

BY PAUL VNUK JR.

At the last NAMM Show, I was introduced to the Radial Engineering StageBugs by Radial's founder, President, and chief madman Peter Janis. Radial is one of the world's foremost makers of DI (Direct Inject) boxes, with a proud pedigree stretching back to the classic JDI passive direct box and now including single, dual, and multichannel units, passive and active, with many different optional features. They're all massively overengineered, built to last forever, great-sounding... and perhaps a tad pricey for the hobbyist or beginner.

The StageBugs are designed precisely for the entry-level market: small, well-built, and marvelously affordable. Each member of the something you're into, it also allows you to split and send your output to an amplifier.) A recessed ground-lift switch (which works even on phantom power, no battery needed) is located on the side of the box; the output side contains a male XLR output and a phase/polarity switch. Unlike Radial's spendier Dls, all of its ins and outs are plastic sockets, but they should stand up fine to daily use.

Internally the SB-1 uses an active buffer circuit with a phase splitter. A few relevant specs: Frequency response 20 Hz to 20 kHz, total harmonic distortion under 0.006% at 1 kHz, input impedance of 800 kilohms, output impedance of 330 ohms, dynamic range over 100 dB, equivalent input noise of –101 dBu, and a noise floor of –97 dBu. While not entirely on par

stereo source into the Input and Thru jacks cleanly sums its signal to a mono output!

The SB-2 has a 20 Hz to 20 kHz (± 0.5 dB) frequency response, a 115 dB dynamic range, total harmonic distortion of 0.005% at 1 kHz, a 140 kilohm unbalanced input impedance and a 1 kilohm balanced output impedance. Again, its specs are not up to those of the JDI, Radial's passive flagship model that uses a Jensen transformer, but they're still very impressive.

Putting the Bugs on Stage

It's hard to say that these boxes sound like this or like that, because as with any good DI, both units do their job well and don't sound like anything at all. With my Fender Marcus Miller Signature Jazz Bass, which features both active and passive pickups, both units handled the signal well. I really like the sound of that instrument's active circuit, so here the SB-2 was the better choice.

Radial Engineering StageBug SB-1 and SB-2 Direct Boxes





Portable personal DI for a wide range of applications

StageBug family shares the same 8.25" x 5" x 1.75" all-metal enclosure; they're made of 16-gauge steel with a baked enamel finish and a nonskid rubber base, and weigh 0.8 lbs. each. There are five models currently either available or forthcoming, and we had a chance to start off this Guitar issue's look at Dls with a quick test of the first two on the market: the SB-1 and SB-2.

SB-1

The SB-1 is a +48V phantom-powered active design; it's billed as an acoustic DI created for use with standard acoustic/electric guitars as well as bass. It should not be confused with the SB-4 (review forthcoming), which is purpose-built for acoustic instruments with piezoelectric pickups.

The input side of the SB-1 features a -12 dB pad button, a $^{1}/_{4}$ " instrument input, and a $^{1}/_{4}$ " output marked Tuner, allowing you to have a tuning device actively in your signal chain without repatching. (Of course, if tuning is not

with Radial's flagship JDV and J48 active direct boxes, these specs are all really good... certainly superior to those of many other budget DIs on the market.

SB-2

The SB-2 is a passive design with an isolated Eclipse ET-DB3 transformer. A passive DI is one of those ubiquitous devices that everyone needs in his bag of tricks for getting most instruments of a non-miked variety into the mix, be they keyboards, basses with active electronics, DJ mixers, laptops with 1/4" interfaces, and more. You can use the SB-2 with guitars and basses that have passive electronics, but the SB-1 is better suited to those instruments.

The SB-2 uses the same layout as the SB-1 with a few alterations. Instead of a phase function, that button on the SB-2 lifts the ground. Otherwise all the other ins, outs and functions are the same, although its pad is -10 dB. One other nifty feature: plugging a

At my usual live-sound gig, the SB-2 was a huge step up in sound and build from the usual cheap fare. It was also nice to have the active SB-1 for bass, since one of our usual bass players uses a Danelectro model which is known for its unique vintage sound, but has notoriously low output. Smiles all around, which is what an engineer wants to see.

Conclusion

When I met with Peter Janis at NAMM, he mentioned that his intent with the StageBugs was to offer a portable and affordable DI for pretty much everyone, while still retaining Radial's reputation for quality. At such affordable prices, we may just see a swarm of these little guys! Look for more StageBugs in upcoming issues, including my current favorite, the unique SB-5. Stay tuned...

Prices: \$80 each More from: Radial Engineering, www.radialeng.com