

once over

Radial

Reamplification

Most of the work done by recording engineers is focused on getting signals from the "real world" into a recording device. However, in some cases, you also need to move signals from the recorder back into the audio domain for additional processing. Normally, we use a mixer to route things to monitors, effects units or other audio processing devices. But there are cases where you need to take processing a step further—you have to get them into an instrument amplifier.

The reasons why

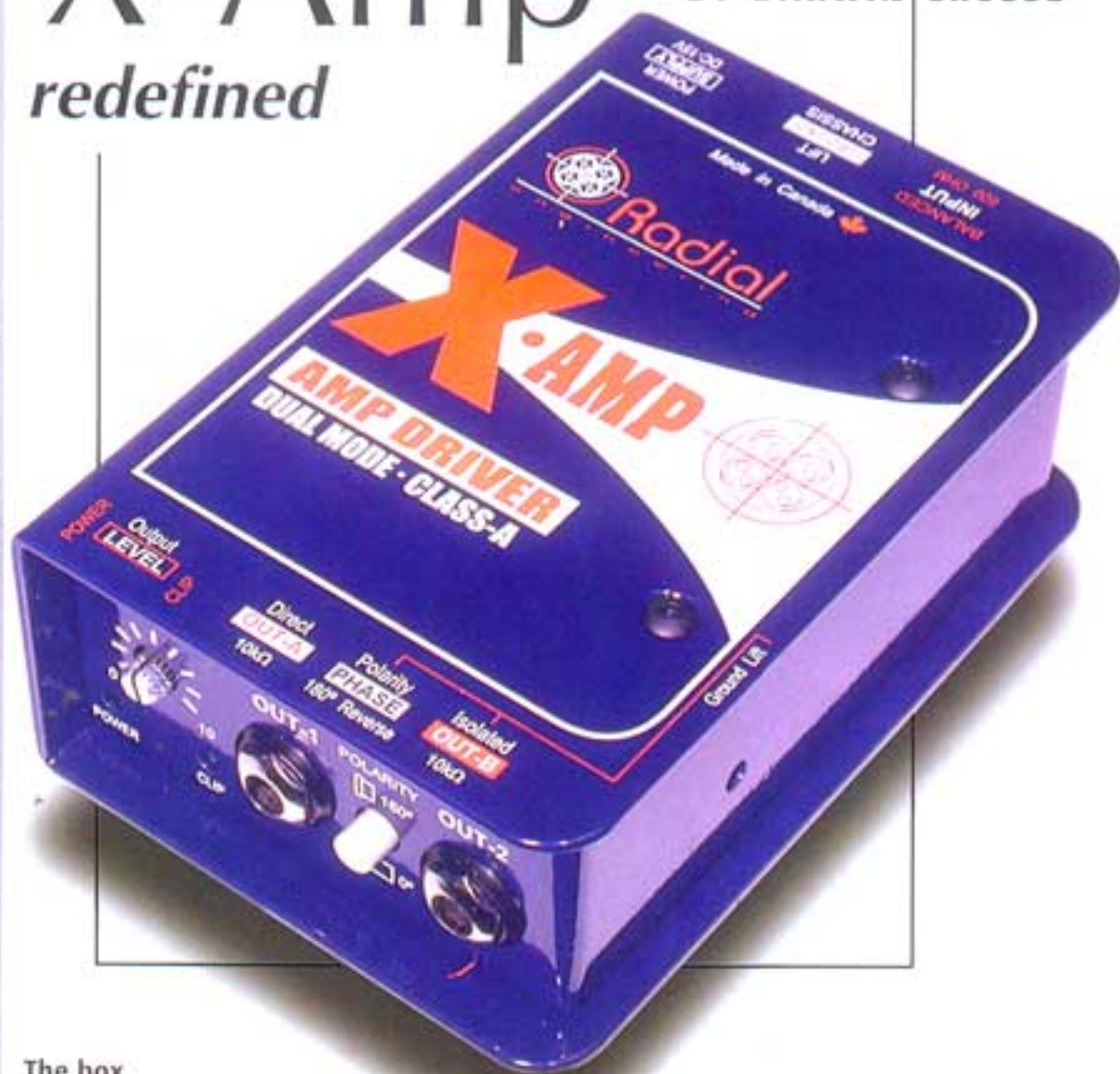
The reasons for doing this can vary. In some cases, you might need to take a DI (Direct Inject) instrument recording and run it through an amp for a more realistic sound. In other cases, you want to get some additional roundness in a tone through the use of a favorite tube amp. And sometimes things just sound better after "moving some air" (using a speaker and mic combo). In any case, this is more involved than simply plugging a tape deck or DAW's output into the front-panel jack of a guitar amp—the signal needs to be adjusted for routing to an amplifier. (See my article on DI and re-amplification elsewhere in this issue.)

