Sweetwater SOUND INC. SWEETNOTES

MUSIC TECHNOLOGY DIRECT

PRS PAUL REED SMITH

Guitars Without Compromise

If you are a lover of fine, hand-crafted guitars, I probably don't need to do anything more than point to the photo on the right. Sporting a premium flame maple top and back and finished in an absolutely stunning dark amber, this is the new **Paul Reed Smith McCarty Archtop**, just one of several brand new instruments designed and built by what is unquestionably one of the premier guitar makers in the world. I actually mentioned the new hollow body PRS guitars in my Tech Notes column right after the Winter NAMM Show, and some of you out there immediately placed orders. That was smart of you, since these are hand made guitars, not instruments that are flying off the assembly line by the thousands. In fact, it will probably be a while before supplies of PRS hollow bodies can actually catch up with huge demand.

Before I get into the specifics of these brand new PRS models (and wait until you see the photo on Page 11), let me just say that Sweetwater has an incredible selection of existing models in stock right now, in all sorts of gorgeous finishes, ready to ship to your door. From the top-of-the-line **Artists** and **Santanas** to the surprisingly affordable **Customs**, **McCarty** solid bodies (the best-seller in the entire PRS line) and **CE** bolt-ons, there's probably a guitar in the warehouse that has exactly the options you want in exactly the color you're looking for at prices that start at under $1800. Many of them even have the highly flamed maple "10-Tops" that PRS has become justly famous for.

Now it just so happens that I'm partial to vintage yellow and tobacco sunburst myself, but you might prefer a whale blue or teal black or even an emerald green PRS. In fact, these instruments come in a startling variety of colors (even turquoise) with or without the PRS tremolo and with Abalone birds or moon fretboard inlays. My suggestion is that you call Sweetwater for an up-to-the-minute rundown on the exact models and finishes in stock right now. As a proud PRS owner, I can tell you these guitars look fantastic, play like a dream and sound even better.

Still, if the thought of a new PRS hollow body has you reaching for your credit cards, let me give you the complete story on all the new PRS guitars: First up is the **McCarty Hollow Body** ($3000 list) which is 3 inches deep at

INSIDE THIS ISSUE:

Yamaha PSR Portables
They have features that, just a few years ago, were only seen on high end keyboards. They have hundreds of sounds, onboard sequencers, built-in accompaniment, digital multieffects and, oh yeah, they sound incredible. Dollar-for-dollar, the **Yamaha PSR-Series** keyboards have serious music-making potential at surprisingly affordable prices.   **— SEE PAGE 2**

Summer NAMM Report
In case you weren't able to make it to Nashville this past July for the 1998 Summer NAMM Show, we have a first-hand report inside this issue that'll knock your socks off. From the latest digital mixers to the newest synths and samplers, there's something for everyone!
— SEE PAGE 3

Sonic Foundry Software
Windows users rejoice! Now you can take your creativity to new heights with the latest technology from Sonic Foundry, like **Sound Forge 4.5**, **ACID**, **CD Architect** and more. **— SEE PAGE 6**

Line 6 Tubetone Amps
Guitar players never stop searching for the ultimate tone. In the past, this meant expensive tube amps. Enter the AX2, Flextone and POD with the latest amp modeling TubeTone technology from Line 6. **— SEE PAGE 7**

PLUS: Lexicon Signature 284, Microboards CD Duplicators, Alesis QS 6.1 Synth AND MORE!

Late-Breaking News: MACKIE DIGITAL MIXER SHIPS!

PANASONIC DA7 DIGITAL MIXER SETS A NEW STANDARD

You've been considering one of the new digital mixing consoles, but you might be concerned about the steep learning curve. When you read the feature list on these babies, it's easy to assume they're going to be formidable machines. Relax. You can have digital power without shutting your studio down for a few weeks to learn an entirely new user interface. Introducing the **Panasonic DA7**, a board with all the really important bells and whistles (and truly impressive specs!), but one that you'll feel right at home with. Oh, and a price that you'll feel pretty good about, too: Under $5,000 — and that's list!

For those of you who may have been vacationing in some remote area of the Amazon for the last six months or so, the DA7 is a 32-input, eight-bus, six Aux mixer that offers true 24-bit I/O capability (and let's face it, the future is 24-bit, so you might as well get with the program now), 5.1 surround sound mixing mode, extensive dynamic and snapshot automation and one function/one step screen layer operation, to name just a few features.

Internally, the DA7 reflects Ramsa's expertise in digital consoles (Ramsa's DX-1000 digital console has been critically acclaimed in Japan for years, though it has been unavailable in the US) and Panasonic's powerful influence in digital audio recording environments — Ramsa is the pro audio division of Panasonic, just in case you were wondering why there are two names on the board. Ergonomically, the console has the look and comfortable feel of a familiar analog friend, and houses an "LED Farm" display: A series of LEDs providing a quick look at the routing status, automation modes, Channel On/Off status, EQ On/Off, Dynamics On/Off, Panning In/Out, and Aux Send On/Off. Additionally, quick access to the console's current configuration is accessible via a large screen graphic display, designed to eliminate having to dig deep into layers of screens to view routing configuration information.

As a matter of fact, Ramsa engineers took the "time is money" reality of studio and broadcast environments seriously when designing the graphics display routing feature. The displays of channel settings and parameters are all quickly accessible via a quick touch of the assignable control buttons. The type or amount of data to be displayed on the screen can be user defined, while certain indicators, such as a SMPTE Time Code readout, are present on all screens. All mix, processing, routing, and surround sound parameters are accessible via the graphics display. Built-in parametric EQ and dynamic controllers are assignable on all inputs and Aux Returns. Via the unit's MIDI ports, a variety of external automation operations are possible, including control of external effects and other MIDI compatible instruments. In addition, up to 50 each of EQ, Dynamics and Channel Status settings can be stored, as well as 50 Global settings of the entire console for instant recall.

Industry experts are already singing the praises of the Panasonic DA7. In the July issue of *EQ*, Craig Anderton wrote, "The (user) interface is, in a word, marvelous. I was able to get quite far without looking at the manual. I hesitate to say that, though, because you can't use the DA7 to its full advantage unless you do read the manual — there are many shortcuts and nifty little features."

Put together all the features and user-friendly interface with the DA7's rather breathtakingly low list price, and you have to admit — I mean *have to!* — that this is one of the most impressive price-to-performance items to come along in quite some time. Yes, you can spend more on a digital mixer, but most of us would rather pay less and get all the functionality and sonic performance we need (personally, I don't need that integrated digital bun warmer) in one package that's ready to plug in and use to make great music.

YAMAHA PSR-SERIES: PORTABLES WITH POWER

There was a time, not long ago, when portable keyboards were rated not by their sound, but by their cheese factor: Little plastic machines making little plastic bossa nova rhythms. Man, have times changed. From first hand experience, I can tell you that today's portables have very little in common with their ancestors. See, I bought my father a **Yamaha PSR530** last Christmas. I bought it because he had to give up his prized Kimball piano when he moved into his retirement community and he wanted something he could use to continue writing music in his spare time (I think his retirement is more active than my so-called "normal" life).

He and I were both amazed when we heard the quality of the sound coming out of the onboard speakers. But what was even more startling was the complexity and sophistication of the built-in accompaniment. My first thought was: I gotta get me one of these things. As a late night "sketchpad," I wouldn't even need to turn on the equipment in my studio to lay down some tracks. That's because the integral multi-track sequencer can store everything until I have a chance to either write out the parts or sit down and record the "real thing" in my studio. For me, there's nothing worse than losing an inspiration because I haven't got a tape cued up.

And then I thought: "Wow! I could even take this thing with me to the beach or up to the mountains." Duh! Yamaha has been telling us this for years. Guess I wasn't paying attention (hey, I was real busy, okay?).

Take it from me, every keyboard player needs one of these machines. You won't believe how good they sound or how much attention Yamaha paid to the sheer musicality of the accompaniment styles. Yes, there's still a polka or two lurking in there, but there's more than enough rock, jazz, country and Latin grooves to keep anyone tapping their toe — these are accompaniment styles that are truly so good they can actually *inspire your creativity!*

I won't take up a lot of space here listing all the different PSR-Series keyboards that Yamaha makes — it would take up two pages anyway. Log on to Sweetwater's Web site and you can download all the information you need on these amazingly versatile and surprisingly affordable instruments (prices start at just $149.95). While you're there (in case you still don't believe me when I say these things are amazing), check out the **Yamaha PSR8000** with its Virtual Arrangement function (intros/endings, multiple fills, bridge/chorus/verse arrangements), Vocal Harmony feature (build your own backup singers) and Gender Function/Pitch Correction (shift the pitch of

The do-it-all, take it anywhere PSR630 from Yamaha: Nothing short of amazing!

your voice up or down while retaining human voice quality or just adjust the pitch of your voice to match the key of the music). This is heavy duty musical firepower, folks.

