

## TECH 21 Boutique Pedal Pioneer

Finding fans with unique products that address guitarists' endless quest for the ideal tone

he first time B. Andrew Barta received a call from someone claiming to be the Eagles' guitarist Joe Walsh, he thought it was a prank. It was the same with calls from ZZ Top's Billy Gibbons and legendary jazz guitarist Les Paul. But in time he began to accept that even players at the highest levels were at first intrigued, then thrilled by the groundbreaking capabilities of his flagship preamp pedal, the SansAmp. Unlike standard effects pedals, the SansAmp mimicked the audio qualities of classic amplifiers, without the need for an amp. The SansAmp made its official debut at the 1990 Summer NAMM show, where to demonstrate its capabilities Barta ran a guitar through the pedal into a small home stereo. The makeshift "amp" sounded so good, dozens of people bought SansAmps (shhh!) right out of the booth.

A typical tube guitar combo amplifier incorporates a preamp, a power amp, a power transformer, an output transformer, and a speaker. Each component shapes the sound. In the studio and some live situations a microphone can shape it further. Tech 21's Classic SansAmp emulates the entire signal chain. Today, other products, particularly in the digital realm, perform similar feats, but in the early '90s the SansAmp was unique.

To this day, Barta insists, "I never wanted to be a manufacturer." In his native Budapest, Hungary, he started on piano at age nine, then picked up the guitar a few years later and began gigging at 17. To satisfy his parents, he also studied electronics in college, which equipped him to begin designing his first stomp box, a distortion pedal to make his Fender Silverface "sound like a Marshall, even at low volume." After a year in Germany, where he continued playing in rock bands, he emigrated to the U.S. Barely speaking English, he took a job in a factory as an assembler of electronic products for the military and aerospace industries. Though he quickly advanced to become a technician and "learned about how products were built from the ground

up," he left to secure repair tech positions first at a New Jersey music store and later at Rogue Music and Alex Music in Manhattan, where he regularly did amplifier modifications for the big guns of rock 'n' roll.

With encouragement from Foreigner's Mick Jones, who remarked, "Finally I can carry my Marshall in my pocket," Barta decided to put the SansAmp into production. In 1989 he took his first prototype to the Sam Ash store on 48th Street where then-Manager/Buyer Bob Capel laughed when he heard the \$300 price. Reluctantly, he accepted one on consignment. Def Leppard's Phil Collen bought it the same day, and almost immediately Capel ordered six more.

Noticing that SansAmps were "flying off the shelves," a savvy sales rep helped Tech 21 forge a network that began distributing the product across the nation—and eventually around the world.

The SansAmp's price alone, which Barta justified by the fact that it was handbuilt in America with premium components, may distinguish it as the world's first "boutique" effects pedal. The device also helped blaze the home recording product category for guitarists.

To Barta, the need for a product like the SansAmp was obvious. While playing in the rock band in Germany he didn't want volume constraints to sacrifice a good, driven-amp sound. Also, he was frustrated by spending precious studio time setting up amps and searching for the elusive sweet spot for the microphone, and by having to "brutalize" his amp to achieve the optimal sound. His invention solved all these problems.

He admits that timing of its introduction was fortunate. "The artistic environment decides when something new is needed," he says. "There's always a progression, such as when musicians who listened to the blues came up with something new—rock 'n' roll. The explosion of interest in home recording made it the right time for Greg Mackie to build a high-quality, affordable mixer. As guitarists wanted to record without playing through and miking their amps, it was also the right time for the SansAmp."

At times Barta was pressured to lower the SansAmp's price, but he'd heard horror stories about good products going bad when their production was moved offshore, so he resolved to continue building them in his own U.S. factory with top-quality components and bullet-proof construction. Tech 21 Vice President Dale Krevens points out that SansAmp's price is also supported by the exceptional breadth and depth of its functions. "There are many ways to build a Strat," adds Barta. "You can build a 'Strat' for \$100, but for the really great ones, people are willing to pay up to \$3,000, and they're definitely worth the



Tech 21's versatile SansAmp Classic pedal emulates every "link" in the electric guitar signal chain.

money."

However, to reach players who didn't need all the SansAmp's sophisticated versatility, Barta began developing other products with a narrower range of sounds and applications. The new Character Series includes nine pedals, each designed to emulate specific, archetypical amp tones. Evocatively named guitar models include Oxford, Leeds, Liverpool, Blond, US Steel, and California.

