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Cool Tools

Radial PRO DI Direct Box

By Mark Amundson

Radial Engineering has been known for many flavors of passive and active Direct Inject (DI) boxes, including its Jensen Transformer equipped "JDI" direct box. While the JDI is popular in national soundco mic lockers, its couple-hundred-dollar price tag has kept sales down to the very serious user. So taking the hint, Radial Engineering has come up with an economy version of the JDI, called the PRO DI.

The Radial PRO DI is a smaller version of the JDI with fewer features (no input merge or output polarity flip), but retains the same quality switches and jacks as its big brother. While not as fully specified as the JDI, the PRO DI still maintains the 140k-ohm input impedance (1k-ohm output reference), and even improves upon the distortion rating to less than 0.01% from 20Hz to 20kHz. Without the -15dB pad switch engaged, the PRO DI can accept just about any pro-audio level sent to it, with just a -22dB drop for impedance matching.

The PRO DI, using my Neutrik Minirator and Minilyzer test equipment, handily exceeded the +/-2.5dB spec and kept within 0.2dB flatness across a 20Hz to 20kHz sweep. In checking distortion, it was apparent that my audio sources were much worse than the 0.01% spec. But even with that handicap, I was able to check +22dBu



across the 20Hz and up audio bands. Most direct boxes are adequate at +10dBu on the low frequencies, but with the PRO DI, only at the 20Hz to 40Hz corner with above +20dBu levels was I able to add 0.02% more distortion. Quite impressive for a \$99 MSRP DI box.

In gigging, I put a Radial PRO DI on keyboards and acoustic guitar duties, as that is the prime usage for passive direct boxes. While no differences were detected in the maelstrom of rock 'n' roll performance, I was able to PFL the individual channels with the PRO DI and critically listen. In these sneak listen PFLs and quieter ballads, the transparency of the PRO DI was noticeable, and more open than DI boxes with smaller, cheaper transformers. I am sorry to say, my other popular brand passive DI boxes are going collect some dust from here on.