Now if you don't happen to have Net access at the moment, feel free to call your Sweetwater Sales Engineer for all the specifics on these great instruments, plus your very special low Sweetwater pricing. You'll find it's, well . . . inspirational! *— J.M.*

By David Stewart

Wow! Just when we thought it was safe to hop in the van and start driving again, what happens? We end up in Nashville at the Summer NAMM Show. This year there were no helicopters or Lear jets to get us to the show as in the past; just a trip in Chuck's luxurious van. Trips that we take together are always interesting. Even when we try to talk about something other than work, we still end up back at the same place — work, and how we can better serve our customers. You'll hear more about these new ideas in the coming months.

NAMM shows always have a very festive mood (lets face it, musicians *do* know how to party) and this one was no exception, with great bands playing up and down every major street and great concerts every night. But in the end, fatigue (partly due to information overload) always wins at the show.

The theme of this year's show was once again guitars, with a notable presence of groove or DJ-oriented equipment and digital peripherals. In spite of walking what seemed like 50 miles per day and listening to every sales pitch known to man, I'm sure we missed things. This report is in no way meant to be the definitive all-inclusive text on the matter. Before you enter remember this: List prices (where available), model names, release dates, colors, sizes, power ratings, specs, weights, knob per dollar ratios, cool guy factors, and everything else are all subject to change. Space prevents us from covering everything in these pages, but a more detailed report is available on our Web site at "*www.sweetwater.com/reports/summer-namm98/*".

AKAI. The **S5000** ($1995) and **S6000** ($2995) samplers appeared to be working perfectly. They aren't shipping yet, but Akai expects them to be ready by October or November. These beasts are the latest incarnation of the S-series, and they can hold up to 256 MB of RAM, have 64 voices across 32 MIDI channels and sport a nice removable front panel that doubles as a remote control (a la Fostex recorders). They look to be the de facto standard in sampling machines for the next few years.

AKG showed a new satin silver version of their popular **C1000S** microphone. It comes with a second capsule converter that provides more presence and ships along with the standard hypercardiod modifier. They also changed the color of the **C3000** to satin silver as well. These new colors will probably not show up in the field for a few months. Also of note was their new **IVM-1** in-ear monitoring system, which is the most advanced application of their Individual Virtual Acoustics technology, using binaural processing technology to achieve an extremely natural sound.

ALESIS. The **M20** is shipping! Actually we've already sold a bunch of them, so it's not news to us. They were also showing various M20 support products such as the **CADI Controller** ($1299) and the **RMD** 32 channel remote metering option ($799). They were also thrilled to report that the wait for the **Q20** effects processor ($999)

is almost over, as well. They expect to roll them out in August. The new **QS6.1** ($999) will be taking over the low priced keyboard duties (see Page 8 for additional information). David Bryce gave us a great demo of the new **DM Pro** drum module ($899). This baby sports four times the ROM memory (16 MB) of its predecessor, the DM5, holding 1600 instruments spread across 64 mapped drum kits, with 256 different snares. It has six outs and 16 trigger ins that are controlled by a separate microprocessor running some very sophisticated software. Availability is early October. Oh yeah, it sounded fantastic. In other news, the **Studio 32** mixer is going down in price to $999.

ART is now in full production on the new **TubePac** and **TubeEQ** (both $249). They have a dual tube EQ ($449) coming out in September and in October they'll be announcing a single rack space channel strip for around $499. We were shown several products at the drawing stages that look very impressive. Stay tuned.

AUDIO TECHNICA was showing their soon to be released **4060** ($1695) large diaphragm tube microphone. It sounds incredible and I found out that a prototype has just been used on the current Celine Dion album.

AXON. Anyone serious about controlling MIDI instruments with a guitar needs to check out their stuff. The **AX100**, the latest in a series of neural net guitar to MIDI converters has the most consistently fast tracking I've seen in a system that works with any guitar. The SB version adds hundreds of sounds and effects. Unlike other guitar synths, it's just as fast triggering external MIDI modules as it is its own internal sounds. Works great for bass, too.

BIG BRIAR. Winning my award for coolest product name are Bob Moog's "**Moogerfooger**" products: the **Ring Modulator** ($289) and **Lowpass Filter** ($299) are analog effects with genuine Moog designs. The knobs (oh yeah, there are knobs) are the same type as used in the original MiniMoog keyboard. They also had the handmade **Ethervox MIDI Theremin** working ($3500).

BOSS. Their newest tuner, the **TU-2** ($139), is housed in a floor pedal style case with LED's that can be seen in full sunlight. It doesn't use battery power until activated by stepping on the pedal. The output can be muted or passed through while tuning. The **AD-5** acoustic guitar processor ($249) has a very unique feature coined at the show as "Reverse Amp Simulation" which allows an acoustic guitar to be run into a standard guitar amp and make it sound like a full range speaker. Release date is scheduled for October. Can't afford an MC-505? Boss has the answer with the **Dr. Groove** ($495). The DR-202's waveform memory incorporates 24-voice polyphony, with its 207 drum and 49 bass samples arranged into 128 Preset drum kits plus over 400 Preset patterns ready for instant triggering. From Hip-Hop to Acid Jazz and Latin, practically every genre of Groove music is represented in these Preset patterns, all with street-level authenticity. There's a 3-track sequencer with a 13-part

The Nashville Convention Center, home of the 1998 Summer NAMM Show (above) and an overhead view of just one of the exhibit halls (at right).

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drum track, a dedicated bass track, and an external source track for triggering external MIDI gear plus a variety of real time controls including tap tempo.

CAKEWALK. In collaboration with **Roland** and **Fender**, Cakewalk plans to participate in products enabling guitarists to be more creative and productive in recording and live performance. The first solution from the alliance is the combination of three distinct products optimized to work together: Cakewalk **Guitar Studio** digital audio and MIDI recording software, the Roland **GR-30** Guitar Synthesizer and the Fender Roland-Ready **Stratocaster**. Guitarists can record and play eight tracks of CD-quality digital audio in tight synchronization with MIDI. Tracks can be edited and mixed in a familiar environment because the user interface is designed specifically for guitarists. It features a Virtual Fretboard for the display and input of melodies and chords. Players are able to capture ideas quickly by using the rhythm patterns provided. There are also specialized utilities including a guitar tuner, MIDI Guitar setup, and guitar effects including chorus, reverb, EQ, flange and delay.

DDRUM was showing a new expanded drum kit called Ddrum **System One** ($4595), which is based on the Ddrum 4 technology. It adds three Ddrum cymbals and a hi-hat to their System Two kit ($3795). Since you use your own stand for the hi-hat it feels like real hats with sounds for open, foot, and closed pedal positions.

DIGITECH. Expanding on their success with the S-100, Digitech showed the new **S-200** processor ($339). It has 20-bit I/O in a two in/two out configuration (the channels can be separated), plus a more comprehensive and easier to use display than the S-100. The **Vocalist Access** ($469) packs the harmonic punch of the Vocalist Workstation into a 1-space rack mount package. The user interface is made more friendly by a new edit knob: push it in to edit, then push it in more to release the edit mode and it pops back out. The **Talker** ($299) may be their most innovative product at the show. Housed in a simple (but cool looking) floor stomp box, it gives a guitarist (or anyone else!) access to all kinds of talking effects made popular in the 1970s.

EMAGIC. Their big news is that they are finally shipping all of their software packages announced at the January NAMM Show (see our Winter NAMM '98 report). They have also announced VST support. Even bigger news is that they are going to be supporting Roland VS-series products. They had a Mac up and running in the Roland booth doing graphic editing on the new VS-880EX.

EVENT announced that all of their computer recording platforms (**Gina**, **Darla**, **Layla**) are shipping. They were showing Layla running on a Mac, but they say it will still be Fall before it is available that way. They showed a new microphone, the **Rode Broadcaster**, a large diaphragm condenser mic that is mounted to a clip so it can be boomed in to a broadcast person with ease.

G&L had several new models at the show all featuring Leo Fender's "Z-Coil" design, based upon his earlier split coil humbucking pickups. Unlike stacked humbuckers, these pickups offer a true single coil sound, but are hum free. New guitars include the **Comanche**, which employs the G&L Dual Fulcrum tremolo system, the **ASAT Z3**, which has their patented Saddle Lock fixed bridge, and the **ASAT Z3 Semi-Hollow**, which has twin voice chambers contributing to a scooped midrange.

JBL had their full range of new LSR products working and sounding great. Their newest system consists of the **LSR28P** bi-amped monitor system with **LSR12P** powered sub. The compact system should go for around $2000 and, from what I heard, is worth every penny.

