

TODAY'S HOTTEST NEW PLUG-INS See Page 4



Sweetwater MUSIC INDUSTRY NEWS AND PRODUCT INFORMATION

SWEETNOTES

MUSIC TECHNOLOGY DIRECT

LATE SPRING 2000 ISSUE



ROLAND REDEFINES DIGITAL MIXING

Thinking about a digital mixer? I'm pretty sure you are if you don't already have one in your rig. Whether you're building a home studio from scratch, considering the replacement of an old analog mixer in your professional studio to allow for more efficiency, deciding on a mixer for a permanent install or needing something more powerful and portable for your live show, you already know the reasons to choose digital over analog. (You do, don't you?)

Your friends and colleagues have been mixing away on their digital boards, letting their creativity flow freely through every mix — each one different, and created without fear of losing those perfect settings. They're no longer restricted by fixed signal paths, long and tangled cable runs or even more importantly, their own trepidation over being able to recreate a specific mix, let alone re-perform a dynamic mix in real time! These new tools of the trade are keeping alive the passion of each and every engineer and musician that use them, providing a comfort zone to work "outside of the box." Way out — where the fun is.

All that freedom should be yours. This is a certainty. Now its time to decide on which digital mixer will best integrate into your music making environment. Some of your choices may only allow for recording to one MDM, or they might be limited to a reduced number of mic preamps

with inserts. Something is always missing from that mixer in your price range, am I right? Sure, it has the onboard effects, built-in dynamics and EQ, but there are never enough holes on the back to connect all the cool gear you've got (or will get) from Sweetwater. Each of your digital mixer choices will typically support the Alesis ADAT, Tascam TDIF, and AES/EBU digital formats, as well as a few extra analog I/Os, but it is my opinion that the **Roland 7000-Series V-Mixing System** addresses these real-world issues most elegantly and completely.

In typical Roland fashion, the company took into consideration all of the ways a digital mixer can be used and then developed a unique modular approach to providing you with exactly the features and expansion capabilities you need. Because the mixing control surfaces and I/O processors are separate devices, you can purchase just the parts of the mixer that fit your application. Let's take a look at the entire product lineup in the Roland 7000-Series V-Mixing System.

We'll start with the most familiar part of the system: The V-Mixing Consoles. There are two consoles to choose from. The **VM-C7200** (\$3695) is the larger control surface with 25 motorized 100mm faders, while the

— Continued on Page 2

INSIDE THIS ISSUE:

FOCUSRITE PROCESSORS

The **Focusrite** brand was initially established in the United Kingdom in 1985 and has been a leading manufacturer of world-class hardware audio processing equipment ever since. The Focusrite philosophy has always been to provide uniquely styled audio products, engineered using the highest quality circuits. Problem was, Focusrite products weren't always readily available to pro and project studio owners. Problem solved: **Digidesign** will now be handling all North American distribution. — **SEE PAGE 3**



NEW TC ELECTRONIC EFFECTS

Want the great sound of **TC Electronic's** crystal clear reverbs in your studio? How about their lush chorus or their superb delay effects? Sure you do, but you thought that TC quality was out of your price range. Introducing the **M•ONE** and **D•TWO** effects processors. They've been designed to give you that awesome TC sound, but at a price that's truly "user friendly." — **SEE PAGE 6**



NEW TASCAM CD BURNERS

For as long as they've been around you've wanted to be able to burn your own CDs. You want to cruise the highway with your own music pumping out of your car's excellent sound system or share your music with friends. Now, thanks to **TASCAM**, you can afford to do just that, as well as duplicate any CD you own! — **SEE PAGE 7**

PLUS: Monster Cable, ZOOM's hot GFX-8, the new Neumann KMS 105 mic and much more!

Roland VM-7000 SERIES MIXING SYSTEM

— Continued from Front Page

more narrow, 13 motorized 60mm flying fader equipped VM-C7100 (\$2995), squeezes into a rack by using the optional RO-C7100 rack mount kit. The larger VM-C7200 can be made quite handsome for desktop use with the help from the VM-SP72 optional side panel kit.

Both consoles have a large, backlit LCD window displaying all the functionality and flexibility that the V-Mixing system offers, and I found the layout of control panel to be quick and very friendly to navigate. A meter bridge option, the MB-24, connects either to the V-Consoles or the V-Processors using MIDI.



All of the actual mixing takes place within the V-Processors: The 48-Channel VM-7200 (above) or the 24-Channel VM-7100, where you'll find all the ins and outs you need

Keep in mind that the V-Console's main function is to communicate control data with the V-Processors, the VM-7200 (\$2795) and/or the VM-7100 (\$1995). You might be interested to note that it is within these processors that the actual mixing takes place — the VM-C7200 and VM-C7100 are the controllers for these powerful processors. In any event, this is where you'll find all the ins and outs and there's no shortage of ways to tie into the system with either unit. The beauty of this scheme is that only two standard AES/EBU digital cables are needed between the processor and the console. No more heavy, noisy and expensive analog snakes. The only audio that runs through the V-consoles are two channels for monitoring a stereo mix through two headphone jacks, a pair of RCA analog outs, and two coaxial digital outputs. Two 1/4 TRS inputs (on channels 23 and 24) can also be found on the console, as well as a Talkback/Slate mic XLR input with phantom power that uses channel 24 when activated.



Compact, yes. Affordable, of course! But with all the features you want and need: The VM-C7100

Buried deep within the heart of each V-Processor are two onboard stereo multi-effects processors and one stereo master effects processor. The multi-effects are the sonic equivalent of the highly acclaimed Effects Expansion Board for the best-selling Roland VS-1680 Workstation, incorporating such unrivaled effects as high-end reverbs, delays, dynamics processing, COSM Guitar Amp modeling and sensational Mic Simulations for some totally awesome direct recording capabilities. Up to three optional VSF-2 Effects Expansion Boards can be user installed into the VM-7100/7200, yielding up to 16 stereo or 32 mono channels of awesome effects.

As if that weren't enough, one of the standout VM-7000 Series effects is undoubtedly the new COSM-based Speaker Modeling. By carefully analyzing the response characteristics of a variety of high end reference monitors, Roland's engineers have graced the VM-7000

"I must say that I have been more than pleased with my experiences with your company. (My Sales Engineer) is an excellent asset to Sweetwater and it's evident in his dedication to customer service and satisfaction. To be honest, I've never found a company as dedicated to its customers as Sweetwater. Although I don't have a multi-million dollar account with your company, I must praise you on providing the 'little guy' the feeling of receiving the multi-million dollar support and customer service." — Fred Eyerman

Series with the ability to convincingly "model" the sounds of these speakers when used in conjunction with the new Roland DS-90 Powered Monitors. This eliminates the hassle (and ridiculous expense) of switching between multiple pairs of monitors during mixdown to make sure that all your elements work perfectly — no booming bass, no lost vocals, etc.

Of course, no matter how versatile a mixer may be, it's the sound that really matters most. Roland has always had a reputation for building fine-sounding equipment, and they may very well have outdone themselves in that department with the V-Mixing System. It's clean, quiet and dead-on accurate. In fact, the audio is so good that it's like you're hearing the original signal — no more, no less. No subtle coloration or unusual peaks and dips across the full frequency range. This is the kind of superb sound that used to cost more than your average family car!

Now back to all of those ins and outs housed in the processors. The VM-7200 has 20 mic/line inputs with phantom power, 12 of them have inserts, while the VM-7100 sports 10 mic/line inputs, 6 of them with inserts. Each processor has 8 assignable outs, 1/4" phone balanced/unbalanced that output the same sounds as those output from MULTI OUT 17-24. The entire system employs superb 24-bit A/D and D/A converters and can be expanded with the addition of a VM24-E (\$395 list) which is actually three of Roland's Digital multi in/out R-Bus (RMDB2) connectors.

At this point, let's put together a 700 Series V-Mixing system in four simple steps. Step One: Choose the control surface or console you wish to use, either the VM-C7200 Console with 25 motorized faders or the VM-7100 Console with 13 motorized faders. You can add an MB-24 meter bridge to either, and the C7100 can be outfitted with a rack mount kit.

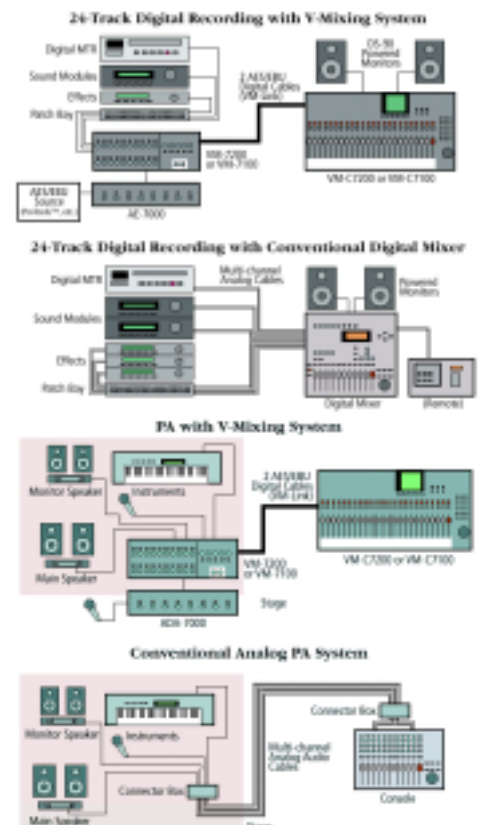
Step Two: How many XLR or analog inputs do you need. The VM-7100 offers 10 inputs, while the VM-7200 offers 20. If you wish to stack multiple processors, you can add a VM-7100 to a VM-7200 for 30 inputs, or combine two 7200s for 40 inputs. In either case, you'll need the VM-24C Cascade kit. If you want to rackmount the processors, you'll need one RO-7000 Rack Adapter for each processor. Simple so far, right?

Step Three: Here you need to decide how many additional stereo effects you want, keeping in mind that each processor can hold up to three VSF-2 boards. These effects would be over and above what ships with each unit.

