

2hp – Comb

- [Manual PDF](#)

[Download the Comb 2HP Manual \(PDF\)](#)

(Replace # with your actual manual link, since PDF was not provided in your upload)

Comb 2HP (Eurorack) – Quick Reference Cheat Sheet

A compact IIR peaking comb filter module with CV-controllable cutoff, resonance, and damp control. Features intense resonant feedback, phaser/thickening, or metallic/chaotic effects.

Inputs, Outputs, and Controls

Label	Type	Description	Voltage Range
IN	Input	Audio input. Modular-level signal.	10 Vpp
FREQ CV	CV In	Control voltage input for cutoff frequency. Adds to knob position.	±5V
FREQ	Knob	Sets cutoff (inverse to delay). Right = higher, left = lower. At 500Hz, 2ms delay.	-
RES CV	CV In		±5V

Label	Type	Description	Voltage Range
		Control voltage for resonance. Adds to knob.	
RES	Knob	Sets feedback amount (resonance/peaks intensity).	-
DAMP CV	CV In	Control voltage for damp(en) (dampening filter in feedback loop). Adds to knob.	$\pm 5V$
DAMP	Knob	Sets feedback path LPF cutoff. Left = max damp (dark); right = no damp (bright).	-
OUT	Output	Audio output. Modular-level signal.	10 Vpp

Basic Usage Guide

- **Connect your audio signal to IN.**
- **Set FREQ** to pick the comb spacing (related to the "tuned" delay time).
 - Higher = brighter, more closely spaced peaks; lower = darker, more spaced.
- **Increase RES** for sharper, more resonant peaks. High enough, can self-oscillate!
- **Adjust DAMP** to filter the feedback path.
 - Left: Heavy filtering, tames metallic overtones (darker).
 - Right: Open/bright resonances, more "ringy."
- **Patch CV to FREQ, RES, or DAMP** for animation. EG: modulate FREQ for moving phaser, RES for feedback sweeps, DAMP for timbral morphing.
- **Extreme RES settings:** white noise in produces string/pluck sounds; signals can get chaotic!

Voltage Ranges

- All CV inputs: $\pm 5V$ (adds to knob value)
- Audio IO: 10 Vpp

Sonic Tips

- **Subtle FREQ, low RES:** Gentle thickening, phaser/ensemble feel.
- **Extreme FREQ, max RES:** Self-oscillation, synthetic string/reed sounds.
- **DAMP to left:** Tames the brilliance, good for "lo-fi" or mellow repeats.
- **DAMP to right:** Brighter, metallic results, more feedback.

For detailed reference, consult the [full manual \(PDF\)](#).

Generated With Eurorack Processor