KAWAI showed a fully working version of their new **MP9000** piano and controller ($2195). The keybed assembly in this unit is a whole new design that employs real hammers at the back of the key for a more realistic feel. It has fantastic piano sounds, which were modeled with a new process they are calling "Harmonic Imaging" — a modeled technology that is continuously variable based on your playing velocity.

KORG. The new **Trinity V3** is the marriage of the famed Trinity and Z series keyboards into one incredible instrument with 38-note polyphony and 100 effects. There will be a new option that will combine the PBSTri and SCSITri into one package bundled with sample CDs that include performances from the likes of Steve Gadd and James Brown. Availability of the keyboard is late September. The **N1R** ($850) packs the punch of the N1 and N5 keyboards into a single rack space. There are 563 multisamples and 304 drum samples stored

The Korg Booth showed the new Trinity V3, while drummers checked out Roland's V-Drums (bottom)

in 18 MB of wave ROM. Interestingly, the LCD display can be switched from amber to green.

LEXICON. Further solidifying their position as a premier guitar effects developer Lexicon introduced the **MPX-G2** processor. It works with any amp using two separate sets of inputs and outputs allowing guitarists to place effects anywhere in the signal chain for optimal performance. They were showing their **System 12P** audio recording hardware ($2999) working with Steinberg's VST and their **284 Signature** amp ($1099 — also see Page 9 for more) was in use in many of the high end guitar booths.

LINE 6. POD is their Flextone on a table ($399). This kidney-shaped unit has all of the front end features of their highly acclaimed Flextone amp (see Page 7 for more).

MACKIE. The buzz of the last few NAMM and AES shows (and this one) is still the Mackie **Digital 8•Bus** Console ($9999). They do have product on the assembly line and they should be arriving as you read this. Some minor features have changed a little bit since the last time we wrote about it, but the thing still does look incredible with 56 inputs, 72 channels, 48 channels with EQ, compression and gate simultaneously, hardware DPS card expandability, software plug in capability on generic DSP cards, SVGA display output port, Apogee UV22 process on tape and main outputs, integrated 3-way meter bridge, motorized faders, 5.1 and 7.1 surround capability and tons more which we'll cover in detail next issue. As with most products of this nature, these boards are going to be extremely hard to get for a while, but due to our great relationship with Mackie, we are at the top of the list for receiving product. Get your orders in now.

MARTIN. Heading up the "I wish I could afford one" category was the **Steven Stills** model. They're only making 91 and they tumble in at a price of only $19,310! Oh, but what a beautiful instrument it is. They also showed a **Don McLain** model ($5750), a **Lester Flatt** model ($8500), and a **Willie Nelson** model. They did not, however, reproduce the hole he has in the front of his. The East Indian Rosewood version is $5500, and the Brazilian Rosewood one is $9800. There were also three **Johnny Cash** models (priced between $3950 and $8200) and the "lowly" **Eric Clapton** model at a mere $3500. In the more affordable range they showed a new cutaway guitar designed for women available in three different woods ($1900 to $2300), a new **JC-1** jumbo cutaway laminate with built in Fishman pickup ($1499), and a new thin body acoustic (**OOCME**) ($1399).

MIDIMAN never fails to amaze me (and I'm terribly difficult to amaze these days). This year they introduced **SAM**, a S/PDIF ADAT mixer and format converter ($399.95). Weighing in at just one pound, SAM's main function is to be an ADAT to S/PDIF (and vice versa) converter. It just happens to be able to mix eight ADAT tracks to one S/PDIF output with 56-bit internal processing and it can lock to sample rates from 39 to 51 kHz. To complement SAM, they have also introduced **Pipeline 8 x 8** ($899.95), an 8-channel A to D and D to A 24-bit converter box with ADAT compatible light pipe I/O. It can also work on a variety of other systems which support the light pipe interface.

NORD. Clavia was showing off the new **Nord Micro Modular** synthesizer. At $895 everyone can now afford to get into the power of modular synthesis. It comes with and uses the same software as its big Modular brother, but has a smaller hardware package with four realtime controller knobs (instead of the 18 on the Modular).

OPCODE. After being purchased by Gibson a short time ago these guys are as enthusiastic as I've ever seen them. Announcements at the show include **Vision DSP** ($495), which will replace Vision Deluxe, with support for Steinberg's VST architecture and full ASIO hardware compliance. **DATport** has a USB port on one side and a pair of S/PDIF ports on the other. Plug it into the USB port on your PC and it's ready to go. No messing with drivers (it doesn't even come with a disk), DMAs, IRQs, etc. Available in September for under $200.

PRESONUS displayed their M80, 8-channel class A microphone preamp system ($1899.95), an ideal front end for Paris or Pro Tools users. They have set it up so each channel can easily receive mic or line level signals on TRS or XLR connectors. To top it off they smartly made a mix buss with XLR outputs and a high output headphone jack with level control. Each channel includes phantom power, phase reverse, -20 dB pad, low cut filter, and a unique IDSS harmonic distortion control. They're in stock now.

By Chuck and Brenda Surack
Owners, Sweetwater Sound

Nothing upsets customers, retailers and manufacturers alike more than the dreaded "vaporware" syndrome. We've discussed it here before, but it's worth talking about again since it's something that will more than likely always exist.

Before we get into the entire subject, we want to give you the good news: Almost all of the most eagerly anticipated products ever designed are now shipping. That's right, if you've been hanging on, waiting for your Mackie digital mixer, Alesis M20, Event Electronics Layla, Roland VS-1680, or MOTU 2408 to arrive, your wait is over. *These products are shipping right now* and we expect to get caught up with all our back orders within the next few weeks or so (your order may even be at your doorstep right now).
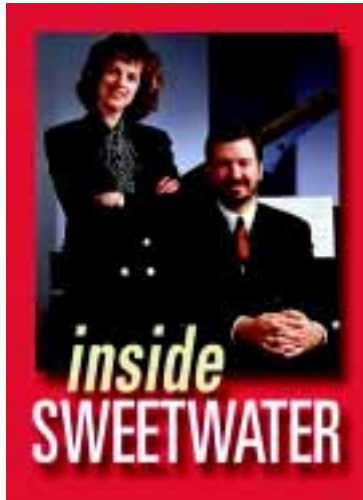
So why does this situation exist? There are several reasons. Maybe the one that gets overlooked the most is that manufacturers do not want to ship you a product that won't do what they've promised. They want it to work perfectly and continue performing for you for many years to come. That means they have to subject these products to an incredibly rigorous series of tests. If a tiny component fails — even a single IC chip or power supply — it can send the item back to the drawing board. More typically, because manufacturers often buy certain parts from other vendors, they have to wait until that vendor fixes the problem and gets them parts that will work correctly.

Meanwhile, because of advertising deadlines that are at least three to four months ahead of the anticipated release date of a certain piece of equipment, the marketing people have to start doing artwork and placing ads, not

Mackie's Digital 8•Bus is one of the hottest products to come along in years — and it's shipping now!

knowing if a month down the road there might be a production glitch. Because competition for musicians' dollars is pretty fierce these days, no manufacturer can possibly wait until all testing is complete and product is in the warehouse before beginning to advertise. They cannot afford to have thousands of mixers or recorders or whatever sitting around for three or four months while waiting for the ads to start appearing. Some companies could actually go bankrupt if that happened — yes, there is that much at stake.

So they look ahead and make a "best guess" estimate of when their latest, hottest item might start shipping. Then they place ads. They tell us and we tell you. And then we all keep our fingers crossed.

Because all of us want the best new gear, we just have to be a little more patient once in a while. When that bright, shiny new digital wondertool shows up on your doorstep and gets integrated into your studio, you want to be sure it's going to perform up to the manufacturers high standards. Thanks to all the intensive testing, odds are good that it will. A short delay in getting what we want might be a little frus-

trating, but having to send something back for repair is, at best, a hassle you can do without. So let's all be glad that manufacturers care enough about their customers to make darn sure that any product they release will give them years and years of trouble free service.

On another topic, many of you can look forward to receiving a copy of our brand spanking new, up-to-the-minute "**Welcome to Sweetwater**" video. Because things have changed a lot around here a lot since our last video in 1994, we wanted to give customers a sense of just how things have grown and how we operate on a day-to-day basis so they can have a better understanding of all the many ways we go to extremes to take care of our customers. Videos will be shipping soon. Let us know how you like it.

Which leads us to our next point (it's nice when it works out like that). We always, *always* want to hear from you. We want to know what you like, and what you feel we are doing right. But we also want to know if you're unhappy or if you think there's something we can do that will make dealing with Sweetwater an even better experience.