Step Four: How do you want your V-Mixing System to interface with other devices? You can start with a VM-24E I/O Expansion Board for each processor, each of which provides three R-BUS connections. From there, each R-BUS port can be connected to any of the R-BUS options in any combination. These include the hot new VSR-880 Digital Multitrack (now rackmount your VS Recorder!), the DIF-AT Interface for Alesis ADATs and TASCAM multitracks, the ADA-7000 8-channel bi-directional A/D and D/A converter and the AE-7000 with 8 channels of AES/EBU conversion.

Confused? Don't be. It may seem a bit overwhelming at first glance, but the entire system is so versatile and so totally user-configurable that it sometimes seems a bit much in black and white. Aha! Here's where your Sweetwater Sales Engineer comes in to explain everything! See how nicely it all ties together now? What's more, he or she will be happy to give you your special Sweetwater pricing on the V-Mixing System that's perfect for your applications. So give us a call now!

— Robert Dorion





digidesign | Focusrite

Classic Sounds from a Name You Trust

If you know high end audio gear, you surely know the name **Focusrite**. And if you're like me, you've probably lusted after more than one of their top quality products. Well, things haven't changed. Focusrite products are still made with the same attention to detail, incredible sound quality and totally impressive specs. The only difference is that **Digidesign** has now become the exclusive North American distributor of all the modular signal processing hardware currently designed and manufactured by Focusrite. All of which means that getting your hands on a Focusrite product won't involve waits of up to 60 or 90 days while the item travels via some obscure route to you from the United Kingdom. Need a Focusrite processor? It will

mount analog signal processors. Platinum Range products include vocal and instrument channel strips, mic pre-amps, and dual/stereo multi-band compressors and EQ.

The **Platinum 1 VoiceMaster** (\$795 list) is a complete vocal processor for recording and live use. Features include a Class A mic preamp, and a host of effective and creative tools including a noise-reducing expander, vocal saturator, opto-compressor, voice-optimized EQ and an opto de-esser.

The **Platinum 2 ToneFactory** (also \$795 list) is a full-featured instrument processor for recording and live use. Featuring a Class A mic / line / instrument preamp, versatile filters, opto-compressor, tone controller, parametric EQ and noise

warmth. Used in many of the world's leading music and post-production studios, the Red Range represents what must be considered the absolute standard in analog processing. Functionally elegant, with easy to use front panel controls, each Red Range product features a distinctive, brushed red aluminum body whose appearance conveys quality and durability (translation: It'll look way cool in your rack — not that we think that will influence your buying decision, but it's a nice plus!).

The **Red 1** (\$3745 list) is a quad mic preamp featuring four perfectly matched channels of the ultimate mic pre for multi-channel recording. Using the same circuit topology as the ISA215 pre-amps (see information later in this feature), the Red 1 and 8 (see below) offer, respectively, four and two channels of ultra-high quality Focusrite mic amplification.

The **Red 8** (\$2495 list) features two perfectly matched channels of the ultimate mic pre-amp for stereo recording (essentially, half of a Red 1). Designed for high-bit recordings using high quality ribbon, valve and condenser mics, the Red 1 and Red 8 offer the best route to a cost-effective and ultra-transparent input stage.

The **Red 2 Dual Equalizer** (\$3995 list) features Focusrite's much sought-after combination of warmth and smoothness. The Red 2 offers two full channels of classic Focusrite EQ with line-level inputs and outputs, providing a simple and effective EQ for almost any mixing or mastering system.

The **Red 3** (\$3,995 list) is a Class A VCA-based dual mono / stereo compressor / limiter. The Red 3 employs an unusual and original single-VCA design to achieve high quality and truly independent compression and limiting, without the compromise and over-processing typically involved in traditional designs.



The Focusrite ISA430 Producer Pack: Combining the best of analog and digital technologies

be in stock and ready to ship right to your door!

This includes the **Platinum Line** of signal processors (ideal for **Digi 001** systems), the classic **Red Range** (legendary for its transparency and warmth), and the **ISA Series** (including the exciting new ISA 430 Producer Pack and the ISA 110 Vintage Reissue Mic Pre and EQ). Digidesign will also distribute the **Blue Range** processors, which are designed for critical mastering applications (such as the Blue 315 mastering EQ).

Focusrite and Digidesign have actually been partners since 1996, when the two teamed up to release the **d2 Equalizer** TDM Plug-In for Pro Tools, followed by the **d3 dynamics** Plug-In. The agreement to make Digidesign the sole North American distributor of Focusrite gear is a natural step, since Focusrite processors make ideal front ends for Pro Tools systems. What's more, most of the top Digidesign dealers in the North America area are already Focusrite dealers.

While this article will attempt to give you an overview of the entire Focusrite line of products, keep in mind that there's an awful lot we won't have room to tell you about, so naturally we recommend that you discuss your specific needs with your Sweetwater Sales Engineer to assure you get all the information you need to make an informed decision on which product (or products) are right for you.

The Focusrite Platinum Range. The Platinum line of signal processing tools has been designed for the serious recording musician and project studio owner. The line is an ideal complement to the Digi 001 and is also a perfect choice for live sound. All Platinum processors are one or two unit, 19" rack

gate, the **ToneFactory** is the perfect processor for guitars, basses, synths and samplers.

Need a dynamics processor that brings you a rack full of high performance Focusrite Class A compression, limiting and gating in one unit? The **Platinum 3 ComPounder** (\$895 list) includes a dual mono or stereo compressor / limiter / gate with Bass Expander. The Platinum 3 is an essential tool for dance music engineers, live engineers and project studios. Hmm, that's just about everyone . . .

This **Platinum 4 MixMaster** (\$1395 list) is a stereo analog mixdown processor that comes with a wide range of



The Red 1 is a quad microphone preamp featuring four perfectly matched channels

mastering tools in a cost-effective two-space unit. The **MixMaster** comes packed with balanced, stereo line inputs, direct inputs, stereo expander, multi-band compressor, 3-band parametric EQ, stereo image controller and a limiter. Optionally, the **MixMaster** can be fitted with a 24-bit, 96kHz A/D card, just in case you want flawlessly detailed audio.

The classic Focusrite **Red Range** is the company's high-end line of analog processors, which are legendary for their unique combination of transparency and buttery-smooth

A powerful and versatile direct recording processor, the **Red 7** (\$2995 list) includes a compressor, de-esser and exciter. It features a single Red Range mic pre, plus a mono channel of the dynamics from the Red 3, with the addition of a de-esser and exciter. The combination of mic pre-amp and dynamics section, makes the Red 7 a cost-effective single-channel processor.

The Focusrite **ISA Range** products (ISA actually stands

— Continued on Page 13

THE LATEST RED HOT PLUG-INS

If you've been a Sweetwater customer, a Sweet Notes reader or a Pro Tools owner, you know that Sweetwater sells more Digidesign systems (and other hard disk recording systems) than pretty much anyone on the planet. There's a good reason for that: We think the Digidesign products sound fantastic and can be configured the way you want them to be. But as powerful as these systems are, they become even more impressive when you add those magical audio tools: Plug-ins!

that will produce the ideal sound you're looking for. Or use it in live performance to get the sound of mics you'd never consider bringing on stage. You can even use it during mixdown to effectively change the mic on an already recorded track. And with the ability to download new sonic models from the Antares Web site ("www.antarestech.com"), the Microphone Modeler will always be up-to-date and sounding fabulous.

For those who prefer a self-contained solution, there will eventually be the AMM-1 stand-alone rackmount processor (more on that in future issues). And best of all, whichever version you choose, you can expect to pay substantially less than even a single modestly priced exotic mic. You can now download a fully functional 10-day trial version of Mic Modeler (TDM or MOTU MAS) from the company's Web site and check it out for yourself. One interesting side note: A number of the mic models were created from vintage mics

in Sweetwater President Chuck Surack's personal collection, as well as from some from the Sweetwater vault.

Here's a partial list of models currently available: AKG (C12A, C414, C414B/ULS Limited Edition Gold, C414B/ULS Modified by Audio Upgrades, 460B/CK61-ULS, D112, C1000S, D790, C3000, C4000B), Audio-Technica (ATM-11, ATM-31, AT853Rx, AT3525, AT4047/SV, AT4033a/SM, AT4050, AT4055, AT4060), B & K (4007), Beyerdynamic (M-500 Limited Edition Classic, MC-834, CK-703), Earthworks (Z30x, TC30K), ElectroVoice (N/D357, PL20), Neumann (U47, U87, U87 70th Anniversary Gold Edition, M149, TLM193, KM184, TLM103), RCA (BK5A), Sennheiser (MD421, MD441, E609, E835S), Shure (Beta 52, Beta 57A, Beta 87A, Beta 98D/S, SM7A, SM57, SM58, SM81, SM98A, KSM32, VP88), Sony (C800G, C48, C37P). That's just a small sampling, and Antares is adding more models almost daily, or so it seems!

If you use a computer to record, you must own this plug-in. It's really that simple!

Surround sound mixing is now a day-to-day reality at many audio and post-production facilities. The new **SmartPan Pro** TDM Plug-In from the folks at **Kind of Loud** (\$995 list) brings true discrete 5.1 surround sound mixing to the Pro Tools environment. It allows Pro Tools to generate six-channel surround mixes by allocating three stereo channels to serve as a virtual output bus. SmartPan Pro is the first TDM plug-in to support panning and previewing of a full six-channel surround sound mix — completely within the Pro Tools environment.

If you're working in Pro Tools and you need to create

mixes for Dolby Digital, DTS, DVD Audio or other surround formats, SmartPan Pro is a must-have. SmartPan's new panning paradigm is the only Pro Tools solution that accurately conveys the psychoacoustics of surround sound panning. To accomplish this, SmartPan Pro offers two options for positioning sound elements. For those accustomed to a traditional joystick controller for multi-channel sound, a visual representation of joystick sound placement is provided. A mouse-controlled puck indicates the position of audio in the soundfield. As the puck is moved, the changing soundfield parameters and channel gains are displayed. In addition, the unique SmartKnob allows you to not only pan sound among speakers, but also lets you intuitively and accurately adjust the width, or spatial extent, of the sound. Either SmartPan panning interface provides precise control over the direction, spatial extent and placement of your audio.

