Deluxe OmniCabSim

Tweakable Cabinet Simulator

User Manual

DSM NOISEMAKER

DSM Noisemaker OmniCabsim Deluxe

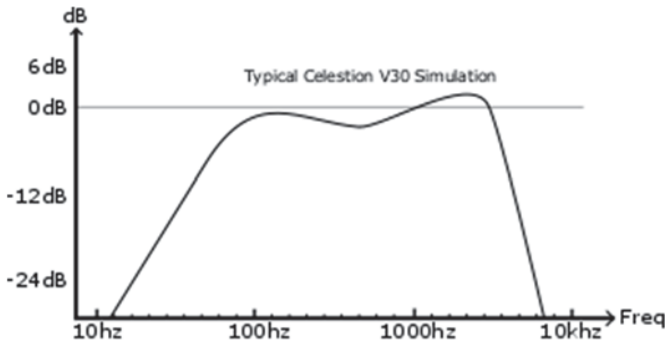
Tweakable Cabinet Simulator

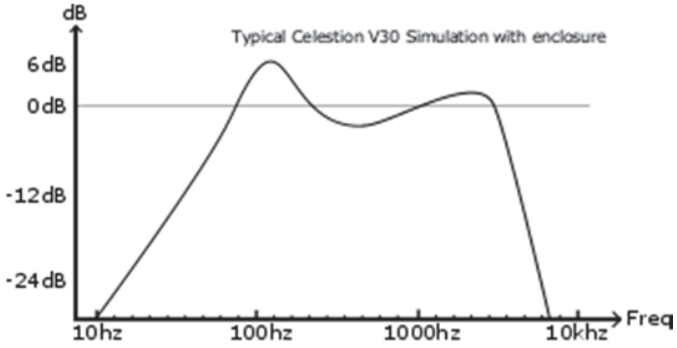
Thank you for purchasing the best cabinet simulator available. This device will help you to achieve the sound of standard cabinets and further, allowing you to tune the characteristics of a speaker and cabinet to your own taste, and not being limited by presets of classic, common cabinets.

What is a Cabinet Simulator?

A cabinet simulator is a device designed to emulate the frequency response of a speaker system. Guitar and bass speaker systems have a very pronounced filtering effect, rolling off the low and high frequencies very sharply due to their physical and electrical properties. Things like cone size, material, impedance, enclosure size and type, even distance from a wall, affect these filters very noticeably.

A typical cabinet simulation consists on a steep roll off of the low frequencies under 70-100hz , an even steeper roll off of highs over 5kHz, and some mid frequency attenuation, for example a typical Celestion v30 simulation looks like this:





Features:

The Philosophy behind the design is to allow the user to CREATE their own cabinet response settings, moving away from the typical preset cabinet simulators in the market. This approach let the musician to define his own sound and getting an accurate reproduction of it when recording and playing live gigs, without depending on mic placement, amplifier or cabinet availability.. Just dial in your favorite tone, tune your cabinet response and go straight to the PA or recording gear.

- **Mic and Line output.** Compensate levels with the gain control.
- **Tunable high frequency response** emulates the steep low pass filter that different speakers produce.
- **Tunable Low frequency response** that controls the low end roll off typical of speaker of various sizes.
- **Tunable low frequency resonance** lets you dial the resonance of the low end roll off point, reproducing the effect of closed or open back cabinets, and anything in between.
- **Mid control** lets you dial “modern” or “vintage” responses.
- **Punch control** boosts the 800 Hz band, that lets you cut through the mix with warmth.

New features:

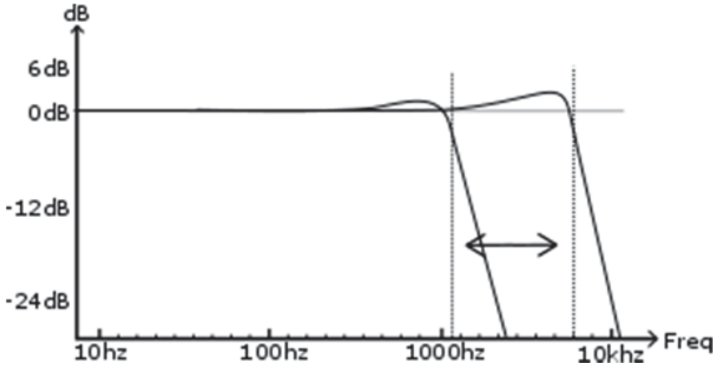
The Deluxe version has been updated with very useful improvements:

- **Lower noise floor**: The noise floor has been lowered by -12dB by carefully modifying the circuit without affecting its wonderful tone response.
- **Improved DI output**: The new design has a top notch DI system, with much more driving power and the standard 6dB signal boost.
- **Headphone Amplifier**: A powerful 350mW Mono headphone amplifier is included. This could even drive a small speaker, so be careful with the volume levels. It is perfect for loud on stage monitoring and practice sessions without disturbing the neighbors.
- **Aux Input:** The aux input allows you to connect an external sound source into the headphone output. This allows you to play along backing tracks, monitoring while recording, and late night practice.