As most of you know, the majority of our customers come back to us time and time again when they need something. But we are not perfect quite yet: There are about 130 people here now, and once in a while, one of them is going to make a mistake — which is only human considering the hundreds of orders that get filled on a typical day here. But in some cases this leads to misunderstandings with customers, who are *also* only human and therefore may get upset when something goes wrong.

We can say with absolute certainty that every single person here at Sweetwater wants you to be happy with your new purchase. We even want you to feel good if you call us and get information about a certain item, and then choose *not* to purchase it from us. But the only way we can be sure that you are completely satisfied is if you let us know.

We read every single letter, fax or e-mail that arrives here *without exception*. If there's a problem, it gets solved — immediately. If you're totally ecstatic (and almost all of our customers are), we let everyone know during our regular weekly meetings. This feedback allows us to better serve every single customer, now and in the years to come.

So take a couple of minutes, sit down and let us know how we're doing. Our philosophy has always been: "If you're not happy, we're not happy." That's not some snappy advertising slogan made up by some ad agency, it's plain and simple our way of doing business every day!

Q & A

Q: What's a direct box? Someone said I need one in my studio and I didn't want to appear dumb, but I don't know what it does.

A: With special thanks to the Sweetwater Web site guys, here is the official "Word Of The Day" definition. Direct Box: Often abbreviated DI (for direct insertion), a device commonly used to convert high impedance, unbalanced signals from a stage instrument (like a guitar, bass or keyboard) into low impedance balanced signals. This puts the signal at the proper voltage level for the mixer and prevents the instrument from becoming loaded down (with too low an impedance), which could cause tonal shifts and distortion. It also allows the signal to be transmitted over long lengths of cable. DIs are always used in live sound to get a signal from an instrument on stage out to the mixing board, which can be as much as 500 feet away. A simple direct box consists only of a small transformer, but more sophisticated designs employ electronic gain stages that resemble the input section of a modern instrument amp. They may also have some combination of ground lift switches, EQ switches, level matching switches, isolated line outputs, and more.

Q: Can I use any CD-ROM drive with my K2000 or do I need a certain brand? I see that they're really cheap in some of the big computer catalogs, but I don't want to waste time sending it back if it won't work.

A: We have found that most SCSI CD-ROM drives do work with the K2000. However, with the huge number of drives out there we have only been able to test a random sampling. We did find that *most* NEC drives and *most all* brands of CD recorders **do not** work with the K2000 and the Kurzweil *does not* work with *any* IDE CD-ROMs. You want to make sure you have the most current OS (3.54) installed in your K2000 as it greatly expands the number of CD-ROM drives that work with it. Here at Sweetwater, we carry several very affordable drives from 4x to 24x speeds that are guaranteed to work with the Kurzweil.

Q: Is there any way to connect more than six external SCSI devices to a Mac? I have the Mac at one end and my Roland sampler at the other, but I also have a scanner, two external hard drives, an internal hard drive, a CD-ROM drive and a Zip drive. I'd also like to add a tape back-up system and I don't want to keep swapping out cables. Help!

A: There are a couple of solutions to add more than seven SCSI devices to your Mac. Your best bet is to install an additional SCSI bus to your Mac via a third party PCI card. These cards give you at least seven more SCSI IDs. An additional benefit is that they are usually even faster at sending and receiving data than the internal Mac bus. The other solution is a SCSI switcher box, but here you normally have to power cycle the computer to change which devices are active.

There was a time when Macintosh owners had all the cool software. Not a fun time for PC owners. But all that has changed, and now Mac audio addicts envy those who live in the Windows world thanks to an incredible suite of products from a company called **Sonic Foundry.** Keep in mind that we're going to be covering a lot of products here, so we can't even begin to list all their features. Your best bet, as always, is to contact your Sweetwater Sales Engineer for more detailed information.

The software that started it all, **Sound Forge**, is now at **Version 4.5** ($499 list). Sound Forge is high end sound editing software for Windows that includes an extensive set of audio processes, tools, and effects for manipulating audio to your heart's content. You can combine Sound Forge with any Windows-compatible sound card to create, record, edit, and refine audio files. Its clean, friendly interface and familiar Windows environment make editing fast and easy.

Version 4.5 includes Sonic Foundry's **Batch Converter** and **Spectrum Analysis** Plug-ins. Batch Converter saves time and alleviates the monotony (and splitting headaches) of converting and processing numerous audio files. Thousands of files can be processed in a single batch. Any process, effect or tool in Sound Forge, or any DirectX plug-in, can be batch processed. Spectrum Analysis performs precise FFT analysis and displays the resulting data in two graphical formats. If you're into Multimedia and Internet Development, Sound Forge supports a wide range of cross platform files and audio/video compression formats including Internet encoders: NetShow 3.0, RealAudio/Video 5.0 and JAVA AU files. It also allows the user to edit sound to image with frame accuracy by supporting Video for Window (AVI) files.

Recording and editing music? Sound Forge is loaded with system-defined presets and will also allow you to create and save your own. All processes and effects dialogs give you the ability to preview changes, as well as a bypass option for before and after comparisons. The Undo/Redo History can quickly restore your files to any previously edited stage (this can be a real sanity saver!). In Sound Forge you can create and give unique names to markers, loops, and regions. Drag any region to a playlist for non-destructive editing and arrangement within a sound file. Create, edit, or change sustain and release loops for samples in the realtime loop-tuning window. Transfer samples to an internal or external sampler via SCSI/SMDI or MIDI Sample Dump.

ACID ($399 list) is a breakthrough loop-based music production tool from Sonic Foundry. With loop-arranging and editing, ACID gives musicians unprecedented creative flexibility. Just imagine working with hundreds of cutting-edge loops or bringing in your own audio samples to create custom music in minutes. ACID allows you to preview any loop before adding it to your mix, automatically matching the tempo and key in real time (this program is actually smarter than we are!).

Click-and-drag to easily add or delete loops. ACID allows realtime changes to pitch and tempo to unlimited tracks (based on system RAM). Control the volume, pan, and effect envelopes for each track to create a perfect mix between loops. To add the finishing touches, you can apply multiple real-time effects with DirectX Audio Plug-Ins. To further edit loops, ACID provides quick access to Sound Forge or even other audio editors. Processed audio can be directly output as .WAV files or exported as digital audio tracks. ACID is also compatible with Sonic Foundry's **CD Architect** and direct-to-digital audio CD programs. Finally, ACID includes a library with hundreds of loops in many different musical styles: Techno, Rock, Rave, Break Beat, Funk, Country, Hip-hop, Disco, Alternative, House, Industrial, Guitar, Ambient and more. ACID rated thumbs up from our own Dave Schmid (Sweetwater's ace Webmaster), so you know this is very cool software.

Loops for ACID ($59.95 list) are high quality sound files that have been specially prepared for use with Sonic Foundry's ACID. The loops store special data that optimizes ACID's time stretching/compressing and pitch change features. Of course, Loops for ACID are standard .WAV or .AIF sound files with just a little extra data tacked on, so they can be used for all your audio content needs. Very potent material here that you are gonna want!

What I want is the **Acoustics Modeler** Plug-In ($249 list), which is a digital signal-processing tool that adds the acoustic coloration of real environments and sound altering devices to existing recordings. Unlike some artificial-sounding reverb units, Acoustics Modeler actually incorporates the acoustical responses of a specific environment into a sound file: from large concert halls and live rooms, even to the vintage sound of old tube microphones. Besides achieving ultra realistic imaging, the impulses can also be used to generate entirely new and unique effects which you have to hear to appreciate. The Acoustics Modeler includes an extensive library of high-quality acoustics signatures and impulse responses.

If you're like me, you probably have some wonderful old recordings laying around that you wish you could clean up. So here's great news: the Sonic Foundry **Noise Reduction** DirectX Plug-In ($349 list) analyzes and reduces low-level background noise such as tape hiss, electrical hum, and machinery rumble from recordings, all with minimal unwanted effects and nasty digital artifacts. To do this, audio is separated into its frequency components to distinguish distracting noise from the desired signal.

The Noise Reduction DirectX Plug-In also includes Click Removal and Vinyl Restoration Tools. Click Removal, as you'd expect from the name, enables click and pop removal automatically or manually. The Vinyl Restoration Tool reduces clicks and pops along with surface noise in a single pass. Noise Reduction Plug-In will run on any DirectX compatible host application in real time!

Also available from Sonic Foundry are three sets of DirectX plug-ins collectively dubbed XFX ($149 list each). **XFX 1** includes 6 discrete plug-ins: Reverb (19 types), Time Compress/Expand, Multi-Tap Delay, Chorus, Pitch Shift, and Simple Delay/Echo. **XFX 2** includes Noise Gate, Graphic Dynamics, Multi-Band Dynamics, Paragraphic EQ, Parametric EQ, and Graphic EQ. **XFX 3** includes Amplitude Modulation, Gapper/Snipper, Flange/Wah-wah, Vibrato, Distortion, and Smooth/Enhance. XFX plug-ins work in any program that fully supports DirectX Audio plug-ins.