Professional surround sound mixers will appreciate SmartPan Pro's divergence control, which adjusts the L/C/R panning law. Sub-woofer/LFE management features are also standard, including adjustable filtering and independent level control. For complex effects, multiple Pro Tools tracks may be linked and panned as a group. All SmartPan Pro functions may be automated.

So whether you're creating 5.1 mixes for video, DVD mastering, or games, you'll find SmartPan Pro indispensable. And, once you've heard surround sound from your Pro Tools system, you'll be hooked. It's serious sound... and serious fun.

Kind of Loud also offers the **RealVerb** Stereo Plug-In for Digidesign's TDM (\$695 list) and RTAS (295 list) platforms and MOTU MAS (\$295 list). RealVerb uses complex spatial and spectral reverberation technology to ac-



A few years ago, there were barely a handful of quality plug-ins available, but within a short time, the market was flooded with them. And oddly enough, just about every one of them did exactly what it was supposed to do and, yes, they sounded great. It's been a few issues since we put together an article on the latest plug-ins, and there are some really terrific new ones just becoming available, so we thought this would be a good time to do another feature.

First up is a plug-in that needs to be in everyone's collection, and it's one of the most eagerly anticipated plug-ins of all time. It's the **Antares Microphone Modeler** (\$599 TDM, \$399 MAS and VST, \$299 DirectX, all list). If you've spent any time at all recently flipping through the pages of pro audio magazines, you've noticed the intense focus on microphones. From the proliferation of exotic new mics to the almost cult-like following of certain historical classics, never has the choice been greater — or some of the prices higher for those in-demand vintage mics. A perfect time, then, for Antares to introduce their new Microphone Modeler.

Using patented Spectral Shaping Tool technology, they've created precise digital models of a wide variety of microphones, from historical models to modern exotics, as well as a selection of industry-standard workhorses. Simply tell the Microphone Modeler what microphone you are actually using and what microphone you'd like it to sound like. It's as simple as that. How much cutting edge technology is this simple to use?

Not only do the models reproduce all of the subtle sonic characteristics that make each microphone unique, but they also give you control of each mic's specific options. Does the mic have a low cut filter? If so, it's in the model. Wind screen on or off? Close or far placement? Each option results in the same sonic effect that it would exhibit with the actual mic. And for that final touch of perfection, you can even add some tasty tube saturation.

With the Microphone Modeler, you can afford to record every track through a model of the specific mic



curately model an acoustic space. What that gets you is a great sounding reverb with the ability to customize a virtual room and pan within the stereo spectrum.

RealVerb provides two graphic menus each of preset Room Shapes and Materials, allowing you to blend the shapes and material composition and adjust the room size according to the demands of your mix. Controls are provided to adjust the thickness of the materials, even in-

— Continued on Page 11



Attention music industry e-businesses.

Are you interested in broadening your Web site's total exposure? Are you looking for inexpensive ways to advertise and get the word out about new products and services? Of course you are. So, how about trading banners with us?

For the low, low price of . . . well, nothing, you can have your banner on Sweetwater's links page ("<http://www.sweetwater.com/insidesws/links.tpl>"). All we ask in return is that you place our banner on your site. What could be cooler than free advertising?

If you're interested, send a message directly to our Webmaster, Michael Oland ("michael_oland@sweetwater.com"), with your site's address and a brief description. We'll get back in touch with you and provide the specific information (and a banner, too).

If a banner is too much, too soon, we're also interested in trading links. Once again, contact Michael for additional information.

You ought to be in pictures. This is an opportunity that you can't pass up if you've ever wanted to get your photo in a national magazine or on the Web. Here's the deal: If you bought all or most of your gear through Sweetwater, we want you to send in photos and tell us about your personal studio — regardless of whether it's a home project studio or a big, professional installation. Play live on stage? We want to know about that, too.

Why are we asking for this? Well, we are going to begin working on a major campaign soon that will specifically focus on our customers (that's you!). Ads and articles (sort of "infomercials") will be published right here in *Sweet Notes*, as well as on our Web site. If we get a particularly compelling story that's accompanied by some high quality photographs, we will probably use it in one of our ad campaigns which will appear in the major industry publications like *Keyboard*, *Mix*, *EM* and so forth.

We will be sending a free, good-looking Sweetwater t-shirt to each entry (so please be sure to specify whether you want an M, L, or XL size). But

think of the exposure you're likely to get if your picture runs in *Sweet Notes* (which is sent to almost 200,000 musicians, engineers and manufacturers around the world) or on the pages of your favorite industry magazine ("Hey mom, I finally made it into *Keyboard!*").

I sure hope we get lots of responses to this. I love the idea of giving our customers some recognition. And who know, there might be a "movie of the week" to follow.

Speaking of customers . . . You may have noticed that we're putting quotes up on our Web site from e-mail, faxes and letters we receive every day from our customers. We've even started adding some to this issue of *Sweet Notes*.

We started getting positive feedback from customers almost from Day One, but up until recently, they just went into a big file folder or ended up being tucked away on one of several hard drives in my office. A few got posted on the company bulletin board. Then, not

long ago, a number of these comments got sent on to several manufacturers who told us we should put them up so everyone could read them.

While we aren't in the business of patting ourselves on the back, we could see their point. If a customer takes the

time to write, their comments should be shared with all our other thousands of customers. So as you look through this issue — and browse our Web site — you might see excerpts from a letter or e-mail you've written.

We've always asked that you tell us when we do a good job, as well as suggesting ways we can better serve you. We also read every single letter, fax or e-mail that comes into the building, and we think you'll enjoy hearing, in the customer's own words, about their personal experience with the "Sweetwater Difference."

New Gear Directory.

It's here and it's better than ever! Copies are being mailed even as you read this, so check your mailbox. If you know someone who might want one (like the guy who keeps "borrowing" your copy), just give us a call and we'll send one their way.



Q: Why can Adaptec's Toast software see my CDR Burner, but their Jam program can't?

A: Jam sometimes requires a "Patcher" that will allow it to recognize a CDR. On the Jam 2.5 Install CD-ROM, there is a folder that is labeled "Plextor and Yamaha Patches." Here you will find some patches that might drive your unit. Just drag the contents of this folder into the Jam Folder that was installed on your Mac hard drive. The next time you launch Jam, your CDR should be found by the application. If not, you can find the most recent patches at "www.adaptec.com" for free downloading.

Q: What kind of SCSI card can I use with Pro Tools 5.0 and my new Mac G4? I'm only going to use it with my CD burner, not with external hard drives, so I won't be using it with Pro Tools.

A: For all G4s (both PCI and AGP Graphics), there is only one SCSI / Accelerator card approved: ATTO Express PCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA), with the following requirements: Firmware v1.4.4 f1, ExpressPro-Tools v2.x.x. Sync Rate must be set to 20 (10), ATTO ExpressPro-Tools System Init must be removed from the Extensions folder. ATTO files mentioned above are available at "<http://www.attotech.com/software/>".

We have found that when a different SCSI card is installed in G4/PT system — and even when Pro Tools is not "using" that card (or a hard drive connected to it), that a number of problems arise. Most commonly, users get DAE errors -6042 and -6045 and playback or recording is interrupted. In some cases, this happens every time you try to play. Sometimes this only happens while bouncing to disk. Removing or replacing the problem SCSI card with the appropriate card will fix this problem.

Moral of the story? Don't put any SCSI card into a G4 with ProTools *except* for the specified ATTO card.

Q: I just got a notice that there is a major upgrade for my software. This is the second time it's been upgraded. I always seem to lose a few days installing and troubleshooting whenever I get one of these upgrades. Isn't there an easier way?

A: In general, the largest amount of frustration that we see customers face in tech support is software upgrades. These often seem to be at the root of many problems we face: Either one is desperately needed or someone released one too soon.

A rule of thumb: When using a computer or other piece of equipment in your studio, (regardless of the platform — Mac / PC — or even stand-alone software like ADA's and DA88s), we make sure that all of the systems are running the absolute latest (yet most stable and compatible) revision they can. On a computer, we may give a new OS, like say a Windows or Mac OS, at least a few months before we upgrade because the first revision (i.e. OS 8.0 or Windows 98a) always has a few bugs that have to be removed. So

— Continued on page 14



Got that star quality? Want to see yourself in a national magazine? We'll tell you how. (Above) Dawn Hopkins in her Sweetwater-equipped studio



MOVING? MOVED? Call, fax or e-mail us your new address and don't miss an issue of Sweet Notes!

t.c. electronic **POWERFUL AND AFFORDABLE STUDIO EFFECTS**

M•ONE and D•TWO

By Daniel Fisher

In this day and age it's difficult — if not darned impossible — to find a poor-quality rackmount effects processor. And unless it comes from a company you've never hear of, it's almost equally difficult to find a bad sounding stomp box or a keyboard workstation with embarrassing onboard effects.

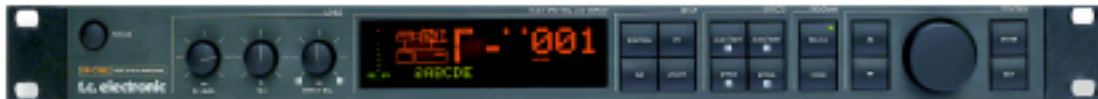
gines are now mixed internally, and can be returned to a single stereo effects return on your mixing console, giving you two full-blown stereo effects simultaneously.

TC's unique Compressor and Limiter algorithms will bring surprising new life to your mixes, and you can add incredible Delays, a super wide Chorus or enhance the details of your

but actual rhythm patterns can be tapped directly - or quantized according to a specific tempo and subdivision. The delays and rhythm patterns can be up to 10 seconds each. Plus, you can control the exact number of repeats with the Absolute Repeat Control! It's also possible to feed the last delay tap back into the delay line, generating a complete rhythm sequence which is repeated when you have the Feedback active. This unique feature allows you to exactly match your effects to your music.

