



A SECOND CHANCE

Radial JD7 Injector guitar signal distribution system

By Danny Miles

an amplifier, only to wish at mix time that you could backtrack and change the amp's sound? It's not an uncommon situation. That's why many professionals will sometimes record their guitar parts direct to a recorder—so that when it's time to mix the tracks, the recorded signal can be sent to an amp and tweaked until its tone fits the mix.

Unfortunately, this solution isn't as simple as it sounds. The problem is that the voltage and impedance of line-level signals—the kind produced by recording decks and mixers—differ from those of instrument-level signals. As a result, sending a guitar signal from a recorder to an amp won't produce a satisfactory sound because the amplifier doesn't respond to a line-level signal the same way that it does an instrument-level signal.

Enter the Radial JD7 Injector, a device that makes all of this possible by transforming signals to the proper level for recording and back again for reprocessing by an amplifier. The JD7 has myriad applications for the stage and studio, but splitting and routing a guitar signal for recording is its most significant.

Overview

Since the JD7 is unlike most gear you've probably used before, let's take a quick look at the unit in use.

First, plug your guitar into the JD7's guitar input and adjust the Drag control (more on this later) to suit your pickups. Next, connect the balanced output on the unit's rear panel to your mixer or recording device, and hook up your amp or amps using the JD7's various 1/4-inch outputs. (A direct 1/4-inch output on the front panel serves as the primary ground path for connecting to an amp, but six more outputs are available, should you need them.)

After recording, feed the recorded direct signal back to the JD7 through its balanced

line input, also located on the rear panel. The signal will be sent to your amp at a level and

impedance it can handle. From there, you can tweak your amp tone, add effect pedals and so on to get exactly the tone you want. When you're ready, mic your rig and record the new processed sound onto a track of its own. Should you change your mind later and want to go for a new tone, simply return to the original recorded track and re-amp it until you get the sound you like.

While the JD7 is designed primarily for the recording studio, it's also useful onstage, where it can be used to drive a number of amps, or split your guitar between amp and direct signals.

Features and Connections

The JD7 is built into a rock-solid singlerackspace unit, and most of the inputs and controls are on the front panel. The unit has a guitar input and a second input with an 8dB pad for high-output instruments like keyboards and active basses. Both inputs share the aforementioned Drag control, a circuit that simulates how an amplifier's input circuit reacts to a guitar's pickups. It's a particularly useful feature, since the guitar-amp interaction is one vital aspect of sound that's lost when a guitar is plugged into a direct box. The Drag knob allows you to dial in the tone of your instrument whether you're using low-output single-coil pickups or high-output humbuckers.

The JD7's output section resides to the right of the inputs. There is the aforementioned 1/4-inch direct out, the unit's main output for sending your signal to an amp. This is followed by outputs 2 through 6, which have 1/4-inch isolated outs for feeding your amps, an on/off switch for activating/deactivating the output, a ground lift and a 180-degree phase switch (technically

the speaking, a polarity reverse). In addition, outputs 5 and 6 each have independent 1/4-inch effect loops.

The rear panel has an auxiliary 1/4-inch direct out (ideal for your tuner or a seventh amp, should you need it) and the XLR balanced output with polarity reverse for direct applications. In addition, there is an XLR balanced line input—a nice pro-level feature—which feeds the recorded tracks to your amps and has a ground

switch and rotary level control.

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Sound

LIST PRICES: Radial JD7 Injector, \$850.00; Radial JDI Passive

Radial J48 Active

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The JD7 sounds incredibly clean, due to its Class A circuit. It's also free of buzz, thanks to its Jensen transformers, which provide optimum fidelity and 100 percent signal isolation. As a straight direct box, the JD7 delivers a healthy, strong signal to the recorder while sending a very smooth one to your amps. And the "feel" of the signal returning to your amplifier from the line input is dead-on. I A/B'd the line playback with that of my guitar, and once I set the levels to match, I couldn't tell the difference.

The Bottom Line

The JD7 simply steals the show. With outstanding tone, flexible routing and superior construction, it is worthy of a place in every guitarist's studio. In addition to the JD7, check out two of Radial's more conventional D.I. boxes: the Jensen-equipped JDI Mark 3, and the JD48 Active Direct box, which is designed to improve performance when running direct over lines that have phantom power. Both are feature-laden and boast extremely clean, high-quality sound.

PROS: Super clean, a versatile interface, great for "reamping" guitar tone
CONS: No TRS inputs