

## Features

Low power consumption with phantom  
Dual function inputs w/2 chan merge  
Polarity reverse switch  
80Hz rumble filter  
Ultra-durable welded steel chassis  
Double sided printed circuit board  
Protective channel for switches  
Ground Lift and Pad switches  
No-Slip bottom pad

## Artists

Alain Caron  
Ani DiFranco  
Bare Naked Ladies  
Billy Ray Cyrus  
Bruce Springsteen  
Bryan Adams  
Chuck Rainey  
Faith Hill  
Garbage  
Janet Jackson  
Jimmy Haslip  
Journey  
kd Lang  
Mark Egan  
Marcus Miller  
Metallica  
Michael Rhodes  
Nine Inch Nails  
Robert Cray  
Sarah MacLaughlin  
Seal  
Styx  
Tragically Hip  
Tony Levin  
Randy Travis  
Victor Wooten  
Will Lee

## Specifications

Dynamic range:	130dB
Signal to noise:	119dB@100Hz
Maximum input:	10V
Frequency range:	10Hz~40kHz
Linearity 20~20kHz:	0.1dB
Phase coherence:	10° at 20Hz 0° at 1kHz
Distortion at 20Hz:	<0.5%
Input impedance:	220k
Output impedance:	600
Construction:	Welded steel
Finish:	Baked enamel
Input connectors:	Two 1/4" phone
Output connectors:	XLR male

*\* The artists listed above are known users of Radial direct boxes but do not necessarily endorse the product. \*\* Features and specifications are subject to change without notice.*



# Radial

engineering

# J48

## 48v Phantom DI



The Radial J48 represents the culmination of three years of research and development to produce a high quality direct box that when powered with 48volt phantom, is able handle the extreme dynamics produced by today's active instruments without compromising audio quality or choking.

### If it's Radial, it must sound right!

It is pretty simple: Put in the effort to develop a design that achieves low harmonic distortion, single digit phase distortion, and benchmark inter-modulation distortion, you will end up with a device that is transparent and natural sounding. Unfortunately, the only way you can get there is with a high internal rail voltage.

### The Magic is in the supply!

The Radial J48 uses phantom power but steps up the internal rail voltage by combining a timing chip and a British-made switching transformer to create it's own power-house. This brings the rail voltage high enough to allow one to hit the J48 with as much as 10 volts without distortion! The result is smooth, natural sound even when the guitar player has his volume 'cranked'!

### More value with great features

The 1/4" input and thru connectors can be switched to dual input to mono output by simply depressing the merge switch. This true resistive mix function can save valuable channels especially with keyboard racks. A 10dB pad is provided along with a polarity reverse to add flexibility while recording. The XLR output features a ground lift to reduce noise and eliminate nasty 'ground loops'.

To increase dynamic headroom, the J48 incorporates a 6dB, 80Hz rumble filter that reduces mud and low-frequency resonance in acoustic guitars. Bass frequencies contain much more energy than high frequencies and by rolling these off, 3dB of extra headroom is achieved!

To conserve energy, the filter switch also acts a momentary switch to check for phantom power. In fact, the J48 circuit is so efficient; the LED will draw almost as much current as the complete pre-amplifier circuit! To maximize the available current, the LED will only momentarily flash on when the filter switch is depressed. Power management at this level is critical!

### Built for the road.

Like all Radial products, the J48 is built tough to handle the abuse of live touring. An internal skeleton houses all of the electronics and these are mounted on a two sided PC board for maximum life. The welded 14-gauge steel construction makes it impossible to torque the PC board, reducing opportunity for cold solder joints to develop. An outer 'book-cover' shell protects the switches and connectors by creating a recessed zone. A no-slip pad covers the bottom that protects the J48 from slipping and from mechanical ground contamination. As an added benefit, as many as eight J48 or JDI Mk3 DI's can be rack mounted in the new 2RU Radial J-Rack.