To pull off the re-amplification process, you need a device that is able to make a line output (from your recording) "look like" a guitar or bass signal. Radial Engineering has produced a simple little box, the X-Amp, that will take a balanced line-level signal and alter it into the low-level, high-impedance signal an amp will prefer.

X-Amp

redefined

BY DARWIN GROSSE



The box

The box is a 3½" x 5½" x 2" brick, with all connectors and controls safely tucked under a recessed metal edge. It features a +4 dB balanced line input (at a standard 600 Ohm impedance), and produces a 5 KOhm output at instrument level. This level can be adjusted (via a front-panel potentiometer) to match the input level of your amp. The unit is powered by a 15 VDC wall-wart power supply.

There are two instrument outputs: one is a direct-coupled output, and is

used to connect both the signal and the grounding of the system. A second output is transformer-isolated, so a second amp can be used without causing ground loops or grounding noise. This output can also be phase-reversed to repair input phase problems.

The ability to drive two amps is almost overkill for this kind of device—we're just getting used to re-amplification; do we really want to double up the noise? But the flexibility is certainly nice—especially for more flexibility in a standardized studio layout. Having

two amps is a luxury, but having both a small tube amp and larger solid state “shredder” immediately available gives a studio an interesting pair of options at the flip of a switch (or two). Radial states that, simply put, having the ability to mix and match amps and pedals in this way is *fun*. Can’t argue with that...

Reamping with two amps

The proof is in the pudding, so I set up a wiring arrangement from one channel of my mixer to the X-Amp, then from the X-AMP to a pair of amps: one guitar combo, and one small bass practice amp. From there, I routed DAW tracks to that mixer channel for amplification, then sent them back to the DAW through a stand-alone mic preamp.

DI-recorded guitar and bass tracks were an obvious starting point. I DI’d both onto separate tracks of the DAW, and then routed them individually through the X-Amp. Re-routing them back into the amp was dead simple, and the result (after a bit of gain adjustment) sounded like the “Real Thing.” I found this especially useful with the guitar tracks; I was doing some recording into tracks of Ableton Live, but decided (after

adding additional loop tracks) that I needed to slow down the audio.

If you do this with recorded effects, you will find that the effected sound can get rather distorted. This isn’t an indictment against Live—it’s the reality of life with any pitch- and time-shifting algorithm. The actual sounds can generally be shifted with good

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success, but start time-shifting a delay or reverb sound, and you are going to be disappointed. By saving this processing (as well as some liquid wa-wa performance) until the track was properly time-shifted, the result sounded great, totally belying its time-shifted origin.

Playing with other instrument tracks, it became clear that many instrument tracks were enhanced by

reamplification. Some of the best effects were seen with drum machine kick drum and hi-hat tracks (which benefited from the addition of some “air”) and a filter-sweep synth track (where guitar effects pedals *ruled*).

Verdict

In every case, the X-Amp lived up to its end of the bargain. In fact, once it was hooked up, it needed practically no attention whatsoever. I found that the X-Amp became one of those “always on” devices that quietly sat on a mixer channel, ready to leap into the fray whenever needed. That is one of the best things you can say about Radial’s product—it is unobtrusive, but performs its tasks exactly as desired. Want to add some reamplification into your life? The X-Amp is a great (and reasonably priced) way to make it happen.

Price: \$200

More from: Radial Engineering, 1638 Kebet Way, Port Coquitlam, BC V3C 5W9, Canada. 604/942-1001, fax 604/942-1010, www.radialeng.com.