When you're finally ready to take all the great material you've created with your Sonic Foundry software and burn professional audio CDs to Red Book specs, you'll want Sonic Foundry's new CD Architect ($395 list). Tracks in the PQ List can be assembled with regions from single or multiple sound files. Full PQ code editing allows even the most sophisticated mixes and crossfades between tracks. The software can be used as either a stand-alone editor or as a Sound Forge 4.5 plug-in. CD Architect is ideal for building audio CDs on Windows and Windows systems, and it now also supports IDE/ATAPI CD-R drives.

My only question at this point is why you're still reading this? Go pick up that phone and talk to your Sweetwater Sales Engineer about all these remarkable tools from Sonic Foundry. It's advice you'll want to thank me for, but hey, I'm just doing my job. Call 'em now! — ***Michael Rief***

A few years ago — has it really been that long already? — the guitar world was stunned by a new amplifier that boasted tube sound, but without tubes! The cutting-edge technology behind this startling development was called physical modeling. The product was the **AxSys 212** by **Line 6**. As you might guess, it was a worldwide best seller.

But now it's 1998, and let's face it, a whole lot has been learned since the AxSys was first unveiled. The second generation of physical modeling amps are now here, and they're more powerful, more accurate and more player friendly than ever. While that first amp was a great start, the people at Line 6 actually listened to what guitar players and industry publications had to say, and the new amps reflect that.

Replacing the AxSys at the top of the Line 6 . . . umm, line . . . is the **AX2 Digital Guitar Amplifier System** ($1199 list). The AX2 uses the same electronic insides as the company's original 2x12" system, so every AxSys 212 can be fully upgraded to be an AX2, with all the features of this new Line 6 flagship (proving the awesome advantage of software-based products and their ability to be inexpensively upgraded).

The heart of the AX2 is its software-based amp models which use Line 6's **TubeTone Amp Modeling** to bring you a wide variety of sounds and effects modeled after some of the most popular classic tube amplifiers. The TubeTone software in the AX2 improves over the original AxSys 212 with even better modeled amp tone and an expanded set of amp models. All of which means that the AX2 can pretty much give you any guitar amp tone you want or need — 19 of them to be exact, all at the push of a button (or one stomp of the optional **Floor Board**).

While Line 6 doesn't name names on its front panel (the manufacturers of the originals would strongly disapprove), you can easily guess which amps they're modeling by the descriptions: Small Tweed, Jazz Clean, Black Panel, Brit Blues, Rectifier, California Crunch, Modern Hi Gain and more. The AX2 ships with 128 preset sounds, or you can dial in your own and save it to the amp's 128 user memory locations (no tube amp offers this feature!).

What's more, the onboard digital effects are

Tone for the '90s and beyond: The 100-watt 2x12 AX2 (left) and Flextone (right) with Floor Board and FB-4 pedals

WELCOME TO THE TUBETONE REVOLUTION!

easily the equal of many outboard pedals and modules, offering up tasty reverb, delay, chorus, flange, tremolo and even rotary speaker simulations. But there's more: Five overdrive/distortion models including Octave Box, four types of wah pedals, and even a 5-band graphic equalizer.

All settings are programmable, of course, with instant recall and seamless switching of complete amp-and-effects setups. A high quality direct out with cabinet and speaker emulation lets you record direct with real miked-up amp tone, or play with great amp tone through headphones. All this tone is driven by 100 watts of stereo power into dual custom 12" speakers. You also get a chromatic digital tuner and an independent aux channel free from guitar tone and effects for clean amplification of acoustic guitar, CD, drum machine, tape, or even vocals to accompany your guitar sound.

But say, maybe you don't need 100 watts or dual 12" speakers. You want a combo amp with classic looks, but you also want that killer TubeTone modeling. Simple! You want a **Flextone** ($799 list)! Powerful enough for rehearsals and live gigs (in reasonably-sized halls, of course), yet compact enough for studio use or as a practice amp, the 60-watt mono 1x12 Flextone is for you. With 16 amp models and 16 pro quality effects setups, each arranged on separate knobs, you can dial

No organ donors required for POD! See details on next page . . .

up the amp model you want, add effects to taste, then save the combination in one of the Flextone's four foot-switchable channels. The amp includes a direct out for recording that gives you great TubeTone cabinet simulation and speaker emulation — recording great guitar tones has never been easier than this! — and the direct out doubles as a headphone jack for late night, speakerless practice.

If you need more power, take a look at the **Flextone Duo** ($949 list) with 100-watt stereo amplification and two 12-inch speakers. This puppy can crank out the volume to fill up all but the most gigantic concert venues, yet it still has all the convenience and features of the 1x12 model. For those that need an all-out, high power, four-channel amp head, the Line 6 people also offer the **Flextone HD** with stereo 2x150-watt amplification, guaranteed to detroy the delicate eardrums of anyone over 40 (or under 40, for that matter). Hook it up to your favorite speaker cabinets or a couple of Line 6's **Cab212S** closed back speakers ($299 list each).

Okay, now you might be asking yourself at this point, aside from the power and speakers, what's the difference between an AX2 and a Flextone. Good question. Here's the deal: The AX2 is designed to give you a total of 256 different sounds, live or in the studio. Programming is done via a front panel matrix that's much easier to learn than it is to explain. It's the ultimate in tone-shaping, but it does require a bit of work to really get the programming thing going. Meanwhile, the Flextone series is designed more like a traditional amp, so you just dial in the sounds you want via the top panel controls, and then save them to

BURN YOUR OWN CDS WITH MICROBOARDS

A few years ago, if you wanted a CD of your music, you had to spend big bucks for just one single disc. If you wanted data transferred from your computer to a CD-ROM, again, big bucks. Man, am I glad that's all changed! Today, you and I have the ability to burn our own CDs at a cost that's a fraction of what it used to cost in the "old days." Whether you need one CD or a dozen or several hundred, one company has the technology and the machines to do the job. In fact, **Microboards Technology, Inc.** has some of the most versatile CD burners on the market!

If you're looking for one duplicator that can do it all in your studio — from audio CDs to CD ROMs to Multi Session and Mixed Mode discs — take a look at the **CopyWriter A2D** CD Duplication System ($1849 list). The A2D is actually the first CD to CD stand alone duplicator with built-in analog to digital conversion. It also features an extremely user-friendly interface, a 2.1 GB internal hard disk and a SCSI port so you can easily connect it to any Mac or PC.

This machine is so cool, you can even plug in a mic and record, or record from the audio line input (thanks to the A/D converters, of course). If speed is critical, note that the A2D can read at 8X (1200 Kbps) and write at 4X (600 Kbps), so a single 60 minute audio CD will only take about 15 minutes to create or duplicate! And the Cue Sheet function has Play, Delete, Swap, Move and Back commands that allow you to change the order and alter individual audio tracks after extracting tracks from CD or input from tape or other analog source.

Microboards Copywriter A2D

If your needs are more sophisticated — and these days, whose aren't? — you might want to take a close look at the **Cedar Desktop CD-R Publisher**. It loads, cleans, records, verifies and even prints labels (300x600 dpi ink jet) on up to 50 CDs automatically. The recorder has a SCSI-2 interface, runs at speeds of 4X for super fast disc creation and the precision robotics (you can finally tell folks you own a robot!) maximizes productivity — you just load it and walk away. When you return, there are your CDs! Yes, its list price is $7685, but if you could see this thing in action, I guarantee you'll want one.

But maybe 50 CDs aren't enough. What if you need a duplication system that can burn up to an astounding 650 discs per hour? Yes, the **DSR-8000 CD Station** ($6995 list) will make you from one to five CDs (or even DVDs), but when high production is needed, you can expand your five slot DSR up to 20 slots. With the unit's Direct SCSI channel, all of the CDR (and even DVD-R) recorders in the DSR-8000 will function as a target writer for Mac, PC or Workstation.

If you have your CD recorders on line already, but are tired of having to label discs by hand, look into the **Signature CD Color Printer** ($1245 list) for printing 300x600 dpi ink jet labels right on your discs that look like they were silk screened.

Call your Sales Engineer right now for more information and (of course) your special low Sweetwater pricing on these superior duplication systems from Microboards.

Cedar Desktop CD-R Publisher

LINE 6 PRODUCTS

one of the unit's four channels. So in essence, if you need 5 to 256 different sounds at the touch of a button, the AX2 is for you. If you want a bit more traditional amp feel and only need to switch between four different sounds, you want a Flextone. Not too tough, was it?

