

## RADIAL ENGINEERING

JDI and JDV

By Jim Miller

Direct-injection (DI) boxes are among the most underrated and underutilized tools available to today's studio owners. I built direct boxes myself back in the 1970s, so I feel uniquely qualified to evaluate a couple of new DIs from Canadian-based Radial Engineering, a division of CableTek Electronics, Ltd.

## Inject Me

The two boxes I received for review are the Radial JDI (\$239.99)—a passive direct box equipped with a premium Jensen transformer—and the Class-A, active Radial JDV (\$299.99). All external switches on the units are recessed to protect them and prevent accidental switching. These things are built like tanks, but the units do have some rather sharp corners that can give you a nasty nick if you're not careful.



The JDI and JDV direct-injection boxes from Radial Engineering are quiet, transparent, versatile, and built to last.

The dark, gray-green JDI is a passive DI box designed to take any audio source and send it directly to the mixer or recorder. In the studio, this means you can take the audio signal from a bass guitar, for instance, and send it to the console

without having to worry about the extra noise generated by an amplifier. This also gives you the pure, uncolored sound of the instrument, allowing you to do your tone shaping at the console. In live applications, the bass signal can go out to the house mixer, while the original signal can be passed directly through to an onstage amplifier via the JDI's Thru 1/4-inch output connector.

A -15 dB pad can be inserted for taming exceptionally hot signals, and there's a ground-lift switch to resolve those annoying ground loop hums and buzzes. By using the Merge switch, the unit's input and throughput can be used to passively mix two channels or devices (i.e. two synths), thus saving valuable console inputs. Finally, a Filter switch, which cuts out ultrasonic noise caused by electronic devices (i.e., computers), can be used in the Pickup position when a guitar is plugged in or in Line position when taking the hotter signals from synths, drum machines, CD players, and so forth. The main output is a balanced XLR.

The dark blue JDV is designed to be powered via internal chargeable batteries, an AC wall adapter, or +48 volt phantom power. Like the JDI, there is a Pad switch, a Ground-lift switch, a Merge switch, and a Thru jack (but no Filter switch). The JDV has a balanced, XLR miclevel output and balanced, TRS line-level out. Being powered, the JDV is perfect for taking low-output gear, such as guitars with passive pickups, direct to the board, though it can also handle hot signals from, say, a synthesizer.

## They're Great

The best things you can say about products like these are that they are quiet, transparent, versatile, and built to last. Both Radial DI boxes fit these descriptions. The unit's construction is rock-solid, and each can perform a wide variety of useful functions with a minimum of hassle. Most importantly, signals pass through both with outstanding linearity and phase accuracy that reflects the manufacturer's obviously high standards.

There are many DIs available today, but after using the Radial boxes regularly for several weeks now, I can say without hesitation that you won't find anything out there offering better performance or more durability for the money than the JDI and JDV.

Overall EM Rating (1 through 5): JDI 4.5, JDV 5

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