A great sounding Chorus is included in the D•TWO, as well. Double clicking on the CHORUS key provides you with instant access to all chorus parameters. A unique Spatial Delay effect adds even more width to the sound of your material. This extra width is generated either by offsetting the left channel up to 200ms or by reversing the phase on any channel or both. The Reverse Delay effect processes the signal, and then adds a backward delay for some amazingly otherworldly effects.

The Dynamic Delay effect reduces the delay level as much



So with all these reasonably good effects processors lying around, why on Earth would anyone want to buy an additional dedicated processor? I've got two answers: **TC Electronic's M•ONE** Dual Effects Processor and **D•TWO** Multitap Rhythm Delay (each just \$699 list).

Simply put, there are times when average quality effects will do the job. But there are also times when a voice or instrument is the absolute center of attention. Imagine the Dire Straits' "Brothers In Arms" CD anytime Mark Knopfler's guitar is playing introspectively over silence or an atmospheric pad. During these moments, nothing but the best choruses, flangers, phasers, delays, reverbs and dynamic effects will do the job.

So when you think of the world's most beautiful choruses and other modulation effects, well you just automatically think TC Electronic. But the best TC effects also come with very "professional" price tags that can often exceed several thousand dollars. And their incredibly flexible architecture may prove to be just a little bit too much of a good thing for those who want to dial in an effect quickly. (Not me, of course. I absolutely love my TC FireworX and G-Force processors! But hey, I play with parameters all day long for a living.)

Now, with the advent of the M•ONE Dual Effects Processor and D•TWO Multitap Rhythm Delay, anyone can have access to TC's world-renowned effects processing without having to take out a second mortgage or going back to school for their Engineering degree.

The M•ONE is a Dual Engine Multi-effects processor, with 1/4" balanced I/Os, S/PDIF Digital I/O (full 24-bit I might add), 44.1-48kHz internal processing, various routing options and more than 20 high quality algorithms. This unit will likely revolutionize the way you work with your effects! Use the M•ONE's Dual Engine to run two of the best sounding, pro quality effects simultaneously without compromising either's sound. The Easy Parameter Level gives you the flexibility to create cool effects and control of all important parameters right at your fingertips. You also get a wide range of lush, lifelike reverbs from classic Halls and Rooms to new and grainy snare reverbs such as Live and Plate. Use the M•ONE's many quality reverbs to create complex sound reflections in various environments. Now you can add different levels of depth to your source material, and add it easily.

If you use the M•ONE Engines in the Dual Send / Return setup, you'll have two independent effects processors. Connect one Auxiliary to the Left Input of the M•ONE, and a second to the Right input and the stereo output of the two En-

source material with the Parametric Equalizers. And the M•ONE has even more algorithms, such as Flanger, Pitch, Gate, Expander, De-Esser, Tremolo and Phaser, all exhibiting that much coveted TC Electronic sound quality.

The M•ONE comes right from the factory loaded with 100 high-grade presets, covering almost any imaginable application. On top of that, the M•ONE can store up to 100 of your own creations in the User bank. When satisfied with your preset, you just hit the STORE key to save it. It's so simple,



that you almost forget that you are actually making presets!

In short, the M•ONE gives you access to all the tools you need, whenever you want to create top-quality effects! And all effect parameters can be accessed via standard MIDI controllers, which allows realtime control and automation. You can also use MIDI to dump and save the entire User bank to a MIDI sequencer. Additionally, the Tap function of the M•ONE can be locked to the incoming MIDI Clock. Sweet!

With the introduction of the D•TWO, TC Electronic has once again succeeded in developing cutting-edge technology and expanding the way you work with your effects processors! Your creativity will be the only limit when it comes to exploring the endless number of delay possibilities within the D•TWO. TC's heritage of classic delays has led to the development of a truly musical Rhythm Tap feature: Not only tempo,

as you like while the signal is fed to the Input, or enhances the delay level when the signal is at a lower level. When using this function you can get a delay effect which seems to be present only where and when it does not disturb or interfere with the source material — e.g. in the pauses between phrases from a vocalist, a guitar player or similar.

Ping-Pong functions let your material jump from left to right, left-center-right or let the D•TWO dynamically fit the panning to your chosen number of taps. If you combine this panning style of delay with the unique Tap function you get a delay effect which takes your production to dimensions like you have never experienced before.

If you're ready to get serious about your effects, it's time to call your Sweetwater Sales Engineer and find out how affordable it can be to own some of the best effects in the industry.

ORAM Sonicomp

If you've always wanted the sonic quality that only an Oram compressor offers, don't wait another minute to grab this special deal! The **SONICOMP 1** (\$1995 list) is a single rackspace module with LED meters, while the **SONICOMP 2** (\$2590 list) is a two rackspace module with true VU meters and the traditional Oram high-end appointments over a full 6mm aluminium sculptured front panel in that distinctive Oram blue. Each Sonicomp represents the best possible combination of the old and the new: Selectable vintage optical attenuation and state of the art (solid state) semiconductor attenuators.

SONICOMP 1 now only \$999 **SONICOMP 2** now just \$1295

"Fast, friendly, informed, knowledgeable service — thanks! I appreciate getting the equipment, etc. when I need it — not one week later!"

— J. L. Adams

NEED IT TOMORROW? We can ship FedEx for next day delivery! (800) 222-4700

Remember when having an actual CD of your music was like finding the Holy Grail? A few short years ago, it cost you some significantly big bucks to burn "one-offs" from your DAT tape, and even more if you had your recording mastered properly before burning a disc (or a dozen or more).

It's amazing how times have changed! Today, for about the same price as having a dozen "one-offs" burned a few years back, you can now act as your own CD factory thanks to companies like TASCAM.

The **CD-RW700** (\$699 list) is TASCAM's budget priced CD Recorder, but it's no stripped down model — features came first when this product was designed! Like most CD recorders in this price range, the CD-RW700 offers unbalanced I/O, S/PDIF digital I/O in coax and optical formats. However, this product stands above the crowd with a built-in RAM buffer, 24-bit A/D and D/A converters for premium sound quality, digital gain adjustment and digital processing of fade in and fade outs from 3 to 30 seconds. It's also got a Monitor function that allows it to be used as an A/D converter or a sample rate converter, without the need to place a recordable disk in the tray or enter record ready mode. Of course, it's also the only one in its class that will rackmount with the rest of your gear.

Other features include adjustable gain on digital I/O, a built-in timer for preset play/record, sync start (all or one track), auto or manual track increment and there's even a programmable wireless remote included. The CD-RW700's playback has a sampling frequency of 44.1kHz, a frequency response of 20-20kHz \pm 0.5dB and a signal-to-noise ratio of better than 96dB. The total harmonic distortion is less than 0.004 percent (at 1kHz, full scale) with channel separation better than 90dB (at 1kHz, full scale). Simply put, the 14-pound CD-RW700 is probably the most cost-effective, rackmountable professional CD recorder on the market today capable of replaying and recording both CDR-DA and CDRW-DA discs.

Of course, if you're in the CD duplication business or if you are looking to make multiple copies of an existing CD, you might want to consider the **TASCAM CD-D4000MKII** Professional CD Duplicator (\$1299 list). The latest member of TASCAM's CD duplication range provides a quick and simple means of copying original audio material or data in CD format at more than real-time speeds, using low-cost CDR media.

The CD-D4000-MKII is especially useful for duplicating material produced using the TASCAM CD Recorders, but it can also be used to duplicate any CD-ROM material to which you own copyright or hold appropriate permission. The unit is housed in a 2U, 19-inch rackmount enclosure and encompasses a 1 x 32x CD-ROM drive and 1 x 8x24 CDR drive. It can read CDR or CDRW masters. Duplication of any CDR or CD-ROM can be performed at 1x, 2x, 4x, 6x or 8x speed. During CD-ROM duplication, discs can be compared after duplication. The Test Write mode checks the integrity of the duplication process at the selected speed before execution. CD audio discs can also be replayed on the CD-D4000MKII. There is also a mini-jack headphone socket with volume control on each drive.

Just two switches on the front panel control a simple menu system that navigates the end-user through copying, checking and comparing discs, playback of audio, and selection of duplication speed. With all the features the discerning professional could want, coupled with a very attractive price point, we expect the CD-D4000MKII to have a great impact in the professional and home CD duplication market. The CD-D4000 is

TASCAM

CD CREATION MADE SIMPLE!



a blessing for anyone needing to make limited duplication runs of CDs. Its simple interface and compact rackmount design make it at home in any studio and with all levels of users.

Since you can back up data discs as well as audio discs, this can be used to run off more than just your demo CDs. Financial records, press kits, and any other distribution materials can be duplicated as well. This becomes more than just a great music tool — it also becomes an essen-

tial tool for today's office, where many records must be archived!

As if these two products weren't enough to make people sit up and take notice, TASCAM also debuted the **CD-R Pro** (\$749 list) and **CD-R Deluxe** (\$630 list) CD burner systems at the Winter NAMM Convention this past February. The systems feature high performance CDR drives from TASCAM's parent company, TEAC, combined with powerful software packages. The CD-R Pro and CD-R Deluxe are the first cross-platform bundles available, featuring complete software suites for both Mac and Windows based machines. Software for recording, editing, CD burning and Internet audio and an Adaptec 2903B SCSI card for both platforms is also included in each bundle.

The CD is the new standard of exchange for both audio and archiving, with CD-ROM drives found on nearly every computer made since 1994. TASCAM has put together the CD-R Pro and CD-R Deluxe burner bundles to give musicians extremely powerful tools to use the CDR format as a creative medium and will have a significant impact on the MI, DJ and Broadcast markets.

The TASCAM CD-R Pro bundle consists of the new TEAC 8x24 speed CD-R58S CD-R drive featuring superfast 150msec access time. The unit has a 4MB buffer and addresses Track at Once, Disc at Once, Multisession and Incremental formats. The drive is bundled with cabling and two blank TEAC CDR disks. Macintosh software includes: TC Works SparkLE for audio recording/editing, Adaptec Jam! for audio CD authoring/recording and Adaptec Toast for data CD authoring and recording. Windows software includes: SEK'D Red Roaster 24 for audio recording/editing and audio CD authoring, Adaptec EZ CD Creator for data CD authoring/recording and MyNet SonicBurn for burning MP3 files to Red Book Audio CD standards.