If you don't do that much gigging (like me), but still want all the incredible TubeTone sound and versatility, the Line 6 folks just introduced the world to the **POD** ($399 list), an awesome-sounding tabletop direct recording tool that's designed to deliver all the sounds of a Flextone (meaning killer tube amp sounds) in a compact package. Line 6's exclusive A.I.R. direct recording output even provides outstanding cabinet/speaker/mic emulations that actually sound like real miked cabinets. This little beauty offers a deep, inspirational sonic palette that uses exactly the same modeling technology as Line 6's combo amps, but without the possibility of pulling a muscle or irritating the neighbors (the ones that go to bed at 10 P.M.). This thing is affordable, and its mind-blowing sound makes it essential for every serious guitar player that wants to lay down the tone on tape (or hard disk).

As you might guess, we have more to tell you about these fabulous amps (we haven't even told you about the **Floor Board** and its eight switches and two pedals at $299 list). But that's a job for your Sweetwater Sales Engineer. True, at this point you probably already want a Line 6 product, but trust us, as amazing as these things may seem in black and white, they're even more incredible when you actually plug in a guitar and play. So what are you waiting for? Pick up the phone and give us a call for information and special low pricing on these amazing Line 6 products. — *Bill Hoover*

ALESIS QS6.1

by Daniel Fisher, Director of Soundware Engineering

Back in the mid to late 80's, when I was a Synth major at Berklee College, I used to hang around the local music stores and lust after all the new amazing gear. For me, the most exciting products were the ones that were actually affordable like the original Alesis MidiVerb with its unbelievable low cost that seemed impossible considering the features it offered.

Throughout the years Alesis has continued to stun musicians with each new product release, bringing previously unattainable technology to the masses and always with a jaw dropping price. Now get ready for the **Alesis QS6.1 64-Voice Expandable Synthesizer.** This 61-note keyboard, which is a heavily updated version of the QS6, still weighs only 19 pounds but now features the following improvements: 16 megs of uncompressed 16-bit linear, 48kHz Sample ROM (up from 8 megs) which adds the critically acclaimed Stereo Bosendorfer Grand Piano and also includes all the Alesis DM5 Drums along with the LA Philharmonic Strings and Brass as well as Keith Emerson's Modular Moog and Hammond Organ samples. Wow!

The QS6.1 is fully expandable to up to 32 megabytes via two PCMCIA-format ports (up from the QS6's single port) which let you immediately access an additional 16MB of sound ROM without installing complicated circuit boards or waiting for disk drives. You can use this port with any of the tasty Alesis QCards that accommodates your musical style, whether you're into classical, hip-hop, pop, rock, orchestral music or otherwise.

Also new are enhanced GM programming, four Edit/Control Sliders (up from just one slider in the QS6) which can be assigned to any parameter. Two new front panel buttons (Transpose and Sequence Start) make live performance even easier. It even has a faster Serial Port which can now transfer data at up to 15k Baud (up to four times as fast as a MIDI interface!), so you can access either Macintosh or PC platforms to get into sequencing, notation, sample importing and downloading, editor/librarians and multimedia authoring.

A new brighter and bigger display allows for easy visibility in any situation, there's an internal power supply now (no more wall wart!) and the latest Fatar-built 61-note keyboard gives you the best feeling synth keyboard on the market. The QS6.1 also provides a huge selection of 640 Programs and 500 multitimbral Mixes. If you want to use your own samples or sounds from other sample libraries, the QS6.1 includes Sound Bridge software that lets you import, save and playback AIFF, WAV and other sample formats.

Knowing Alesis, you might expect that they added all these great features for only a couple hundred dollars more than the original QS6. But are you ready for this? They've actually reduced the price by $100!! The new list price for the QS6.1 is now only $999. But how does the QS6.1 sound? Well, I'm a bit biased, seeing as how Alesis flew me to California for a while to be part of their QS Programming Team, but I know you will be knocked out by how much professional sound can come from this lightweight and astoundingly priced marvel of engineering.

If the QS 6.1 sounds like a great addition to your personal setup, I suggest you call your Sweetwater Sales Engineer today for more information and special pricing on the 6.1 and the entire line of exceptional Alesis QS Series synths.

by Daniel Fisher, Director of Soundware Engineering

Having read your way through much of this issue you already know just how excited we are about the new products we saw at the Summer NAMM Show. It was also a great chance to show the world some of our own exciting releases. Unquestionably, the biggest draw to the Sweetwater booth was our exclusive **K2500SWx** keyboard package, which delivers the world's most powerful synthesis and sampling keyboard along with everything needed to make it a world-class music production station — one that looks as good as it sounds.

The real oak endcaps and oak music stand along with the custom wooden keyboard stand will make the K2500SWx the centerpiece of your studio. A customized, lazer engraved brass plate with your studio's name completes the look. The K2500SWx not only comes fully loaded with every possible option inside the 88-note weighted keyboard, including 128 megs of RAM, 28 megs of ROM, 2.5 megs of P-RAM, and the powerful KDFX digital multi-effects, it also sports an internal 2 gig hard drive.

The K2500SWx has the latest soundware and software upgrades installed as well which provide the very cool KB3 organ simulation and the exciting Live Mode which lets you bring external audio signals in for "VAST-ing." Our K2500SWx is also unique in that it comes with our entire **Sweetwater Soundware Library** including the acclaimed **Power Translator Series** (with the Roland CD-ROMs!), along with some of the best third-party CD-ROMs in the industry for a grand total of over 15,000 megabytes! There's so much more to tell about the K2500SWx, but I'll leave it to your Sweetwater Sales Engineer to fill you in on the rest.

In other Soundware news, we're proud to announce our latest offering for the E-mu ESI-4000 sampler called the **ESI Premium Rhythm Section** CD-ROM ($99 list). It's the latest of our $99 Mini-Series CD-ROMs which now brings our award-winning Young Chang Stereo Triple-Strike Grand Piano to E-mu owners (an E4/e64 version is currently in the works). The CD-ROM also contains 5 of our GM Standard Drum Kits from the **Total Stereo Session Drums** CD-ROM, 5 of our best Bass Guitars and a Yamaha Rock Piano and C7 Piano. There's even a classic DX-7 Electric Piano thrown in for variety.

This CD-ROM follows our other already successful $99 "Mini" CD-ROMs including the **Electron Bomb** CD-ROM which features Dance, Techno, Industrial, Rave, and Ambient VAST programming from Kurzweil gurus Andrew Schlesinger, Gary Phillips, Brian Cowell, and Bruce Duncan. You'll find 100 Synthetica Volume 1 programs (regularly $39) as well as the latest Synthetica Volume 2 for Contemporary ROM (also $39). You can "rave-on" with the 100 DEEPRAVED Programs ($39) and push the limit with our 100 Techno/Ambient programs (again $39) and much more, all for just $99!

And don't forget our recent addition to the $99 Mini CD-ROM series, the Young Chang Mini CD-ROM for the K2000/K2500 which features our best 16 meg and 13 meg Stereo Virtual Grand Pianos. It even includes an 8 meg Mono Virtual Piano for your mono PA gigs all for the outstanding "Mini" price of only $99. If you bought these three floppy sets separately it would cost you $227, but we're offering this "mini" CD-ROM for only $99! Get your copy today and start playing piano for real.

Well that's all we've got for this issue. Next issue I'll be back to let you in on some really hot soundware that we're developing for several of the other popular brands of samplers. You won't want to miss this one.

lexicon SIGNATURE 284: THE ULTIMATE DIRECT BOX FOR GUITAR

by Daniel Fisher

I have a confession to make: I've been a keyboard player for 30 years now and all that time I secretly always wanted to be a guitar hero, too. This passion got even stronger after working full time on Sweetwater's Ultimate Guitar CD-ROM for the Kurzweil, with its 115 different guitars. The killing blow came when Sweetwater started its highly successful "Custom Select" Premium Direct Luthiers program which put literally hundreds of top quality guitars and accessories in the same building where I work.

So I gave in and treated myself to an electric guitar. Being a trained musician and soundware engineer, but only a beginning guitarist, I currently find myself focusing more on *tone* than on highly technical playing. This has led me to explore all of the fantastic tone-shaping products we carry for guitars and I truly believe I've found the "Holy Grail" of all that is TONE! It's the new **Lexicon Signature 284** (list $1099), an all tube, Class "A" stereo recording amplifier and direct source. This hand-built, all-tube amplifier was designed by tube guru John McIntyre specially for Lexicon.

