RADIAL Headload

By Joe Gore

As hard as it is to accept, there comes a crisis point in the lives of many guitarists when they must—*gasp*—turn down. Sure, we can postpone the inevitable with unassailable logic like, "I need to be that loud for my *tone*, man." Still, there are times when shrieking toddlers, pitchfork-wielding neighbors, and tri-county SWAT teams will challenge the most dedicated tone seeker's commitment to 130 dB practice sessions at 3 a.m.

A Worthy Compromise?

Fortunately, savvy minds have concocted tools that let us dime our 100-watt heads well into the wee hours: power attenuators. Connected between your amp's speaker-out jack and the speaker(s) in your combo or cab, they let you run your amp full-bore, but at a fraction of the usual volume. Some attenuators are also load boxes, which electronically simulate a speaker load so you can record directly from your head (without a speaker connected) and not destroy your amp (the likely outcome without such compensation).

A number of good attenuator/load boxes sell for between $200 and $300, and the half-dozen I've tried all work well. I've never encountered a model that *exactly* reproduces the sound of a blasting speaker or cab at whisper volume, but you can narrow the realism gap by modifying your amp's tone settings or EQ-ing the signal at the mixing desk. And anyway (cover your ears, tone illuminati!), a small compromise on your guitar sound is a reasonable trade if it spares you disemboweling by your bandmates, soundperson, or spouse.

Not Your Basic Load Box

Radial's Headload does more than most competitors and is priced accordingly. At $899, Headload is probably overkill for players who just want to crank their amps at night with minimal collateral damage. But its rugged steel enclosure and many pro features could make it crucial gear for touring guitarists—especially those fortunate enough to travel with their own front-of-house soundperson.

Headload incorporates circuitry from Radial's popular JDX 48 Reactor Guitar Amp Direct Box, which lets you send direct post-amp/pre-speaker signals to the board via a single XLR jack. But Headload offers four outputs: dual XLR and 1/8" jacks. One set of each routes the signal through the front panel's EQ and cabinet-simulation settings, and one set bypasses them. It's your choice whether to connect a speaker or just listen through in-ears, stage monitors, or Headload's headphone jack. You can even connect two cabinets, provided their combined impedance matches the amp's speaker-out impedance.

The front-panel controls refine the sound you hear through the speakers, and you can decide whether these adjustments are applied to the direct signal or only the monitored one. The range and load controls let you lower the speaker signal by as much as 99 percent. The low and high resonance switches are like the loudness controls on a hi-fi tuner, fattening and brightening to compensate for the ways our ears tend to interpret relatively low-volume sound.

You can choose from six simulated cabinet voicings for the direct signal. Headload also incorporates the phase-alignment circuitry from Radial's Phazer box, which helps nix unwanted phase cancellation when combining direct and miked amp sounds. In other words, Headload provides the tools to contend with just about any direct-from-the-amp signal, whether or not you connect a speaker.

Let's Talk Tone

When listening through speakers at attenuated levels, the results are similar, but not identical, to a non-attenuated tone. Hear for yourself—all the audio examples feature the same brief performance, routed through Headload at various settings via a Reamp. Compare **Ex. 1** (an 18-watt Marshall clone at near-maximum volume) and **Ex. 2** (the same audio and amp settings, but with the signal attenuated 80 percent). Both were recorded with the same Royer R-121 ribbon mic in the same position, with no direct signal added.

For Ex. 2, I activated Headload's high and low resonance switches, so the tone is both brighter and boomier than the original—a result I might well prefer in a mix. It certainly doesn't sound "fake" or "quiet." **Ex. 3** is simply the Ex. 2 clip with some compensatory board EQ added. It sounds pretty darn close to the loud sound in Ex. 1. Impressive!

Direct tones without a miked speaker sound less realistic (though not bad, necessarily). Even with speaker emulation, tones are buzzier and less three-dimensional. **Ex. 4** features the same reamped guitar performance through various Headload emulations. There's a nice range of choices, though none sound as realistic as the miked examples.

In fairness, though, I've never heard a guitar DI box with genuinely convincing speaker emulation, and Headload is better than many. In **Ex. 5,** I use EQ to nudge the direct sound closer to the miked sound, but there's still a strong character difference. (Which isn't to say that the ultra-present direct sound wouldn't be perfect in some contexts.)

But there are many ways crafty engineers might incorporate direct sounds other than blasting them as-is. They might add EQ or mix it with the miked sound, dialing in the least phasey-sounding blend via the Phazer tool. They might also use just part of the direct signal. (For example, I once did a tour with a two-guitar/no-bass band. My signal ran through a DI on its way to a small amp. The engineer isolated only the lowest part of the direct signal and pumped up its lows before recombining it with the miked sound. Result: arena-filling bass you'd probably never get from a miked guitar speaker.) Meanwhile, just about every amp simulator these days includes realistic speaker emulations based on impulse responses captured from real miked speakers. Most of them sound more organic than the analog EQ emulations found on Headload and rival other products I've tried. So don't take the flat, buzzy DI tones at face value—a good engineer *can* make them sound great.

The Verdict

Radial's Headload Guitar Amp Load Box and Direct Box sounds at least as good as any attenuator/direct box I've heard, and it boasts more useful features than any of them. Few hobbyist or homebody guitarists need to spend $899 for this specialized tool if all they want is loud tones at low volume. But for players and engineers who must contend with varying venues night after night, this Swiss Army guitar DI could become one of the most crucial tools in in the road case.

LEARN MORE

CLICK HERE TO HEAR the headload.

RATINGS

Radial Headload Load Box

$899 street
radialeng.com

Tones	4.5
Ease of Use	4.5
Build/Design	5
Value	4.5

PROS Superb construction. Great-sounding level attenuation. Comprehensive connectivity.

CONS Speaker emulations not 100-percent realistic. Probably too complex and pricey for non-pro players.