QuickTime 4 for advanced multimedia capability with MP3, Xing AudioCatalyst 2.1 for MP3 compression for Mac and Windows is enclosed.

The TASCAM CD-R Deluxe bundle consists of the new TEAC 6x24 speed CD-R56S6 CD-R burner featuring 150msec access time. This unit has a 2MB buffer and addresses Track at Once, Disc at Once, Multisession and Incremental formats. The Deluxe bundle offers the same related hardware and media as the Pro bundle and the same software package, less Xing AudioCatalyst 2.1 and Adaptec Jam! for the Mac. Also, Red Roaster Lite is substituted for Red Roaster 24. Both the Pro and Deluxe packages will support 24-bit, 96kHz audio with an additional third-party high audio card.

We've come a long, long way in the last few years. In fact, this writer is still paying for the CD burner he purchased just three years ago at what was then, seemingly, a very reasonable price. But today, every home and project studio can afford to have its own CD burning (and duplication) facilities. Thanks to companies like TASCAM, no musician will ever have to spend ridiculous amounts of money just to have his or her music on one of those shiny plastic discs. And that's pretty great in our book. — B.H.



You've heard about **Monster Cable**. You may even be using them in your own studio or on stage. If you're not, you need to know what the big deal is about these products and exactly why you should be a Monster Cable user.

Monster Cable Products, Inc. was started in 1979 by Noel Lee, who was at the time a laser-fusion design engineer at Lawrence-Livermore Laboratory in California, as well as an audiophile and drummer / musician. He found that wires of different constructions produced varying degrees of audio performance when hooked up to loudspeakers. From this very basic discovery, he crafted his own high performance cable. He named it Monster Cable, and founded an industry that has since exploded.

Prior to Monster Cable, most stereo systems were wired with ordinary "zip-cord," the same cable used for electrical household and lamp wire. The creation of Monster Cable started a new category of high performance audio cables that revolutionized the home and pro audio markets.

Noel chose the name "Monster" for two reasons: It sounded strong and powerful, and the size of the cable was truly "monstrous" compared to ordinary loudspeaker cable. The name, combined with the company's quality and unique clear jacket, immediately grabbed customers who became fanatical about the product. Now, the Monster Cable name is sometimes misused to mean any high performance cable, and the company is recognized as an industry leader worldwide.

Today, Monster offers more than 1000 products, which have become indispensable accessories for music lovers, audiophiles, recording studios, sound professionals, musicians, custom installers and home theater enthusiasts. To date, more than 2,000 different CDs have given Monster Cable credit right on the jacket of their recordings (and that number is growing daily) and hundreds of feature film sound tracks and Foley sound effects have been recorded with Monster Cable, which now has its headquarters in Brisbane, California.

you'll find that the majority of them (along with many of the nominees) were connected via Monster Cables.

Monster Cable's legendary microphone and musical instrument cables, found in many of the world's top recording studios, are used religiously by engineers, producers and musicians alike. These professionals recognize that the quality and sound of their cables play a crucial role in delivering the very best possible sound reproduction. And in the highly competitive world of music, Monster gives the artist and recording engineer that extra edge to turn an ordinary performance into something extraordinary.

Monster Cable is engineered for better sound. Yes, that's quite the claim, but the truth is that other cables can actually smother sound, increase distortion and flatten bass. Monster Cable's ProLink cables utilize unique patented technologies such as multi-gauge Bandwidth Balanced wire networks and Time Correct windings to transfer complex music signals between components with greater accuracy and proper phase alignment.

Monster's MicroFiber dielectric employs an intricate process of winding an air-core fiber around each individual conductor to reduce dielectric losses and electromagnetic distortions. MicroFiber increases dynamic range, extending high frequencies and reducing background noise. In addition, Monster's MultiTwist construction, ultra-dense shielding and conductive polymer dielectrics are used to eliminate hum, interference and handling noise. Wider frequency response and more natural reproduction of harmonics are just some of the improvements musicians discover with Monster Cable ProLink microphone and studio interconnect cables.

Designed with the musician in mind, Monster Cables is proud to introduce the Performer 500 Series of instrument cables

that are so popular with top professionals around the world, both in the studio and during the live performance. On a budget? Don't get bummed out: Monster Standard 100 instrument, mic and speaker cables deliver improved performance at an affordable price. In addition to their outstanding mic and instrument cables, the ProLink line features high performance snakes, patchbay cables and speaker cables, as well as line-level audio, video and digital interconnects for every possible hook-up.

"Knowledgeable sales people...It's nice dealing with someone who knows what they are talking about."

— Justin Kurtz

"Very impressed with the personal service." — Zoe McDougall

"Service is as advertised. It's fun to deal with a dealer who has the products and knows what's up."

— Richard Ford

specifically engineered for the style of music you play. Style-specific cable designs unlock the full potential of your instrument's tonality and feel, and add a signature-quality to your personal sound.

Whether you play rock, jazz, bass, or keyboards, Monster has a cable designed to enhance your sonic signature. For the ultimate in transparency and accurate audio reproduction, there is Monster's Studio Pro 1000 line, the mic and instrument cables



Whether you play rock, jazz, bass, or keyboards, Monster has a cable designed to enhance your sonic signature. For the ultimate in transparency and accurate audio reproduction, there is Monster's Studio Pro 1000 line, the mic and instrument cables

Monster recognizes the importance of a high integrity, long lasting connection. Their connectors are designed for maximum signal transfer and the ability to withstand the rigors of stage and studio environments. Monster's ProLink cables deliver sonic refinements to improve the quality of every note you play, every track you lay down, and every recording you monitor.

For more information and special pricing (it costs less to sound great than you think), call us at Sweetwater today!



For years, industry professionals have raved about the substantial improvements Monster products make in their various audio applications. Several of these talented individuals have become Monster product endorsers or, as the company likes to call them, Famous Monsters. Their Famous Monsters program is an exclusive club where high-profile talents join forces with the audio experts at Monster in the ongoing process of mastering the science of sound.

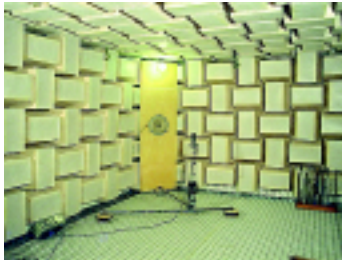
Among the most famous of the Famous Monsters are Paul Simon, Bruce Hornsby, Sarah McLachlan, Red Hot Chili Peppers, Aerosmith, Tom Petty and the Heartbreakers, Korn, The Goo-Goo Dolls, Nine Inch Nails and George Benson, just to name a few. Fact is, if you look at the winners at this year's Grammys,

SWEETWATER VISITS NEUMANN



Back in November of 1999, Chuck Surack, President of Sweetwater, happened to find himself in Europe on business. Being in Germany, what could possibly make more sense than taking this opportunity to visit the worldwide headquarters of **Neumann Microphone**? According to Chuck: "It's not like I find myself in Europe on a regular basis. Of course, we sell a lot of fine Neumann mics and since I had been invited on several occasions to spend some time at their facility, I thought this was perfect timing."

And so, on Wednesday, November 3, Chuck stepped through the doors of the Neumann Marketing, Sales and Service headquarters in Berlin, Germany. After introductions were made, Chuck was taken on a tour throughout the entire facility and given the opportunity to actually see the process of mic development and prototyping. Neumann's sophisticated circuit design and development, capsule development and testing, and circuit prototyping were demonstrated on state of the art computer driven tools. The machine shop was also visited, where work was being done on a "secret" mic which was released at the AES Show (see page 10 for news of that product).



The service department was visited, where Neumann mics dating all the way back to the 1940s can be fully serviced. "New old stocks" of parts were seen here, including capsules, tubes, body shells and individual parts. The full anechoic chamber was demonstrated in terms of mic testing. During the visit to the headquarters, a lot of extremely rare and valuable older Neumann mics were glimpsed.



On Thursday, the Neumann people took Chuck on an ICE high-speed train ride through the German countryside (and past the city-sized Volkswagen factory in Wolfsburg) from Berlin to Hannover to visit the actual production facilities for Neumann microphones in a small town called Wedemark. There, in a separate wing of the Sennheiser factory, the Neumann mics are manufactured.



In stark contrast to the highly automated Sennheiser Evolution mic production, the Neumann mics were seen to be hand crafted by a small team of specialists. CNC machines for capsule backplate manufacturing, a quasi-clean room for diaphragm sputtering and tensioning and a mini-anechoic testing station were all visited.



Friday was spent taking a tour of the fascinating city of Berlin, a place that simply exudes a sense of history. Chuck's visit there was only a few days before the 10th anniversary of the coming down of the Berlin Wall, and signs of the upcoming celebration were evident throughout the city.



Chuck, a man who has just about seen it all, was impressed. "When you talk about building a product the old fashioned way, by hand, with a sense of pride in the final product, nobody does it any better than Neumann." The highlight of the tour for Chuck? "That's simple," he answers. "For a microphone lover like me, it was seeing their display of vintage mics, some of which are truly one-of-a-kind."

Thankfully for us, photos were taken during the tour. Picture 1 (at top) shows the company's anechoic chamber. Picture 2 is a display of vintage Neumann mics at the Berlin headquarters. Pictures 3 - 5 are photos of Neumann mics being manufactured and assembled in the production facility in Wedemark.

anechoic chamber. Picture 2 is a display of vintage Neumann mics at the Berlin headquarters. Pictures 3 - 5 are photos of Neumann mics being manufactured and assembled in the production facility in Wedemark.



For this issue of Soundware Scene, I'd like to talk to only one person. Problem is, I just don't know who that person is yet. As you know, Sweetwater is the world's only music retailer that has its own full-time Soundware Development Facility. Over the years, it has proven to be an important part of the Sweetwater "value-added" legacy of service, support and the best hands-on knowledge in the industry.