Controls:

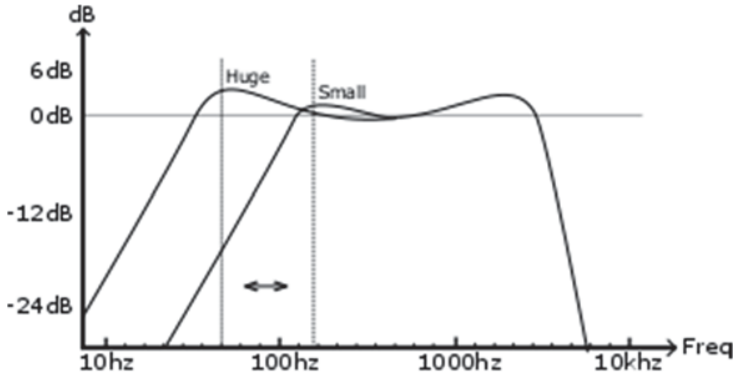
Gain: The gain control has a 0 to +12 dB of gain. It is used to compensate when the input level is too low. It is recommended to keep the gain low and the input signal strong to improve Signal/Noise ratio.

Hi Response: This controls the high end roll off point of the speaker simulation. The range goes from a dark 1.5 KHz roll off typical of subwoofers speakers, to 8 KHz, like an extended range speaker, going anything in between.



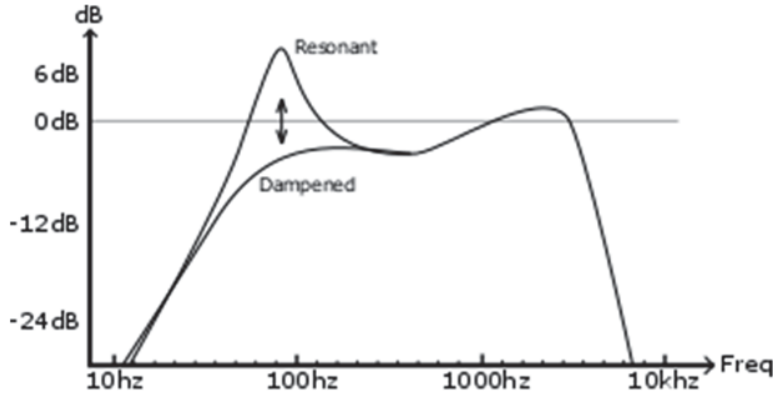
Hi Response range

Cab Size: This knob controls the theoretical size of the cabinet, as it moves the low frequency resonance up or down. Smaller cabinets with smaller speakers tend to have a higher resonant peak than bigger stacks. The range goes from small cabinets (1x8” style), at 180Hz up to huge 2X15” cabinet resonant frequency at 70Hz.

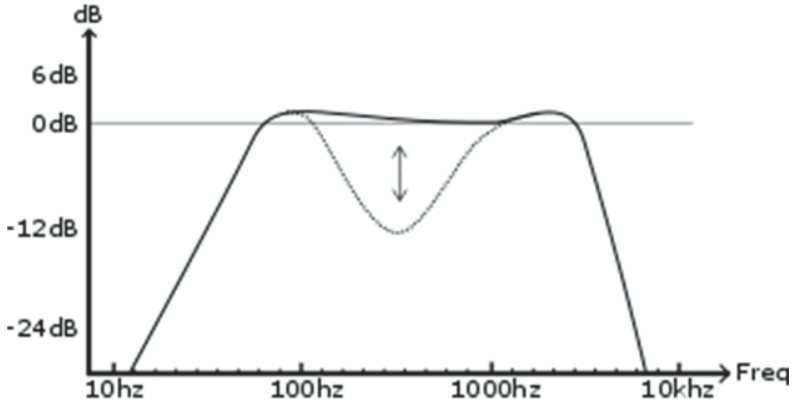


Cab Size Range

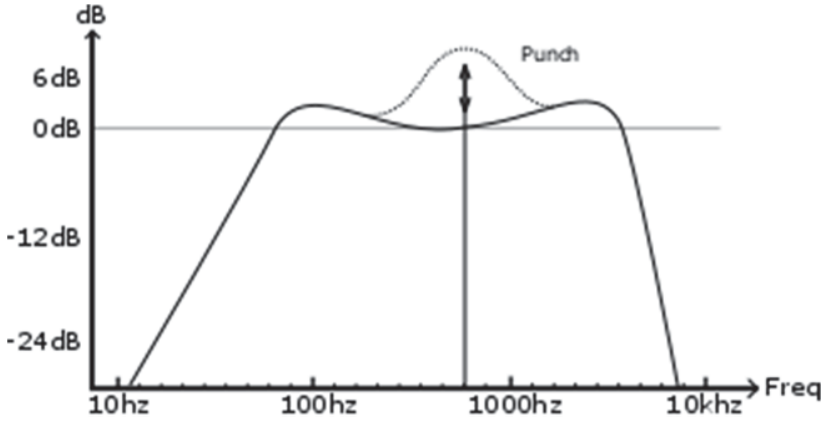
Resonance: This knob alters the intensity of the resonant frequency of the cabinet. Big closed back cabinets have a very resonant peak at the low frequencies, in contrast, small open back cabinets have a mellower resonance. *Note: if the input signal contains a lot of low frequency content, maxing this control out may induce oscillation.*



Mid Response: Controls the 450 Hz band response. Different kind of speakers shows a distinct response around this band.



