

# SUPER REVERB

## Digital Reverb



## User Manual

## Overview

Super Reverb is a digital reverb processor inspired by the classic Boss RRV-10 rack unit from 1986. It features 9 authentic reverb algorithms including rooms, halls, plates, multi-tap delays, and gated reverb. Enhanced with modern features like pre-delay and input-driven ducking for professional mixing applications.

## Signal flow

Input → Tone EQ → Pre-delay → Reverb Algorithm → Ducking → Mix with Direct Signal → Output

The input signal passes through a tone-shaping filter, then an optional pre-delay before entering the reverb processor. The wet signal can be ducked based on input level, then mixed with the dry signal according to the Direct and Effect Level controls.

## Main controls

Parameter	Description
Effect	Master bypass switch (Off/On). When Off, the plugin passes dry signal only.
Mode	Selects one of 9 reverb algorithms: Room 1, Room 2, Hall 1, Hall 2, Plate 1, Plate 2, M Tap 1, M Tap 2, or Gated.
Pre-delay	Delay time before reverb begins (0-250ms). Adds separation between dry signal and reverb tail. Classic studio technique for clarity.
Decay Time	Length of the reverb tail (0-15). Higher values create longer, more spacious reverbs. The actual time depends on the selected Mode.
Tone	Adjusts the tonal character of the reverb (0-100%). Lower values are darker and warmer, higher values are brighter.
Effect Level	Volume of the wet/reverb signal (0-100%). Controls how much reverb is added to the mix.
Direct	Volume of the dry/direct signal (0-100%). Set to 0% for 100% wet, or blend with Effect Level for parallel processing.

## Ducking controls

Ducking automatically reduces the reverb level when input signal is present, then lets it swell back during quieter moments. This keeps the mix clean and prevents reverb from masking the source.

Parameter	Description
Duck Time	Release time for the reverb to return after ducking (10-500ms). Shorter times = reverb comes back quickly. Longer times = smoother, more gradual swell.
Duck Amount	Intensity of ducking effect (0-100%). At 0%, ducking is disabled. Higher values duck the reverb more aggressively when input is present.

## Reverb modes

### Room 1 & Room 2

Small to medium room simulations. Room 1 is tighter and more intimate, Room 2 has slightly more diffusion. Great for drums, guitars, and adding subtle space.

### Hall 1 & Hall 2

Large concert hall simulations. Hall 1 is more classic and smooth, Hall 2 has a different character with modified early reflections. Ideal for vocals, orchestral instruments, and creating depth.

### Plate 1 & Plate 2

Classic plate reverb emulations with dense, bright character. Plate 1 is more traditional, Plate 2 offers variation. Perfect for vocals, snare drums, and adding shimmer.

### M Tap 1 & M Tap 2

Multi-tap delay/reverb hybrids creating rhythmic spatial effects. These modes combine discrete echoes with reverb tails for complex, evolving textures.

### Gated

Classic 80s gated reverb effect. The reverb tail is abruptly cut off, creating the iconic punchy sound popularized on drums in the 1980s. Decay Time controls the gate length.

## Quick start

- **Subtle room ambience:** Room 1, Decay 3-5, Effect Level 30%, Direct 100%
- **Lush vocal hall:** Hall 1, Decay 8-10, Pre-delay 30-50ms, Effect Level 40%
- **Bright plate for snare:** Plate 1, Decay 5-7, Tone high, Effect Level 50%
- **80s gated drums:** Gated mode, Decay 4-6, Effect Level 60-80%
- **Clean mix with ducking:** Any mode, Duck Amount 50-70%, Duck Time 100-200ms
- **100% wet for send/return:** Direct 0%, Effect Level 100%

## Technical notes

Super Reverb uses authentic HG61H20R36F gate array emulation based on the original 1986 hardware. The reverb engine processes in stereo with true stereo output. Pre-delay uses a simple delay line for authentic vintage character. Ducking employs an envelope follower with fast attack and user-controlled release. Reverb engine based on mt32emu/BossEmu by Dean Beeler, Jerome Fisher, Sergey V. Mikayev (LGPL 2.1).

## Support

For technical support, updates, and additional information:

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