What makes it so special? Well, one key factor is its low output power which allows you to get the sinuous touch and gorgeous tone that only a fully-cranked all-tube amp can deliver. With only 3 watts per side, its low-power design makes it ideal for recording as well as live performance applications where high volume levels are undesirable. The Signature 284's unique design combines a high-gain preamp with a low-wattage, stereo Class A power amplifier. The preamp section uses three 12AX7 tubes and incorporates a switchable high-gain stage and beautifully voiced tone controls. To put the finishing

touch on the 284's tone, a stereo power amp uses two EL84 tubes in a Class A configuration. A tube-driven stereo effects loop lets you place effects in-line between the preamp and power amp for sonic effects that can't be obtained at the console. Simultaneous outputs let the amp drive any combination of stereo speaker, balanced recording and slave amp outputs. The speaker outputs can handle 4 or 8 ohm cabinets. Built-in speaker simulation lets you select "smooth" or "bright" independently for each recording output. For silent recording, the passive load is automatically connected when the speaker is disconnected. Because the slave outputs tap the signal after the power amp, they carry all of the Signature 284's characteristic tone and can be connected to any power amp and guitar cabinets for greater performance volume.

So what does this all mean to you, the guitar hero? It means that you can get the best fully-cranked all-tube sound all the time, whether you're practicing with headphones,

recording to digital, or blowing away an amphitheater full of fans, using the same hand-wired preamp and power amp. It means that your high quality analog and digital effects

NASHVILLE NAMM REPORT

ROLAND. We took a vote and Roland won the award for coolest new product at the show. The **JP-8080** ($1595) looks like a JP-8000 in a six-space rack unit, but has 10 voices with a monophonic mode and has a multieffects unit with 384 patches. But here's where it gets interesting: It also has audio inputs that can be routed through the filter sections or used as an oscillator. Using an external audio source as an oscillator brings a whole new palette of sounds. Add MIDI synced LFOs and filters that can be controlled by an audio input and one can quickly build some sounds that are just begging to be sampled and looped. The **VS-880 EX** ($2195) will replace the VS-880. It has a new backlit display and the effects board is now built-in. Plus they've made it able to record on all eight tracks simultaneously and it is now all 20-bit via six balanced inputs. There are now two digital I/O ports (both S/PDIF) and it will be capable of archiving to CD-R.

For the DJ market Roland added the **DJ-2000** Mixer ($1495). It can do all the basics, but also adds a three-band "Isolator" which can be used to radically boost or cut low, mid or high frequencies. Making Isolator control easy, the DJ-2000 incorporates an innovative Grab switch which allows DJ's to instantly trigger Isolator EQ settings on the fly for drastic sonic manipulation. The new **SRJV80-14 Asia** board, and **SRJV80-13 Vocal Collection** board are both phenomenal. The most impressive demo of the show was Scott Wilke's fluid performance of five-way velocity switched jazz scat vocals from the Vocal Collection card.

SHURE. Their new **UT** and **UC** series VHF diversity wireless microphone systems were the most significant offering. The UT series are designed specifically as a low cost solution while the UC series have selectable frequencies and are still sensibly priced. Also showing was the new **UA888** networking interface which can control up to 32 of the U4S and U4DUHF wireless systems on a Windows PC.

SONY enters the DJ market? They showed the **DRE-1** (as in Dr. Dre?) which should be shipping in September for around $1200. It's a Mini Disc-based platform with sampling trigger banks and all sorts of instant looping and scratching features. Speed and pitch can be adjusted independent of one another or together via a very simple dual slider mechanism. The neat thing is that, with their ATRAC compression technology, it's easy to record any performance you do right back to a Mini Disc and have it ready to play instantly — all in real time. The **DVS-V55** ($550) is based on the engine of its big brother, the DPS-V77. It retains the great sound quality of the V77 without the cost, but the important things are there: 20-bit converters, four inputs and outputs, tap function, easy dial up of 45 algorithms, 200 factory and 200 user presets.

SOUNDTECH has the most fantastic cable checker I've seen (I'm kind of into nerdy stuff like this): It's called the **MCT-7** ($149) and checks MIDI, video, 1/4 inch, 1/8 inch, RCA, XLR, and some more I can't think of. It checks for polarity and any pins shorted together or to ground. They also have a handy polarity checking device called, well, Polarity Checker. It costs over $200, but is an extremely valuable tool in system setup.

SPIRIT. The big splash was the **328** digital mixer ($4995), a 32-channel 8-bus mixer with 16 mic inputs that comes with ADAT Optical and TASCAM TDIF I/O already built in. Their unique feature is the "E-Strip," which allows the user to view an entire channel's controls horizontally across the board. It virtually eliminates digging through menus for parameters. The **FX-16** is a 16 x 4 rack-mountable board with 4 aux sends and three band EQ (mid-sweep) per channel. Really cool: A Lexicon effects processor that's built-in.

STEINBERG was in the Thinkware booth showing the new 24-bit version of **Cubase VST** and **Wavelab 2.0** ($499). They also have announced that they will license and take over development of Apogee's **Master Tools UV22** plug-in. An obvious first development will be VST compatibility.

SWEETWATER. We introduced our new **SWx**, a fully loaded and customized version of the K2500 (see Page 9). We also showed a selection of **Oram** outboard gear to a ton of enthusiastic studio engineers. The **MWS** and **Hi Def EQ** were huge hits with everyone who stopped by.

TANNOY. We found their compact new **Reveal** ($399) monitors in use all over the show, sounding great. The distinctive red color really makes them stand out and the shape is both pleasing to the eye and nice to the audio with very rounded off front edges.

TASCAM was out in force with the **DA-98** and **TM-D8000** digital mixer. The buzz, however, was centered on their **TM-D1000** compact digital mixer ($1199) and the new **DA-45** 24-bit DAT recorder ($1999), the world's first 24-bit SAT. The TM-D1000 sports an impressive array of cool features, including backlit LCD display, channel switches that light up, built in TDIF, S/PDIF and AES digital connections. There is also going to be a **FX-1000** effects board available that will add four channels of dynamics processing and a pair of multieffects processors. And finally, a long overdue product, the **T3000** 3-well duplicating cassette deck ($1499). It can act as a stand alone duplication system or work in a chain with nine other machines for a total of 30 potential slave decks.

WASHBURN. Their Buzz Feiten Tuning System is being incorporated in more and more of their guitars. It's both a manufacturing technology and tuning method that allows guitars and basses to be much more consistently in tune across the range of the neck. Models include the **XB500TR** 5-string bass ($899) and the **XB925** ($1699) a 5-string that has two Bartolini pickups and is made from exotic woods. There's a **Paul Stanley** guitar model, the **MR450 Sammy Hagar** model, and the **P4**, which has a mahogany body and a maple top and employs sound channels inside for increased string clarity on distorted sounds.

YAMAHA. This show's smash success for them was the **DJX** ($459), a really powerful workstation keyboard geared towards producing dance and groove oriented music. This thing is packed with 238 sounds including hits, scratches, breakbeats, loops, human voices, and 128 GM sounds. There are 100 dynamic patterns to groove with and lots of real time controls. Also in the fun category were their new PSR-Series keyboards. There is the **PSR-79** ($149), **PSR-195** ($259), and the **PSR-225** ($399) which adds GM sounds and EZ chord fingering with chord dictionaries and directories. The new **MU-128** ($1295) is brand new (shipping in October) and will soon be redefining the standards for small modules. It has 128-voice polyphony and over 1400 sounds in 24 MB of wave ROM. The really amazing thing is that it has three of what they call PLG slots. These slots provide ports for "alternate technology cards" to be installed, giving it even more functionality. They also showed their new **SW1000XG** card ($699.95), a PCI wavetable card with hard disk recording (4 record and 12 playback tracks) and multi effects processing. It has 20 MB of wave ROM, six effects, and will be supported by all the popular sequencers. It supports the PLG cards mentioned above for the MU-128 and also has the ability to interface directly with the company's upcoming DSP Factory.

ZEN DRUM still gets my award for coolest looking product and for booth with the best vibe.

That's it. Another NAMM show is behind us. Get in contact with your Sweetwater Sound Sales Engineer to find out the latest low down on all these new toys. Many of the products are right on the brink of shipping so you'll want to get your orders in right now to get one of the first ones.

LEXICON SIGNATURE 284

can be used after the preamp tubes have shaped your signal. Then your effected signal can be power-amped with real tubes in stereo. It also means that you can finally send the true output of your stereo power tubes directly into your mixing board (no power-soak needed) for a fatness that no direct box could ever deliver.