Due to our rapid growth (a serious understatement) in Retail and Soundware products, we are once again looking to add another member to our Soundware Development Team. We need someone who lives to program synths and who would rather sample than eat. Simply put: "We want the very best!"

We're specifically looking for someone who has experience with creating a finished piece of soundware including the recording, sampling, editing and programming for various brands of samplers and synths. The person we select will be supplied with all the best equipment and training needed to create soundware with Sweetwater's high standards of quality. This Soundware Engineer position involves working directly with me on new soundware projects as well as beta-testing of new keyboards and other products that the public isn't even aware of yet.



Is this your idea of an office? Can you picture yourself coming to a studio like this to "work" every day? If so, contact us as soon as possible and make your wish become a reality.

If standing knee-deep in the absolute latest in musical wizardry is your idea of career bliss, you too should consider joining our team.

Other talents that are particularly interesting to our department include the ability to do technical writing and being comfortable with providing synth/sampler technical support over the phone and via e-mail.

What we offer in return is a competitive salary, an excellent education covering all aspects of music technology and the opportunity to build the home studio of your dreams. And speaking of homes (and dreams), you simply won't believe how easy it is to afford the house, the two-car garage, the yard, and the neighborhood that you thought you'd never have until someone rich mentioned you in their will. But it's true: Fort Wayne has some of the best living conditions per dollar anywhere in the entire United States.

If music, instruments and hi-tech equipment is your passion, you'll find

— Continued on Page 13

We have all the hottest products from all major manufacturers — IN STOCK!

ON STAGE

WITH THE NEUMANN KMS 105

I don't think I'd be going too far out on a limb if I said that most musicians would love to own a Neumann mic. But up until now, Neumann mics were pretty much relegated to serving time in the recording studio and never seeing the light of day (nor the glaring lights up on a smoky stage).

Well that just changed when **Neumann** introduced the **KMS 105**, a super-cardioid, live performance vocal microphone, at AES '99 in New York City. Not willing to rest on the marked success of their superb vintage and contemporary studio microphones, Neumann has at last turned their attention to the stage to vanquish the grainy, unresolved sound of the typical live microphone.

Although virtually every other aspect of sound reinforcement technology has been vastly improved over the last decade, live vocal microphones have more or less lagged behind. The new Millennium ushers in a cost-effective, serious live vocal microphone to fill that void: The Neumann KMS 105.

With the refinement of their complete design and development facilities in Berlin (see story on Page 9), Neumann implemented their time-efficient microphone prototype process to create a German-engineered microphone for live performance. What separates the KMS 105 from the rest of the crowd? Beta testers report that the KMS 105 truly has "air," that rare, elusive quality that is easier to experience than describe in words or specifications and has been (up until now) limited to high-end studio microphones. Every vocal nuance shines through effortlessly, unmasked and uncolored.

As evidence of its fitness for the rigors of stage use, the KMS 105 boasts 150dB maximum SPL, reduced handling noise and a reduced sensitivity to plosives (thanks to a sophisticated inner basket structure). With 132dB

of dynamic range and a 20Hz to 20kHz frequency response, the full emotional impact of a vocal performance is transferred from the stage to the audience. The sound of the KMS 105 is so true that even back-up instrument



bleed-through sounds natural — something live engineers will greatly appreciate.

The high resolution, low self-noise and neutral off-axis response of the KMS 105 make it the perfect microphone for use with the latest in-ear monitoring sys-

tems. Unlike the murky sound delivered by many live vocal microphones, the transparency of the KMS 105 does not distract the vocalist from his or her delivery and conveys an accurate reflection of performance.

The KMS 105 is available in distinctive nickel or matte black casing, and its shape is unique and stylized, reminiscent of Neumann studio microphone designs. The KMS 105 will be available just in time for the upcoming summer touring season at a price that won't break the bank (just \$595 list — for a Neumann!).

Neumann's award winning line of microphones has set the standard in the industry since 1928. In 1999, Neumann received the prestigious Technical Grammy for their 70 years of innovation in microphone design and contribution to the music industry. A continuing commitment to provide innovative, technically refined products and engineering solutions of proven quality ensures that Neumann's stature will remain unassailable.

For those interested in such things, the K55 capsule was developed from the famous K50, found in the KMS 150, KM 150 and KM 185 microphones. This new version features a super-cardioid pattern, achieved by specially modifying the response of the K50 pressure gradient transducer. The frequency response characteristic is developed in the acoustic realm, allowing for accurate representation of transient details found in music and speech, and thus transmitting a very open and detailed capture of the human voice. The KMS 105 also received the prestigious 1999 EQ Blue Ribbon and PAR Excellence Awards.

If you make your music on stage, singing your heart out and are tired of sounding muddy, I'd suggest you call your Sweetwater Sales Engineer for super pricing on the awesome new Neumann KMS 105. — **M. R.**

ZOOM GFX-8 GUITAR PROCESSOR

By Daniel Fisher, Director of Soundware Engineering

I have to admit it; each time I think I can no longer be surprised by **ZOOM**, they go and create another amazing product with features that defy their already shockingly low price tags. This time around it's a really excellent looking and terrific sounding guitar multi-effects processor called the **GFX-8**. By refining **ZOOM**'s legendary modeling technology with high-grade analog circuitry, V.A.M.S. (Variable Architecture Modeling System) provides an amazing degree of freedom and flexibility at an almost unbelievable list price of \$499.99. "Exceptional performance for the price" is no longer an adequate description of their high-density DSP technology. Each and every one of the GFX-8's 69 effects were individually developed to achieve a level of quality that goes way beyond any single effect devices.

In addition to basic ambient, delay and modulation effects, an "Acoustic Effect" lets you produce a convincing acoustic guitar sound from an electric guitar without having to switch instruments in the middle of a live performance. And there's a wide range of other newly-developed special effects like (SFX) Sample & Hold, Gate Reverb, and Synth. All of the effects are capable of responding fully to the demands of guitarists who have refined their individual sound and who want to distinguish their sound from others.

The GFX-8 easily emulates everything from the screaming distortion of a high-powered stack to the warm, fat distortion of a classic vintage amp. More than just a hybrid electronic circuit, V.A.M.S. fuses analog and digital technologies to achieve "cyberdistortion with a human heart." There's even Send and Return

jacks that let you patch in your favorite distortion or tube-based preamp!

A patch memory with 240 slots (80 user / 160 preset) comprise virtually all the sounds produced by guitarists around the world. In addition, a sampling function with a maximum of 25 seconds lets you instantly copy any phrase. The Jam Play function lets you play backing rhythms and chords and solo simultaneously. And the stereo 1/4" input jack lets you connect your CD or cassette player right into the system for practice sessions that are as enjoyable as they are effective.

Whether in edit mode, or when using the Windows or Mac Graphic User Interface (that comes free on the included CD-ROM), you get custom distortion with the freedom of "cut-and-paste" editing that allows you to tap the almost unlimited potential of the system. The GFX-8's unique

— Continued on Page 15



FRUSTRATED? NEED HELP? Our Tech Support Team is just a phone call away: (800) 222-4700

The Latest *Red Hot* Plug-Ins

— Continued from Page 4

verse thickness for creative effects. Through some very clever engineering, the blending of room shapes, size and materials may be performed in real-time without distortion, pops, clicks or zipper noise. Once you've created your custom room presets, you can even morph between two presets — in real time, and with no distortion.

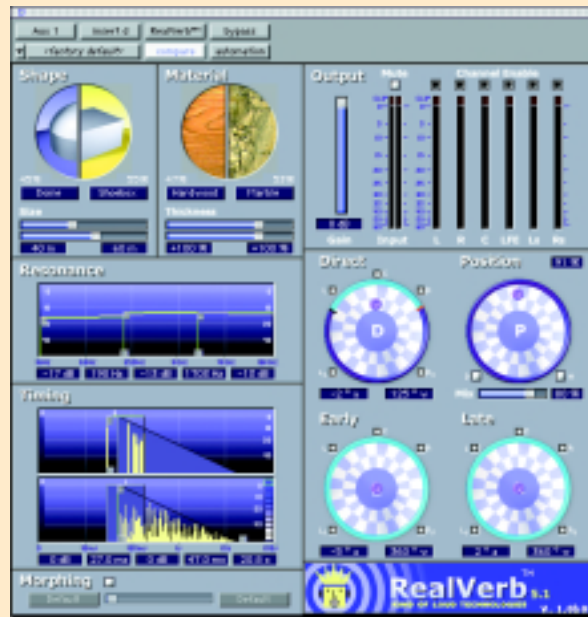
RealVerb also includes intuitive graphic control over equalization, timing and diffusion patterns. To maximize the impact of your recording, we put independent control over the direct path, early reflections and late-field reverberation in your hands. Capitalizing on the psychoacoustic technology that went into the design of RealVerb 5.1 (see below), the company has incorporated some of those principals into RealVerb. Their proprietary Stereo Soundfield Panning allows you to spread and control the signal between stereo speakers creating an impression of center and width. The ability to envelop your listener in a stereo recording is an entirely new approach to reverb design.

Then there's the first true multichannel reverb plug-in for Pro Tools users: **RealVerb 5.1** (\$1495 list). Sure, you could run a reverb plug-in on individual tracks, then pan and mix in surround. And it would work, kind of. Or, turn to RealVerb 5.1, an intelligent reverb plug-in tuned for multichannel sound — the first reverb that does precisely the "right thing" to your surround mix.

RealVerb 5.1 uses sophisticated algorithms designed to model physical spaces — real or surreal. New auralization technology offers both broad stroke creative control and the ability to fine tune individual parameters. RealVerb 5.1 lets you select from among a dozen room shapes and plates, from a simple shoebox to a fan-shaped concert hall. Not only does RealVerb 5.1 provide a graphic representation of room shape, it also allows you to customize your room by morphing between shapes and adjusting room sizes. The result: Either an extremely natural — or supernatural — sound.

If you're mixing in surround, make it sound good. RealVerb 5.1 will truly add a new dimension to your mixes.