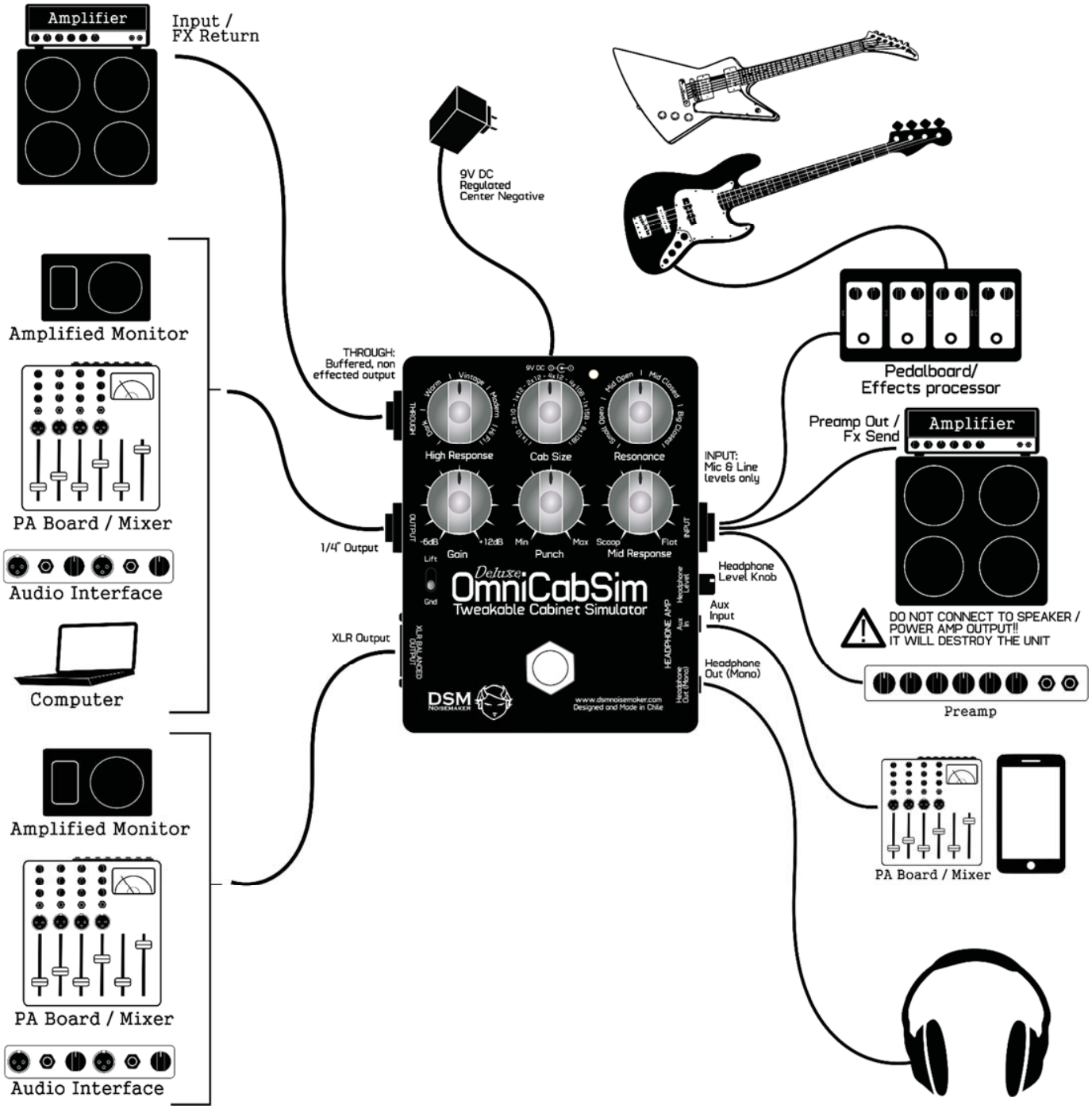
Punch: This one boosts the 800 Hz band, when you need more presence and punch on your sound to cut through the mix.



Headphone Level: Controls the headphone volume level. Beware that the Headphone may get really loud. Protect your hearing by using it with moderation.

Connections:

IMPORTANT: THIS IS NOT A POWER ATTENUATOR, DO NOT CONNECT TO THE POWER OUTPUT OF AN AMPLIFIER!!



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