## Radial Smart Sheet

# J48<sup>™</sup> ACTIVE DIRECT BOX



The Radial J48™ direct box is the world's finest phantom-powered active DI. It has been optimized to handle extreme transients using only the 5 milliamps of available current from typical 48-Volt phantom-power. The J48 features a unique digital switch-mode power supply that steps up the internal rail voltage to an amazing 9-Volts.

Most battery-powered guitars and basses are active and will produce as much as 7-Volts when played at maximum volume. Since typical direct boxes are only able to handle about 3 volts, they choke. The trouble is caused when the input signal is greater than the internal rail voltage. This creates all types of distortion: bass sounds thin and lacks punch, guitars sound scratchy and tend to have sporadic peaks, and they lose their natural body resonance.

Because the J48 has more 'horse-power' (current to work with), it is able to handle these transients without choking. This extra headroom significantly reduces harmonic, phase and inter-modulation distortion. And when you fix all of the problems, a funny thing occurs... you get great sound!

#### Features

- · Superior dynamic headroom
- · High input impedance reduces loading
- · Merge switch sums stereo instruments to mono
- Low-cut filter, -15 dB PAD, and polarity reverse

#### **Applications**

- Provides extra 'reach' and 'air' in your sound!
- · Ideal for active acoustic guitars and basses
- · Great for keyboards and drum modules
- · Equally wonderful for live or studio

#### Cool stuff

3-Volts

Typical active DI

- · Huge 9-Volt internal rail voltage for extra headroom
- Handles loud transients without choking or clipping
- · No batteries required, works with phantom-power

9-Volts

J48 max rail voltage

The .148's 9-Volt

· 3 year transferable warranty

Headroom: J48 gives you more!

7-Volts

Active guitar/bass

The output from



-15dB PAD allows super-hot inputs such as from a CD player to be connected and balanced for long runs.

MOMENTARY LED will flash once to tell you phantom-power is present. This saves power for the audio circuit.

MERGE FUNCTION turns the input and thru jacks into a passive mixer to sum stereo signals to mono. This saves valuable inputs on the mixer!

INPUT connects from instrument. the **THRU** to the amplifier. High input impedance reduces loading.

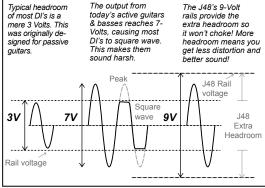


XLR OUT 600 Ohm balanced, mic-level output will drive 1000 feet without appreciable noise.

POLARITY REVERSE flips the polarity from the AES standard pin-2 to pin-3 on the XLR.

80HZ LOW-CUT (high-pass) filter gently reduces excessive bass for more headroom and clarity. Eliminates run-away resonant feedback from acoustics!

**GROUND-LIFT** disconnects the internal ground path between the input and the output.



### **HEAVY-DUTY WELDED I-BEAM**

enclosure of 14 gauge steel makes it impossible to torque the PC board. Eliminates cold solder joints.

HIGH CYCLE heavy-duty switches are rated at 10,000 cycles.

MILITARY-GRADE PCB with full surface ground plane to reduce susceptibility to RF noise.

**DIGITAL SWITCHING PSU steps** up the internal rail voltage to 9-Volts. The J48 will not choke like other DI's when hit with loud transients.

BAKED ENAMEL finish for excellent durability and great looks for vears!