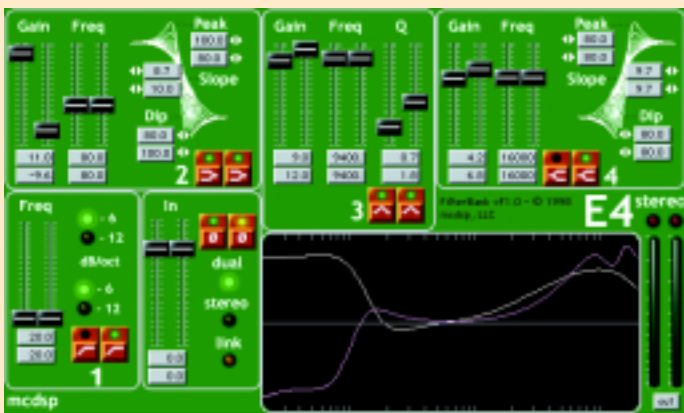
Another plug-in "essential" is **FilterBank** from **McDSP** (\$495 list), a high-end equalizer plug-in designed to emulate the sounds of vintage and modern equalizers and filters. What's more, it is not just another great sounding EQ — it's every EQ ever made in one plug-in! FilterBank achieves this lofty goal through its unique design philosophy: Give the user maximum control. All critical equalizer and filter design parameters are



that covers nearly the entire audible spectrum (20 – 21,000 Hz). The parametric bell is up to 5 octaves wide! Gain is +/- 12 dB. Naturally, you also get Low and High Pass Filters with adjustable slope and resonant peak greater than 24 dB. Finally, Band Pass and Band Reject Filters are onboard with a frequency control range that covers nearly the entire audible spectrum (20 – 21,000Hz). Q range is 0.2 to 12.0.

The company's Double Precision Arithmetic keeps the noise floor at the -144 dB level you would expect from the 24-bit TDM bus. Exclusive Analog Saturation Modeling is provided in each EQ/filter band to prevent digital clipping. Up to 48 EQ/filter bands are available on a MIX dsp. FilterBank can run on any MIX system dsp type (SRAM, DRAM, no RAM). PCI systems can run up to 24 EQ/filter bands on a single dsp. NuBus systems can run up to 6 EQ/filter bands on a single DSP. It's ProControl and HUI compliant with control automation (PT 4.0 or higher) and available in TDM, AudioSuite, and RTAS versions. FilterBank supports NuBus, PCI, MIX systems, and host-based Pro Tools systems.

Using the same design approach as the company's popular FilterBank plug-in, **CompressorBank** (\$495 list) gives the user complete control of dynamic compression. Common controls such as Output (make-up gain), Threshold, Compression (Ratio), Attack, and Release are provided. Nonstandard Knee and Bite controls allow the articulation of the compression characteristics. Multiple peak detection circuit types provide flexibility only previously achieved by owning different compression units. Side chain support, side chain or in-line pre-filtering, and a passive/active EQ section (post compression) round out the signal processing capabilities of an already very capable compressor.



totally user adjustable. FilterBank can emulate any EQ: Tube driven or solid-state, vintage or modern, fat or thin. Or FilterBank can be used to create a distinct, custom EQ. All EQs are available in stereo or mono versions, in 2-, 4-, and 6-band configurations.

Filter Bank offers High and Low Shelving EQ with independent control of frequency, gain, peak, slope, and dip. It also provides Parametric EQ with a frequency control range



Want power and flexibility? Six different compressor configurations are available. If you need side chain support, it's provided in all CompressorBank configurations. Side chain pre-filtering (high pass, low pass and band pass) can also be placed in-line and applied to the compressed signal. How about Compression Curve Modeling? In addition to the standard Threshold and Compression (Ratio) controls, the actual shape and response of the compression curve can be adjusted with the Knee and Bite controls. Knee softens the compression curve, creating a smoother response. Bite gives the compressor the ability to allow signal transients to pass uncompressed, while the overall compression response is unchanged. These controls allow the user to emulate responses of their favorite vintage gear.

Other features include Multiple Peak Detection Circuitry, Dynamic EQ, Double-Precision Arithmetic at side chain pre-filter, compression and active EQ stages. Up to 16 mono (or 12 stereo) channels of compression are available on a MIX DSP. Compressor Bank can run on any MIX system DSP type (SRAM, DRAM, no RAM). PCI systems can run up to 8 mono (or 5 stereo) channels of compression on a single DSP. The plug-in is

— Continued on Page 14

This issue's topic is really at the heart of what we like to call "The Sweetwater Difference" and has to do with the process we all go through when considering a significant purchase (something expensive or important enough to require some serious consideration). I'll be the first to admit that my personal buying process has changed significantly over the years as I've become a more educated consumer. What seemed logical once now seems short-sighted in retrospect. Sometimes the only real cure for inexperience is a good lesson from the school of hard knocks. The fact is that the price for not knowing something you should know can be awfully high and quite painful.

Let me give you "before" and "after" examples based on my personal experience to better amplify today's topic.

Before: Back when I was buying my first car, I confess that I was a less than sophisticated shopper. I wanted a car and I knew what I could afford. I didn't spend any time checking out any kind of "Consumer Reports" publications or consult "Blue Book" pricing on used autos. Ultimately, I think I got a pretty good deal on a used '76 Pontiac Astre (the Pontiac version of the Chevy Vega). The price was right, the car looked good and drove well and that was that.

As I soon discovered, the aluminum engine blocks used in Vegas and Astres had a tendency to warp and seize (mine didn't, but I waited for it to happen whenever I drove it and thought I heard a funny noise). I also found that these models were apparently made of compressed rust which ate away at the body and frame with a frighteningly voracious appetite (listen closely and you could almost hear the metal oxidizing).

I soon became quite proficient at basic body work and engine noodling and managed to get a fair amount of use out of the car before the frame rusted to point where the body literally wasn't able to support the rear axle and actually collapsed, leaving me with my rear tires pressed tightly against the wheel wells. As at least one Pontiac Web site notes, the Astre and Vega "are embarrassing moments in American car-making history that need to be forgotten." I have a lot of fond memories associated with that car, so I'll respectfully disagree; plus I learned lessons that I use to this day to help me make better buying decisions.

After: About a year ago, I was looking to upgrade from the basic, auto everything camera to something with more features and better quality (I wanted to be able to capture some photos of my kids as they grew up and the old camera just wasn't cutting it). So I set out to buy my first high end camera. This time around I read voraciously to learn more about cameras, photography and current technologies. I talked to friends who knew more than I did. I visited Web sites and read reviews on-line.

When I had a reasonable idea as to what feature set I wanted and understood the amazing array of accessories a little better, I had to figure out where to actually buy the gear. I called a few retailers that advertised in the photography magazines I'd been reading and found them to be extraordinarily consistent. That is, consistently not very helpful beyond offering a price and a tiny hint of actual product knowledge. Not one single dealer I contacted actually tried to understand my application or level of expertise. No one inspired confidence in terms of customer service. None made me feel

valued as a customer. None of them offered more than a product at a price. But the prices seemed very good and really didn't vary much from dealer to dealer.

Granted, I wasn't buying a car here or even seeking a pro camera, but the investment was still significant for me. What I wanted was a salesperson or company that I could feel really comfortable doing business with; a company that would back up the products and be there for me if I had problems down the road with my purchase.

At this point, I remembered an old friend of mine who was a professional photographer and had opened up a camera store. It was not a big splashy place, but the kind of place that dealt in new and used equipment and was frequented by people who really knew photography and staffed by people who not only knew, but also cared about photography. I called my buddy up and was immediately asked a bunch of questions. I thought, "Wow, he's making me think about some stuff that had never occurred to me!" He was honest — almost brutally frank in some cases — with his opinions.

He helped me put together a list of gear and nailed down the details all the way to film recommendations. I mentioned the prices I'd seen and he didn't flinch. He also didn't match them because he knew what the competition really had to offer and what he had to offer. He did, however, quote me a fair price and I very happily paid it. I haven't had a single regret and have since gotten a ton of use out of the equipment (and bought more) and taken photographs that will make me smile when I'm an old man with grown children and grandchildren. I've called him with technical questions a few times and always received solid advice, including recommendations to not buy things that I'd pre-sold myself on based on a perceived need.

So, what's the message? I guess that if there is any lesson I've learned over the years, it's that price is only one component of *value* and that I, as a consumer, definitely want *the best value*. Price for me is a component that becomes less and less significant as the decision increases in importance and/or complexity. I can recall many instances where I've saved money and caused myself additional grief and expense by doing so.

Cheap cables for audio gear or cheap paint for a house aren't good buys. Working with a cheap attorney or investment or tax advisor isn't likely to be in your best interest. As the saying goes, you get what you pay for. Society today seems to be getting more and more oriented towards immediate gratification. The ability to purchase almost anything over the Internet is perhaps the best example of this.

Nearly 20 years ago, I watched the hi-fi industry go through tremendous turmoil as the plethora of specialty and high-end shops dissolved and my tweaky audiophile friends were left with superstores carrying mid-level gear and salespeople who didn't have any

— Continued on Page 14

"Excellent service, the best I've seen in the business."

— Lane Cameron

"The 'exact' product I needed was recommended. It worked 'exactly' as needed — no hit and miss. Thanks."

— Eddy LaBarra



EMPLOYEE PROFILE

Name: Jeff Law Title: Senior Sales Engineer Years at Sweetwater: Ten

What were you doing before you joined the Sweetwater Team? I was a plant



manager in the family business and was in charge of fifty people. It was a great job, but I saw a huge opportunity here with Chuck. I actually began working for Sweetwater on a part-time basis.

What in your life best prepared you for the work you do at Sweetwater and why? Working with people. And coming in from the business community allowed me to look at the music industry from a different perspective.

What did you dream about doing for a living when you were growing up? I thought I'd be an astronaut or a pilot.

Describe the most dramatic situation in which you provided the "Sweetwater Difference" for a customer? Actually took a flight to a customer's studio and was there the day his package arrived.