You may wonder what Lexicon is doing making a custom "boutique" guitar amplifier. I asked Steve DeFuria of Lexicon for the story. It turns out that Steve needed a small, low-wattage, portable, all-tube, stereo amp with stereo effects inserts to research the development of their new **MPX G2** Guitar Effects Processor (list $1799). Guess what? No amp like that existed, so Steve enlisted the help of tube guru John McIntyre to build him a one-of-a-kind research amp. Once the prototypes of the MPX G2 were ready, Steve traveled around showing the MPX G2 to many of the best engineering ears and guitar gods in the industry. Each and every one of them loved the G2, but always started out by asking, "Where the hell can I get one of those amps?"

After a while it became clear that modern guitar effects technology had outdistanced the amplifiers they needed to play through and the Lexicon Signature 284 was born. The electric guitar will never be the same again. There's even a specially designed stereo guitar speaker cabinet made for the Signature 284 called the **SB 210** (retail $499). It's a stereo, split baffle closed-back cabinet loaded with 2 Mojo 10" speakers that are rated a 35 watts peak per side which are custom made by Mojo Tone.

To learn more about this amazing custom hand-made amplifier, call your Sweetwater Sales Engineer today for current availability and your outstanding Sweetwater price.

By Jim Miller

Like most of you, I can sing a sad song these days. See, I didn't get to Nashville for Summer NAMM. Oh I know, you're thinking, "But Jim, you're an industry powerhouse! How could there be a NAMM Show without you?"

Okay, so you weren't really thinking that, but it's nice of you to humor me. Actually, the reason I couldn't make it to NAMM was simple: I was running behind in my work. Besides my regular duties with Sweet Notes, I had several articles and reviews to complete for Electronic Musician, and I was putting the finishing touches on samples for a new Sweetwater CD ROM (if you're nice, Daniel Fisher will tell you all about it soon).

Fortunately, as you have probably already noticed, Sweetwater's own David Stewart was there in Nashville and he put together this issue's most excellent overview of all that was new at the show — and there was plenty; so much, in fact, that I've had to give up much of my page so we can fit it all in. Of course, the more amazing new gear there is, the more we find we need, right? I can hardly believe the tools we have available to us these days.

For my (brief) article this issue, I want to discuss a topic that's on a lot of people's minds lately, which is 16-bit vs. 20- and 24-bit technology. Hardly a day goes by that I don't get asked about this: Is 16-bit finished as a format?

"Hey, my ADAT can beat up your ADAT!"

Are we dinosaurs if we don't step up to the higher resolution formats? It's an interesting question and one that certainly will not get definitively answered for some time. But let me share some personal observations.

About six years ago, a major consumer stereo publication conducted exhaustive blind testing to determine whether CDs were actually superior to (of all things) cassettes. We all have an opinion on this subject, right? Well, I won't keep you in suspense. With properly calibrated, high quality cassette machines running with Dolby C noise reduction, most of their panel could not — and I repeat, could not — consistently tell the difference between a cassette and a CD. No, not even those with so-called "golden ears." If they boosted the level of the cassette a bit, many people chose the cassette as the better-sounding format (thinking it was the CD). Amazing, isn't it?

Okay, if it's so tough to hear the difference between cassettes and CDs, what's the likelihood that listeners will hear the difference between, say, 16-bit and 20-bit recordings?

Obviously, when the 16-bit, 44.1kHz format was introduced in the late 1970s (has it really been that long?), those were the upper limits of our technology. Still, I have lots of CDs that were recorded at the dawn of digital that sound fantastic. The reason is simple: The recording engineers on these projects (and on analog recordings of the same vintage) were masters of getting the most out of their medium.

Now I'm no different than anyone else. Give me the choice between 16-bit and 20-bit and I'll take 20-bit every time. Problem is, I still have a 16-bit wallet (ouch!). And the hard truth is that I still have not produced any recordings that have absolutely tapped the upper limits of 16-bit's potential. Another fact that should be apparent is that not all 16-bit recorders are created equal. Some sound better than others. The same, I'm sure, will be said for higher bit machines.

So what it boils down to is this: What's your budget? Higher bit formats are the future, no one can argue with that. But neither can you argue with the fact that 16-bit will be with us for quite some time to come and sounds pretty awesome for 20-year old technology. Until my ship comes in (and damn it, I'm still waiting) I will try to make the best recordings possible using my present 16-bit machines. When the day comes that the technology cannot handle what I am capable of producing, that's the day I will bite the bullet, call the bank and switch to the highest bit-rate I can afford. For most of us — maybe not you, but the majority of us — I think that day is still a ways down the road.

With that I'll declare the subject open for discussion and thoughtful responses (if any) will be addressed here next issue. Meanwhile, my new philosophy is simple: Life's short, make music.
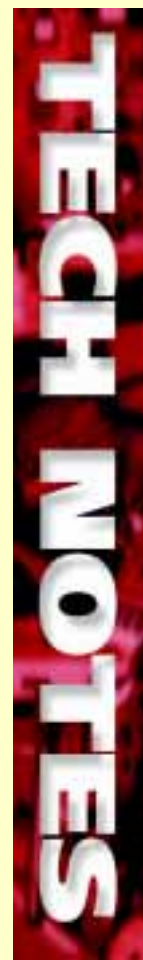
PAUL REED SMITH: Guitars Without Compromise

the bridge and 1 3/4" at the rim with a carved spruce top, carved mahogany back and sides and the superb McCarty neck profile (nice and chunky, my favorite) with moon inlays. Also included are the newly designed McCarty Archtop pickups with sound that perfectly complements the look and feel of the instrument, a PRS stop tailpiece, 14-to-1 low mass tuners with ebony buttons. You also get the standard McCarty electronics: one volume and tone control plus three-way selector switch. The **McCarty Hollow Body II** ($3600 list), has the same features as the Hollow body, but with a carved, figured maple top and back.

If you like your guitars slightly fatter (and I mean that in the best possible way!) there's the **McCarty Archtop** ($3200 list), which has all the features of the Hollow Body, but is 4" deep at the bridge and 2 3/4" at the rim with carved spruce top. The **McCarty Archtop II**, ($3800 list) has the same features, but with a carved, highly figured maple top and back. Options include Bird inlays, adjustable stop tailpiece and rosewood headstock veneer.

At the top of the hollow body PRS line is the magnificent **McCarty Archtop Artist** ($10,000 list). It features a carved Artist grade,
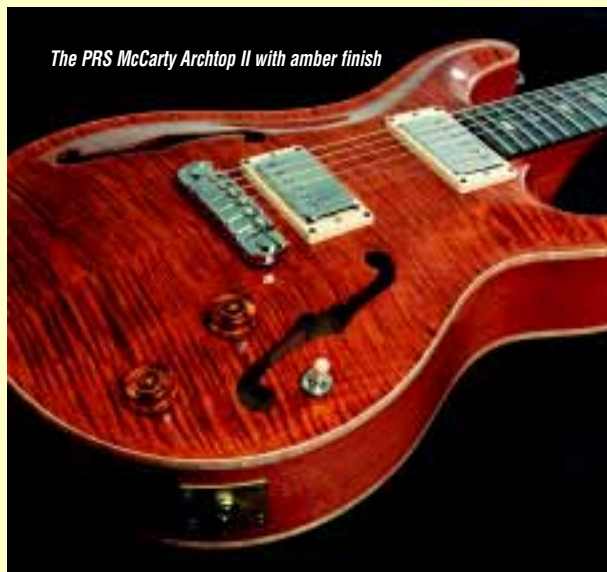
highly figured maple top and back and carved mahogany sides, 4" deep at the bridge and 2 3/4" deep at the rim. Features include a Brazilian rosewood fingerboard, Abalone birds with gold outline, rosewood head stock veneer, wide fat neck carve, adjustable stop tailpiece, 14-

The PRS McCarty Archtop II with amber finish

to-1 low mass tuners, ebony buttons and gold hardware. Whew! This is a serious guitar for serious guitarists!

Also new this year is the **McCarty Soapbar**, which is basically a McCarty with a solid mahogany body and special Seymour Duncan "soapbar" P-90s. Options include Abalone bird inlays, PRS tremolo and 14-to-1 low mass locking tuners. Though it's not new, the **Carlos Santana** model ($8000 list) is now a special order. It includes a leather case, rippled Abalone purfling, Brazilian rosewood fret board, rosewood head stock overlay and an optional stop tailpiece.

The Paul Reed Smith philosophy is simple: Make guitars that players just won't be able to put down. The craftsmen at PRS build guitars with a passion that you might have thought was gone these days. But it's not. And you'll feel it the very first time you pick up one of these fantastic instrument.

Whether you're searching for the perfect stage ax or that special once-in-a-lifetime investment, call your Sales Engineer right now and check out the current selection of Paul Reed Smiths in the Sweetwater Custom Select collection. I promise: You'll have an instrument that will deliver the tone you're searching for with looks to match! — *Jim Miller*

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Lexicon, Microboards and more!**