb.
<b>Decay</b>	0.5 s – 47 s	Controls the length of the reverb tail. Short values suit subtle ambience; long values create expansive atmospheric spaces and experimental textures.

## 3. Post Reverb Filter

The Post Reverb Filter shapes the processed signal after the reverb engine, enabling precise tonal sculpting of the reverb tail. Designed to remain clean and transparent, it preserves the integrity of the reverberated signal while offering detailed control over resonances and frequency balance. This section can be enabled or bypassed independently.

The filter is ideal for refining and controlling the frequencies coming out of the reverb, but it also becomes a powerful creative tool when combined with automation and exaggerated resonances, allowing the reverb tail itself to evolve rhythmically and tonally over time.

Parameter	Range	Description
<b>HPF Freq</b>	20 Hz – 5,000 Hz	Sets the cutoff frequency of the post-reverb High-Pass Filter.

Parameter	Range	Description
HPF Q	Variable	Controls the resonance of the post-reverb HPF. Higher values create stronger emphasis around the cutoff frequency.
LPF Freq	500 Hz – 20,000 Hz	Sets the cutoff frequency of the post-reverb Low-Pass Filter.
LPF Q	Variable	Controls the resonance of the post-reverb LPF.
Bypass	On / Off	Enables or disables the Post Reverb Filter section.

## 4. Output Section

Parameter	Range	Description
Output Gain	-12 dB – +24 dB	Sets the final output level of the plug-in. Use this control to compensate for gain changes introduced by filtering or resonance.
Global Dry/Wet	0% – 100%	Controls the overall balance between the unprocessed input signal and the fully processed output. 0% passes the dry signal only; 100% passes the processed signal only.

## Creative Applications

Resonant Reverb was designed not only as a spatial processor, but also as a creative tone-shaping instrument. Many of the included presets developed together with Joe Chiccarelli showcase unconventional ways of transforming sound far beyond traditional reverb duties.

### Cleaner Mixes

Apply the pre- and post-reverb HPF controls to remove low-frequency buildup from the reverb return. This maintains clarity in dense mixes where muddy low-end reverb can obscure the mix's foundation.

### Textures Design

By exaggerating resonance values and automating filter frequencies, Resonant Reverb becomes a powerful sound design tool capable of generating evolving textures, resonant sweeps, metallic tails, and animated spatial movement. Subtle automation can add life and motion, while extreme settings can produce entirely new timbres from simple source material.

## Transforming Drum Samples

Several presets are designed to completely reshape the character of drum sounds. For example, using *808 Kick Extender* on a standard sampled kick can add the weight, sustain, and movement associated with classic analog drum machines, while *LoFi Boxy Snare Room* can turn a clean digital snare into a gritty, character-driven percussion sound with depth and attitude.

## Experimental Spatial Processing

Because each module can operate independently, the plug-in can move from subtle ambience enhancement to highly experimental processing. Using only the filter stages with resonant peaks and automation can create movement and tonal coloration even without audible reverb, while driving the internal processing harder introduces density and energy inspired by classic studio hardware chains.

## Vocal and Instrument Character

The interaction between the filters, harmonic saturation, and plate reverb engine allows vocals, guitars, synthesizers, and acoustic instruments to sit in a mix with a more finished, record-like quality. Tight resonant boosts before the reverb can emphasize musical harmonics, while post-filter shaping can create focused spaces that feel vintage, intimate, or aggressively modern.

## Tips & Best Practices

- Use moderate Q settings for musical tonal shaping; reserve extreme values for intentionally resonant or experimental effects.
- Long decay times combined with resonant filtering can generate sustained, drone-like textures well-suited to ambient and cinematic work.
- Use the Width control to position the reverb precisely within the stereo field without affecting the dry signal.
- Bypass the reverb engine and use only the Pre and Post Reverb Filters for creative tone shaping independent of any reverb processing.
- Apply the Global Dry/Wet control when running Resonant Reverb on an insert channel to blend the processed signal to taste.

# Factory Presets designed by Joe Chiccarelli

All included factory presets were personally designed by Joe Chiccarelli, drawing from decades of experience crafting records across multiple genres, studios, and generations of artists. Each preset reflects not only his production and engineering techniques, but also the tonal instincts, creative decisions, and listening approach that have defined his career.

Rather than functioning as conventional reverb presets alone, many are built as complete tone-shaping chains that combine resonance, filtering, ambience, dynamics, and harmonic character to achieve specific sonic identities and emotional textures.

These presets can serve as mix-ready starting points, creative sound design tools, or insight into the studio techniques and sonic philosophy behind Joe Chiccarelli's approach to record making.

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## Vocals

Designed to place vocals into unique spaces ranging from intimate ambience to heavily stylized textures, delays and resonant atmospheres.

- BG Vocal Room Efx
- Classic Tube Vocal Plate
- Closet Like Vocal Reverb
- Concrete Vocal Ambience
- Dark Vocal Support Ambience
- Evil Vocal Repeats
- Female Vocal Rear Ambience
- Long Wide Dreamy Vocal Reverb
- Middly and Behind the Vocal Ambience
- Modern Bright Vocal Plate
- Radio Telescope Vocal Bounceback
- Short Dark and Wide Vocal Reverb
- Vocal Clouds
- Vocoder Style Sing Along Reverb

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## Drums and Percussion

A collection focused on transient shaping, analog-style drum enhancement, resonant kick extensions and experimental snare environments inspired by Joe's career.

- Floor Tom Enhancer
- Rack Tom Enhancer
- Stereo Overheads Enhancer
- Wood Drum Room
- 808 Kick Extender
- 808 Kick Note Maker

- 808 Kick Note Maker 2
  - 808 Kick Room
  - Gunshot Snare
  - Hand Clap Snare
  - LoFi Boxy Snare Room
  - Long Dark Hallway Snare
  - Simmons Like Snare
  - Snare Drum Fattener
  - White Noise Snare
  - A Longer Kick Note
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## Bass

Presets designed to add cabinet-like resonance, stereo width, sustain, movement and harmonic character to both electric and synthesized bass sources.

- Bass Fliptop Cabinet Simulator
  - Elec Bass Edge
  - Instant Bass Amp Cabinet
  - Bass Soft and Wide Support
  - Bass Techno Repeater
  - Fretless Bass Imitator
  - Synth Bass Widener
  - Wider Fatter Elec Bass
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## Guitars

From subtle room enhancement to wide ambient textures, these presets explore the interaction between resonance, saturation and spatial depth on electric or acoustic guitars.

- Rock Rhythm Gtr Widener
  - Acc Gtr Short Ambience
  - Clean Elec Gtr Room
  - Funky Slapback Gtr Room
  - Heavy Guitar Ambience
  - Pedal Steel Long Ambience
  - Pedal Steel Medium Ambience
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## Synths and Keys

Experimental resonant spaces and harmonic enhancement designed for synthesizers and keyboards.

- Synth into Church Organ
  - Elec Piano Room
  - Synth Pad Church Like Character
  - Synth Pad Midrange Peaker
  - Synth Pad Simple Resonances
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## Mix Utility

Utility presets intended for subtle enhancement, spatial glue, tonal correction and mix coloration across a variety of sources.

- Horn Section Room
- Horns Soft Ambience
- Just a Little Midrange Personality
- Sax Solo Ambience
- Short 1970's Style Rock Room
- The Missing Lower Mids
- Trumpet Room
- Sasquasch

## Credits

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**Developed by** Épica Audio

**In collaboration with** Joe Chiccarelli