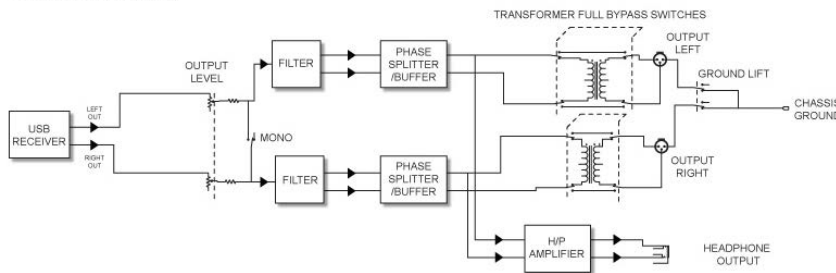# RADIAL USB PRO
PLUG AND PLAY

by Jimmy Den-Ouden

USB-Pro Block Diagram

I acquired a Radial USB Pro to use on the CX Roadshow because I needed an audio interface to sit between my laptop and a mixing console for an audio demo. People tend to examine my demo setups pretty critically, and for that reason the USB Pro was good. I've never seen anyone look at a Radial box and question it — there's kind of a general consensus that everything they make is good and works like it's supposed to.

This is certainly true of the USB Pro. It's a simple idea really – take a digital to analogue converter and put it in the same box as two DIs. It's a USB DI.

The USB Pro operates at 24 bit, 96kHz, so on specs alone it's likely to satisfy the most demanding (or precious) users. It uses the same construction format as the JDI, J48, and every other Radial box. Rock solid construction you can stand on, drop or probably drive over with a car. I didn't drive over mine with a car, since the frequency response of the unit is already effectively dead flat from 20Hz to 20kHz.

The unit is nicely setup to provide logical signal flow – you plug USB in at one end, and get dual XLR outputs at the other. The input is a type B USB socket, and while it's not a locking connector it's at least better than a mini USB type socket. I'm yet to find a locking USB connector (other than an all-weather IP rated one), so such a desire is something of a pipe-dream anyway.

Adjacent to the USB input socket is a 3.5mm headphone jack that you can use to monitor the output at the DI. A level adjust sits next to this, effecting both the XLR and headphone outputs. There's a mono sum button with corresponding LED. This is a great feature for when you don't want to run stereo back to the console (who cares if a PowerPoint transitional "zing" is mono or not?). Passive summing with a Y lead can cause problems, so this is a win.

A similar button sits at the other end of the unit between the XLR outputs, providing a ground lift feature. Laptops tend to have noisy power supplies, so anything you can do to isolate such noise sources from the PA is a good thing. On the same topic, the USB Pro has dual isolation transformers which can be switched in-line with the outputs. Clicking the iso transformers in-line rolls off the HF output a little, starting at 5kHz to finish 5dB down at 20kHz. Much as expected really, as is the 2.5dB dive at 20Hz. The device is USB powered, so no external supply is needed.

The output level runs from extremely low through to head-amp smashingly high – while it says mic level on the XLR outputs I reckon it outputs much higher if you ask. Achieving good signal to noise ratio is definitely no problem.

The USB Pro is USB 2.0 full speed compliant, so while it won't work on a Commodore 64 you've got a pretty good chance of true plug and play with anything recent. It's not a cheap way to solve one problem, but it is a cheap way to solve every laptop audio problem ever.