THE BOTTOM LINE

PERFORMANCE TESTING BY TOM MULHERN & ASSOCIATES, CAMPBELL, CA (408) 374-135

AT A GLANCE: The single-rack-space Model 381 Guitar Preamp offers guitarists an indispensable tool for shaping their instrument's sound, plus it includes BBE Sound's proprietary BBE Process, which dramatically makes every tone richer, fuller, and more full of life. Switchable dual channels, multiple outputs, and a speaker-emulator circuit add to the versatility and value of this low-cost powerhouse.

uitarists are finally catching on to what hi-fi fanatics have long known: There's a lot to like about preamps—namely sound, size, and flexibility. And there's especially a lot to like about BBE Sound's Model 381 Guitar Preamp. Its slim, single-rack-space size makes it a natural for big and small racks, but it can also sit alone atop a guitar amp or powered speaker cabinet, or next to signal processors in a studio. And whether it's used

BBE Sound Model 381 Guitar Preamp

plugged into a power amp driving a set of speakers, which themselves impart their own tonal characteristics. Suffice to say, going direct usually requires at least moderate EQing at the board. By building in speaker-emulator circuitry, BBE added the necessary tone shaping so that direct patches to a board give a warm, full tone that's more like a miked speaker. I was able to plug these outputs straight into the console and



as the front end of a preamp/power amp/speaker setup, or plugged directly into a mixing console, it opens the door for great guitar sound onstage or in the studio.

The preamp's front panel is logically laid out with two separate channels, each with its own LED to show which is active—green for clean, and red for overdrive. The knobs are adequately spaced so that you can grab them in a hurry, plus they all have big, white lines on their faces so there's no mistaking how they're set. In addition, both channels have different controls, so the sound-shaping parameters of each are custom-tailored to task of creating either a clean or overdrive sound.

Among the Model 381's coolest features is the switchable BBE Process. When it's activated, it imparts more apparent size and immediacy to the sound, as well as a little brightness and a tighter bottom end. This description may seem vague, but once you've heard it, you'll probably leave it on all the time. It's subtle—more of an enhancement than an effect—but it sure adds flavor to a guitar. Because it's located before the effects send, if you patch, say, a reverb unit into the 381's effects loop, you'll be sending a much more lively sound to the reverb, which gives the guitar's tone more wallop, more cutting ability.

BBE Sound also included a feature in the Model 381 that no guitar preamp should be without: a speaker-emulation circuit for its recording output. Ordinarily, when a preamp's outputs are plugged right into a mixing console, the sound ranges from sterile to brittle; neither attribute is desirable. They're intended to be

ABOUT THE AUTHOR: The former Managing Editor of Guitar Player magazine, Tom Mulhern is a bassist, guitarist, and writer who specializes in all aspects of audio technology.

get an excellent sound without having to alter the board's EQ. For more of the bottomy, slightly thick proximity effect of a mike stuck in a speaker's face, I dialed in a little more low end at the board.

Channel switching is absolutely silent—no pops, squeals, or clicks. A front-panel switch lets you do it with a finger tap, but BBE Sound includes a footswitch and a 25' cord that plugs into the Model 381's back panel, allowing you to jump between channels at the stomp of a foot. A nice feature of the footswitch is its 1/4" jack, which allows you to use any length of cable—shielded or unshielded—to connect it to the 381.

For most guitarists, the big question is, "What about the distortion?" It's really good, and it's easily shaped to suit your taste. Like many multi-stage guitar amps, the BBE's distortion channel has both a drive control and a volume knob. You can set the drive from vaguely dirty to "Hot enough for you?" to "Grab the fire extinguisher!" At the hot, hot, hot setting, you're in the heavy overdrive realm that rubs elbows (and more) with fuzztone distortion. You probably won't want to set this knob far beyond 6 or 7, a good brink-of-out-of-control setting that maintains the definition of chords, double-stops, and fast lines. The volume knob is particularly useful when you want to set the overdrive channel's level to match the clean channel's. And, of course, you can set the overall output for both channels via the left and right volume knobs on the front-panel's right side.

The distortion's bottom end is easily adjusted via the bass control, but the essence—the spice—of the distortion is dialed in using the two midrange controls. Mid 1, the low-midrange knob (centered at 340 Hz), takes care of the "fatness," while

BBE Sound Model 381 Guitar Preamp

Mid 2 governs the amount of upper-midrange (750 Hz) thickness. The combination not only forms the tone's body, but the two knobs work together to set the amount of resonant, "nasal" quality. For example, with a moderate drive setting, you can set the Mid 1 all the way up and then adjust Mid 2 to about 7 or 8 to get a great lead sound that emulates distortion through a wah-wah with its pedal backed off part of the way. Turning Mid 1 down to halfway takes away some of the "honk" and gives the tone a harder edge.