One unexpected hit among Tech 21's pedals was its SansAmp Bass Driver DI, introduced in 1994. Frustrated by the dry, sterile sound achieved by running bass guitar through a conventional DI into the mixing board (because the common wisdom said miking the bass amp sacrificed low end), Barta developed the Bass Driver DI to restore "a little grind" in the bass sound of his own band and the

bands he mixed for. One of Tech 21's most notable users is Rush bassist Geddy Lee, who now uses SansAmp RPM and SansAmp RBI rack-mounted units both onstage and in the studio. (With no need for traditional amplification onstage, instead of bass amp stacks Lee performs in front of a bank of spinning clothes dryers!) Other early fans of Tech 21 bass processing included Metallica's Jason Newsted and his successor, Robert Trujillo.

Barta acknowledges the merits of digital modeling, but like most guitar tone purists, he prefers the warmth, nuance, and flexibility of analog emulation. "Modeling copies a specific sonic 'snapshot," he explains. "Emulation is more like an impressionist's representation of

the sounds he hears, capturing its essence and vibe." And unlike a finite digital model, he continues, in analog emulation each tonal element—and, in the case of the SansAmp, each link in the signal chain—is infinitely adjustable and interactive with other tonal elements, creating a virtually limitless sonic palette.

## **EMULATION, NOT MODELING**

Though purists swear by the pleasingly musical quality of analog "noise," most want to minimize its quantity. Through use of the highest-quality components, Tech 21 achieves a very low noise floor without the gating required for digital modeling and without the latency associated with analog-to-digital conversion.

Expert reviews of the SansAmp typically rave about its vast range of sounds, but a recurring caveat suggests that its complexity makes finding the ideal sound a challenge. Barta addressed this issue first with the SansAmp PSA rack-mount tube amp emulator, which replaces standard potentiometers with 256-position digital/analog resistor "switches." Each switch's position is memorized by digital circuits that are discrete from the analog signal path. Later-model pedals such as the new VT Bass Deluxe incorporate this technology as well. In addition to maintaining isolation from the analog signal path, a "wake-up processor" engages the digital circuit only for the split-second the preset is "memorized," thus reducing battery consumption.

Barta originally developed the ultra-clean solid-state Power Engine extension cabinet to complement Tech 21's line of SansAmp preamps. However, it was also embraced by players who were satisfied with their own preamp—any brand, analog or digital-and wanted to replicate their studio sound in a live performance situation. "Even the most recognized guitar amps have their own tonal personality," he explains, "and sometimes that personality conflicts with the player's preferred sound." Because the Power Engine is "very flat and very

clean," it serves as the perfect delivery system for personal tonal characteristics guitarists assiduously fine-tune through their selection of preamps, processors, and, recently, amp emulation computer plug-ins. Says Barta, "We've heard about guys getting great results at the gig by plugging their guitar into a laptop with all kinds of plug-ins and running stereo through two Power Engines. We always try to keep an open mind with how our products are used."

Broadly speaking, Tech 21's guitar and bass amplifiers integrate SansAmp toneemulation capabilities with the Power Engine amplifier into a familiar combo package. However, there are different sonic imprints within the line. For example, soon to join the Landmark 300 bass head, a new line of bass amps will incor-



Tech 21 Landmark 300 Halfstack bass amp and Trademark 60 1x12 combo guitar amp.

porate the preamp sounds of the company's popular VT Bass pedal. Trademark Series guitar amps, introduced in 1996, offer exceptional flexibility, with separate controls for character, drive, and three-band EQ. The Trademark 60 adapts convincingly to pop, blues, heavy metal...and jazz. In fact, legendary jazz guitarist and electric guitar innovator Les Paul used one for the last ten years of his life. "Les Paul was one of my idols," says Barta. "Like me, he loved to tinker

with his sound, and he used to call me to discuss new features for his amp."

Though Tech 21 offers high-end products in a crowded market, it benefits from very strong word-of-mouth, especially on forums such as Harmony

Central, TalkBass, and The Gear Page. Not surprisingly, its line sells best at retailers where employee training and product knowledge are priorities such as e-tail giants Sweetwater and Musician's Friend, and Colorado independent Drum City Guitarland. "Everything they make sells, right down the line," comments Drum City

Guitarland co-owner Jason Kae. "They also have a really good mark-up—at least \$50 per pedal—and we *never* have any defective ones." Saving particular praise for the new Character Series pedals, he adds, "Every one of them sounds great. A guy came in last week and bought one of each for his studio."

After more than 20 years of inventing, designing, refining, and selling acclaimed Tech 21 gear all over the world, dedicated rock 'n' roll guitarist Andrew Barta gladly accepts the title "manufacturer." And with it, a great deal of satisfaction from helping to bring "boutique" to a whole new level.

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