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Gear & Software Reviews For The End-User

June 2004

Studio St



Cover Story:
Surround Listening
Environments —
Acoustics Count

by John Storyk

PAR Speaker Evaluations!

- Alesis' Prolinear 820 DSP
- Klein and Hummel 0300D
- Focus Audio FS-68
- Lipiniski Sound L-707
- ADAM P11A

\$3.95

(3)





www.proaudioreview.com

BY RUSS LONG

very two or three years I come across a piece of gear that makes me wonder how I ever made records without it. It took one day in the studio with the Radial JD7 (\$850) to realize that it is a piece of gear that belongs on this list.

Playing multiple guitar amps with a single guitar is prone to cause a number of problems including the introduction of artifacts, noise, hum, etc. The Radial JD7 is essentially a highimpedance unity-gain guitar signal distribution amplifier with dual selectable high-impedance inputs and seven high-impedance outputs. Any one, or all, of the outputs may be selected at one time, allowing multiple amplifiers, effects and modelers to be used alone or in tandem. Outputs 5 and 6 have separate effect loops that can be inserted at the touch of a button. The box is also equipped with a balanced output and input that allows dry recording and wet remixing of guitar signals (essentially a re-amp box built in).

FEATURES

The shell of the 1RU rackmount JD7 is made of 14-gauge steel with welded seams throughout. The 6-inch deep box has a beautiful dark enamel finish and weighs 8 pounds. The box's layout is so surprisingly intuitive that there is barely a reason to open the manual. The JD7 offers a 2-in/7-out signal routing system featuring one-touch operation of all functions.

From the ground up, the JD7 was designed to offer uncompromising sound. The box features a high, 1-Mohm input circuit impedance to emulate a classic vintage amplifier. This provides maximum bandwidth while reducing pick-up loading. This Class A, FET-driven input circuit (no op-amps) is combined with the world's finest Jensen transformers to distribute the original signal at unity gain to all seven outputs. This produces a clean, natural

Fast Facts

Applications:

Live sound, studio

Features:

Two inputs, seven outputs; 8 dB pad; loop chain; Class A

Price:

\$850

Contact:

Radial at 604-942-1001. www.radialeng.com.

Radial JD7 **Guitar Signal Distribution**

System loop (1/4-inch jacks for input

sound with virtually zero harmonic, phase and inter-modulation distortion and without the introduction of artifacts.

The JD7's front panel is equipped with two 1/4-inch jack inputs. The Select button determines which input is active. Input 2 features an 8 dB pad that is activated when the pad button is pressed. This allows for easy transition between a passive and an active instrument without having to necessarily adjust the input level on an amplifier to compensate. A red clip LED illuminates to warn the user of circuit overload.

The Drag knob control is designed to compensate for the natural relationship that occurs between the guitar and the amplifier. When a guitar is connected to an amplifier, the guitar pickup and the amplifier circuit react in a very distinct manner depending on the type of pickup and the amplifier's front-end design. The Drag control simulates this relationship by allowing the user to dial-in the amount of drag that sounds right.

The front panel's output section offers Outputs 1-6 via 1/4-inch jacks. Channel 1 is a direct out. The output is activated when the on switch is pressed. An LED illuminates when the output is engaged. This ground is coupled to the instrument and the primary amplifier through this output.

Channels 2, 3 and 4 are Jensen transformer isolated outputs. The transformers provide ground hum elimination without affecting the signal quality. These channels each have an on switch that activates the output when pressed, an LED that illuminates when the output is engaged, a chassis ground lift switch that provides complete isolation and a polarity switch that reverses the phase of the output.

Channels 5 and 6 offer all of the features found on channels 2, 3 and 4 with the addition of a Loop button that activates that channel's

Channel 7 is a rear panel mounted 1/4-inch auxiliary output. This seventh output is ideal for use with other rackmounted effects or processors.

rear panel effect

The balanced line input and balanced line output are also found on the rear panel. The F-XLR input is equipped with a ground switch that lifts the ground and a level control that adjusts the level for maximum signal to noise control (the input overload is monitored via the front panel clip LED). The M-XLR output allows a clean guitar track to be recorded for eventual re-amping, sans amping or amp farming at a later time (all while the musician uses the other seven outputs). This mic level, isolated, balanced output features Jensen's finest JT-DBE transformer, allowing cable runs up to 300 feet.

A 15VDC UL-CSA-approved external power supply (read wallwart) provides power to the JD7. The power supply connector "lock" insures the power cable will not accidentally be disconnected from the rear of the JD7.

IN USE

I spent several weeks in the studio with soon-to-be rock legends Lume, and we found the JD7 to be an invaluable part of recording electric guitars. For starters, both of the band's guitarists use multiple amplifiers at the same time. Splitting the guitar signal without any signal degradation was practically impossible before the JD7. Now it's a breeze.

I also had great results using the JD7 while recording bass. We were recording the instrument through a DI and a Tech 21 Sans Amp but the musician wanted to record through his SVT rig as well. The JD7 flawlessly distributed the signal to the three sources without any sound degradation.

On another project the guitar player was tracking in the control room, but his amp was in the studio over 120 feet away. He was using a Fender Twin so keeping the amp head in the

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control room and running a long speaker cable to the cabinet was not an option. With the help of some adapters we were able to create a 130-foot instrument cable, but there was an amazing amount of sonic degradation (thin and dull). Amazing enough, when we used the JD7 as a line driver, the amplifier sounded as if the guitarist was only 10 feet away from his amp.

SUMMARY

The Radial JD7 provides exceptionally high-quality guitar signal distribution and reamping features in a compact (but heavy) 1RU box. Outside of the fact that I am not a big fan of wallwart power supplies (they seem to always be in the way), I have nothing bad to say about the JD7. The box is amazing. I am sure it will not be long before practically every guitarist or bassist who shows up to record has his own JD7. But until then, I am not giving this one back.

Russ Long, a Nashville-based producer/engineer, owns The Carport recording studio. He is a regular contributor to **Pro Audio Review**.



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