While distortion quality is important, it's only half the story on the two-channel Model 381. One of the best ways to test a preamp is to check its *clean* sound. Overdrive is tantalizing for sharpshooter leads, but there's nothing like a good clean sound for rhythm work. What you're looking for is the kind of

don't lose quiet passages or the trailing end of decaying notes.

The effects loop comes after both channels, but before the two master volumes. It's designed to send a mono signal to external gear, but it has two returns for stereo (if your outboard effect is mono, no problem—just return through the left return jack). You can also use the effects-loop send to connect the Model 381 to a guitar tuner or to a second monitor system.

Because the Model 381 features solid-state circuitry, it should be incredibly reliable in the long haul, particularly on the road, where *everything* gets bounced and beaten. There are no tubes to wear out or break, and when you turn it on, it's fully on—no warm-up necessary. The enclosure is good, solid metal, and the knobs and switches are firmly mounted so that they won't wiggle loose or get knocked off. A plus that many



The Model 381's rear panel features stereo main and recording outputs, a mono/stereo effects loop, and a jack for the remote channel selector.

clean tone that comes from an old tube amp—the kind that's clean yet full, with body and a reactive feel. That is, when you strum softly, it feels supported, and when you spank it harder, it adds progressively more dirt and body. The Model 381 is exceptional for this. By setting the clean channel's volume to about 7, the bass to 10, the midrange to 7, and the treble to 10, a Strat (or a humbucker-equipped solidbody with a lot of maple or other hard wood) is right in the pocket. To control the "grit factor" and body, adjust the volume and midrange to suit your needs. If you're using a guitar with one or two humbuckers, fiddling with the BBE's midrange governs the warmth and "cut" that you want, especially for classic rock and roll rhythm guitar. With the BBE Process switched in, the sound and feel are incredibly similar to a tube amp with a couple of 12" speakers.

A well-designed internal noise gate in the Model 381 makes the unit dead-quiet when you aren't playing, a particularly handy feature when the distortion channel is active and you're using tons of gain. Its threshold is set low enough so that you players may overlook is the built-in power supply, instead of an external AC adapter, which is easily broken or lost. It's great to have a plug-in-and-go setup like this.

In all, the BBE Model 381 Guitar Preamp is very, very tough to beat. It yields terrific clean and distortion sounds, plus its BBE Processor makes the sound lively, present, and forceful. For the no-nonsense, plug-and-play guitarist the Model 381 offers the convenience of two easy-to-use, footswitch-selectable channels, master volume, and an effects loop. For the player with a rackful of gear, it's the perfect front-end component to complement digital reverbs and multi-processors. And finally, for all guitarists who record their work, the Model 381 does away with the need for power amps and speakers, as well as microphones, creating a direct sound as fat and sassy as a miked cabinet. The versatility, convenience, and tone—at a very affordable price—make the BBE Model 381 an excellent choice for all electric guitarists.

Inside BBE Sound's Model 381 Guitar Preamp

Type of unit: Rack-mountable guitar preamp

Features: Two independent channels, footswitchable channel selection, stereo effects loop, stereo direct and recording outputs, speaker emulator, and BBE Process sonic enhancer

List price: \$299.00

Dimensions: $19" \times 5^{1}/2" \times 1^{3}/4"$

Weight: 9 lbs

Front panel (L-R): 1/4" input jack; channel 1 (clean channel) green LED activity indicator; clean-channel volume, bass, mid, and treble controls; channel-selector pushbutton switch; Channel 2 (distortion channel) red LED activity indicator; distortion-channel

drive, bass, Mid 1, Mid 2, treble, and volume controls; BBE Process green LED activity indicator; BBE Process level control; BBE Process in/out pushbutton switch; left and right master volume controls; power on/off switch

Rear panel (L-R): AC power cord, fuseholder, 1/4" left (mono) and right main outputs; 1/4" left and right recording outputs, 1/4" left (mono) and right effects-loop return jacks, 1/4" effects-loop send jack, 1/4" channel-selector footswitch jack.

Manufacturer's address: BBE Sound, Inc., 5500 Bolsa Ave., Ste. 245, Huntington Beach, CA 92649