

- Dual inputs and unprecedented routing flexiblility
- High voltage, feed-forward Class-A circuit
- Huge dynamic range and headroom, low noise floor.
- Virtually zero phase distortion
- Ultra low intermodulation distortion
- Drag[™] control to recreate guitarto-amp relationship
- Creative features never before available in a direct box.

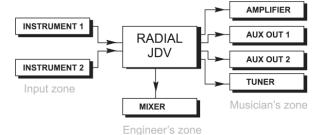
Radical thinking from Radial Engineering

Radial spawns a totally new concept for instrument signal management by introducing the concept of 'zones' to the musical landscape.

If you think about it, a direct box is actually a central distribution hub from which the instrument signal is managed. Most DI's simply offer an instrument input, a thru-put to the musician's amplifier and then an output for the mixing console.

Affectionately known as Big Blue, the Radial JDV Mk3 takes this concept to a completely new level by providing the musician and engineer with greater flexibility than ever before and does so without any signal degradation whatsoever. The concept is simple: We have broken down the signal path into three zones: input, thru-put and output.

Radial JDV Mk3 Zoned Concept



Each zone features expanded functionality: Dual inputs allow two instruments to be used without having to reconnect. By offering several instrument thru-puts, the musician can now work inside his own 'creative world' giving him greater freedom to create new sounds and inspired results. These include a standard thru-put for a traditional amplifier; two unity-gain auxiliary outputs to drive a stereo rig, effect device or simply more amps. A designated tuner output allows constant frequency monitoring while being outside the primary audio signal chain. For the engineer, a standard balanced XLR output provides the dry instrument signal to track.

One may ask: "This seems so easy and natural, I wonder why no one has ever done this before?"... Truth is that although it may look easy on paper, the challenge is retaining the signal integrity without degradation. The JDV does this without adding harmonic distortion, phase distortion or inter-modulation distortion. To make matters even more interesting, matching the buffered outputs to the thru-put presents yet another challenge. But what is life without challenges?

With the advent of 24bit/96kHz digital recording expanding dynamic headroom while lowering the noise floor has become the 'Holy Grail' of analogue circuit designers.

The Holy Grail Delivered!

The JDV features a proprietary feed-forward, Class-A design coupled with an ultra-high internal rail voltage that, in many respects, looks more like a tube design than the all-discreet components that have been employed.

Radia IDV MK3TM DIRECT INJECTION BOX

Class-A circuits are preferred over more common push-pull designs (Class A-B) as they do not introduce harsh zero-cross distortion. Open the JDV and you will see big, high-voltage discreet components. These are used because they simply sound better! For example, larger capacitors are able to store more energy than smaller ones. This mean that the audio signal does not starve when pushed to the limits. And every ounce has been squeezed out of the oversized components to yield the very lowest harmonic distortion, virtually zero phase distortion and almost un-measurable inter-modulation distortion.

To further enhance headroom, the JDV employs an unprecedented 30-volt internal rail voltage for exceptional dynamic signal handling. One should note that the Radial JDV is a unity gain device: This means that whatever you put in you get out. In fact, the JDV has so much headroom the PAD is located at the output so that it will not overload your mixer. With the JDV, extreme transients are handled with the ease of a Sunday afternoon drive.

As famed Marcus Miller & Herbie Hancock engineer Khaliq Glover wrote: "We tested Big Blue against the old standbys, it was if the bass went holophonic. The depth was beyond anything we have ever heard".

Drag me through the dirt!

To match the thru-put to the buffered auxiliary outputs, we have added Drag control, a feature that was created while developing the Radial JD7 Injector. Low output passive pick-ups, such as those found on vintage instruments, are naturally loaded down by the amplifier's circuit, tubes and transformers. Once the Pick-up signal passes through the JDV's Class-A preamp circuit, the instrument essentially goes from being passive to active. It becomes too clean... too perfect. Drag control allows the user to recreate the natural sound of the direct passive output by

JDV Mk3 Block Diagram

Input Pad (speaker): -30dB DRAG Output Pad: -15dB Power requirement: Custom 30Volt supply AUX-A OUT INPUT A -30dB PAD AUX-B OUT HI-CUT CLASS "A" BUFFER LO-CUT CLASS "A" XLR OUT BALANCED INPUT B TUNER OUT GND LIFT REGULATED ₩, PSU ₩, THRU OUT OVERLOAD

reintroducing the loading effect caused by the amplifier and the cable capacitance on the pick-up. One simply adjusts the Drag control to dial-down the output to match the natural sound of the instrument and amplifier combination.

This ain't no pretty faced parlor boy.

Like all Radial Engineered products, the JDV is designed to handle the abuse of the road and happy to come home to the studio. Honed from 14-gauge welded steel and finished in tough baked enamel, the JDV is built like a tank. The innovative bookend design protects the switches, control and jacks providing years of trouble-free performance. A full bottom noskid pad provides mechanical and electrical isolation, and lets you put it where it needs to be without fear of sliding or scratching your ProControlTM.

Bigger, better and more!

The Radial JDV Mk.3 is a revolution in instrument signal management and it truly raises the bar for sonic performance. And it does so without altering the natural sound of the instrument. With a JDV, you get all of the natural dynamics and harmonic overtones to ensure every nuance is articulated. Changing the sound of a '62 Jazz before it gets to the control room is simply not smart. At Radial, we believe that it is our task to deliver the original tone and character of the instrument pure and simple. Believe you me... there are plenty enough toys in the control room to shape the sound for a mix.

This unyielding attention to detail assures that the sound you get is as good as it possibly can be.

Nothing added - Nothing lost

JDV Mk3Specificatons

 $\label{eq:continuous_propose} Frequency Response: Residual Noise: Poistortion (20Hz ~ 20kHz): \\ \begin{tabular}{ll} 10Hz ~ 30kHz (+/-1dB) \\ -93dB @ 1V-RMS \\ < 0.015\% @ 1V-RMS (1.2k\Omega load) \\ < 0.5\% @ 5V-RMS (without load) \\ < 5° @ 100Hz \\ 0.07\% (DIN standard) \\ 10kOhms ~ 3.9mOhms \\ 000 Ohms \\ -30dB \\ -0tput Pad (speaker): \\ 0utput Pad: -15dB \\ Power requirement: \\ \end{tabular}$

ADAPTOR