Favorite hobby: Astrophotography

Motto: "Make it happen!"

Most unusual/creative solution to a customer problem: Using 400 AKAI S3000 CD samplers that had been custom-modified by AKAI and installed into Discovery Zones across the country as part of an interactive robot. In addition, 200 MIDI Time Piece units were used as controllers.

What makes working at Sweetwater fun for you? Fun customers!

Favorite movie you've recently seen or rented: "Casablanca"

Guilty pleasure of choice (i.e. watching Gilligan's Island reruns): Hanging out on the beach when I have other stuff to do.

Place you'd most like to visit on your next vacation: Hawaii

What is the most important thing you've learned at Sweetwater? What customer service really means.

Favorite magazine: "Sky and Telescope"

Real-life Hero: John Young (the first Space Shuttle pilot)

How would your boss describe you? "The paranoids are after him."

FOCUSRITE

— Continued from Page 3

for Input Signal Amplifier) are based on designs from the original Focusrite recording console. The current ISA Range comprises three products, each of which feature the legendary microphone preamplifier and EQ circuits from this console. They are truly high-end, professional analog signal processing solutions that are used in many of the worlds leading music, television and film studios.

The **ISA110** (\$2000 list) is the original Focusrite channel of uncompromised microphone pre-amplification and EQ, which has been the choice of countless recording engineers and producers since its introduction. However, this is the first time it has been made available as a stand-alone, single channel unit.

The EQ design of the **ISA215** (\$4995 list) is comparable to that of the Red 2 but also features two mic pres and two input trim controls for a wider range of gain control with its companion "stepped and fine tune" controls. The 215 also has separate in / out buttons to drop all bands of EQ in and out. It also features the original mic preamp and EQ circuits from the Focusrite console.



The Focusrite ISA215: A superb equalizer plus dual mic preamps

The wide variety of different processor modules, in combination with the digital output, makes the **ISA430** (\$3495 list) a true "Producer's Pack," combining the very best of analog and digital technologies. The ISA430 is designed primarily for use in commercial and larger project recording studios, audio / video post-production facilities, voice-over facilities, etc.

The Focusrite Blue Range Mastering Solution. The Blue Range is Focusrite's world-class analog mastering range of products. All Blue products are designed to perform to the very high standards established by Focusrite's legendary analog processors, and provide unparalleled fidelity in mastering, transfer and recording work. Blue Range products do not feature transformers, since all transformers introduce a slight coloration in the signal path that is usually not desired at the mastering stage. In many cases, however, mastering facilities desire input and output transformers, so they are available as optional modifications on the Blue products. Blue signal processors also feature a high percentage of stepped controls to allow exact channel matching and repeatability.

The **Blue 330** (\$7745 list) is the ultimate analogue mastering compressor. Featuring the same compressor as a Red 3, but with a single set of controls, the 330 operates as a true ultra high resolution stereo compressor. The **Blue 315** (\$7745 list) is the ultimate analogue mastering stereo EQ. Truly a product of the Focusrite heritage, the Blue 315 is extensively based on the topology of the Focusrite console circuits, with added sensitivity, accuracy and control.

The **Blue 230** (\$4495 list) is a Class A VCA-based dual mono / stereo compressor and



The Focusrite ISA215: A superb equalizer plus dual mic preamps

limiter with separate controls for the compressor and limiter functions, PPM metering and a true stereo mode. The **Blue 300** (\$6995 list) is a mastering system controller, allowing centralized control of all mastering functions, monitoring, and complex analog and digital audio routings.

Finally, for those of you who need or want the finest A/D and D/A converters, Focusrite offers the **Blue 245** 20-bit A/D Converter (\$4955 list) and the companion 20-bit **Blue 260** D/A Converter (\$3995 list).

By now you've probably figured out that these processors are not for everyone. They are terrific performers that will find a place in studios that are looking for the quality construction, design and audio that comes only from a company with a heritage like Focusrite. For additional information and your special Sweetwater pricing, call your Sales Engineer today.

"Thank you so much for your help with my purchase ... I know that I am not one of Sweetwater's big dollar customers, but I was treated like my business was important to (you). Thanks for the postcard and the follow-up call. You were patient, helpful and spent as much time with me as needed ... and I appreciate that. You have built a positive relationship with me that I will not forget!" — Stephen Perakis

ZOOM GFX-8 GUITAR PROCESSOR

— Continued from Page 10

front panel makes a clean break from conventional effects systems: Ten knobs stand out in bold alignment. Turn any one of them and the sound changes. Each knob clearly says what it does, and does what it says (imagine that!). With the operational feel of an analog effect and preamp, the



sound moves as you'd expect it to. And the large, highly-visible display reacts instantly to changes to tell you exactly where you are at any given moment. The GFX-8's numerous controllers are presented in a familiar interface that bears a close resemblance to the control panel of a guitar amplifier. In short, here are effects that are a joy to play through.

The ZOOM GFX-8 is housed in a rugged, solid metal chassis that can easily withstand the full range and force of the guitarist's artistic emotions — even mine. Its classy color scheme underscores a harmonious integration between the studio and stage environments. Hands down, this is a crowning achievement for ZOOM and an excellent opportunity for guitarists looking for the "does everything" pedalboard.

But don't just take my word for it. Sweetwater has more than its share of guitar fanatics and each of them has had the same positive reaction to this terrific unit. For more information about the GFX-8 and the rest of the ZOOM line of guitar and studio processors, I suggest you call your Sweetwater Sales Engineer today and start defining that special tone that belongs only to you.

SOUNDWARE SCENE

— Continued from Page 9

yourself surrounded by almost 200 young employees who feel the same way you do. We've brought enthusiastic experts from all over the country to join our Sweetwater team. If you think this sounds like the type of place you want to call "work" and you have the skills we're looking for, send an e-mail to daniel_fisher@sweetwater.com, fax me at (219) 432-1758 or write snail mail to me at the Sweetwater Soundware Development Facility, 5335 Bass Rd., Ft. Wayne, IN 46808.

Hope we'll be hearing from you soon.

Searching for Success in the Music Technology Industry?

Are you tired of a job with an income ceiling? Want the opportunity to grow your income to the six-figure level? If you really "know your stuff" and have what it takes to be a winner in a highly competitive industry, we have a place for you right here on the Sweetwater team! Here you can be a leader rather than a follower and build that great career you've always wanted in a community with all the big city conveniences, but almost none of the headaches (traffic jams, crime, pollution, etc.). And Ft. Wayne real estate is some of the most affordable in the country! So what are you waiting for? Call and ask for the Career Center or e-mail us at careers@sweetwater.com today!



Sweetwater
(800) 222-4700

TALK TO AN EXPERT! Our Sales Engineers know their stuff and can help you select exactly the right gear!



— Continued from Page 5

typically we suggest giving them at least one revision (which usually happens within two to three months of a release date as in the case of MacOS 8.1 or Windows 98b) to fix the initial problems. Subsequently,

one or two more may happen to fine tune the OS.

With stand-alone decks and instruments / modules, we usually suggest a similar approach. We check the manufacturers "Download" and "Tech" pages for the latest stable revision and will put it in all of the decks of that model via SysEx or a floppy download. Periodically, companies like Alesis and TASCAM will post two or three revisions within a week's time. We recommend you put the newest one in as long as you are not in the middle of a project. The worst time to do any upgrades is when you are halfway through a session, project, or a tour. If an item is stable and doing the job, wait until you come to a point where you can dedicate a few days off to take on such a task. Because if you don't and you decide to update in the midst of a session, you could crash your rig, or worse yet, have something happen that will cause you to lose material due to corruption.

As far as updates to software applications, we suggest you use an approach similar to the OS of a computer. A) Do this at a scheduled maintenance time and not during a session. B) Give a brand new version a little bit of time to hit the market before running out and putting it in your computer, especially one that is a "something point zero version" (i.e. 2.0), because we can almost guarantee that at least one revision will occur. C) Once you do upgrade, keep an eye out for every revision in the numerical series to ensure that you have the most stable and bug-free version. D) Always check the spec and compatibility before "just upgrading" because some computers, due to their speed and performance, are not always able to handle the most recent version of an application. At that point, a computer upgrade may be required to continue upgrading certain software.

Note: Manufacturers will keep you current as long as you are registered and take the time to check their respective Web pages for upgrades (often free), so take advantage of this. Having said all this, there are some companies out there that won't release any software until they are absolutely positive there are no major flaws in it (or even minor ones). When in doubt, please give us a call and we can tell you whether or not a specific upgrade has been stable or "buggy." We're always glad to pass along important information like this.

"My Sales Engineer goes above and beyond to get me the products I need in the time I need them. Thanks so much!" — Keith J. Hersch
"My first experience won't be my last. It's very reassuring to receive the no-hassles help." — Ed Pettersen

The Latest Red Hot Plug-Ins

— Continued from Page 11 ProControl and HUI compliant, controls automation (PT 4.0 or higher), is available in TDM, AudioSuite, and RTAS versions and supports Nubus, PCI, MIX systems as well as host-based Pro Tools systems.

Finally, we have **ChannelStrip** from **Metric Halo Labs** (from \$495 to \$999 list depending upon platform), which is quite literally the channel strip audio processing section of a full-featured digital console with a TDM plug-in interface. It offers exceptional audio quality, astonishing DSP efficiency and a comprehensive user interface that finally allows Pro Tools users to work with their system as efficiently and interactively as they would with a dedicated mixing console.

ChannelStrip provides all your standard audio processing facilities in one complete plug-in: Invert gain/trim, polarity invert, expander and gate with integrated side-chain filter, compressor with side-chain filter, six-band fully parametric 48-band EQ, six selectable filter types per band (peaking/parametric +/- 24dB boost/cut per band, high and low shelf with adjustable dip, plus bandpass and high and low cut filters). High resolution metering is available for each processing block. The compressor section is dynamically switchable between pre- and post-EQ. All internal routing can be done with the transport engaged. Each processing section is fully metered. The output section incorporates the company's exclusive SpectraFoo-style Peak, RMS, and VU meters.

ChannelStrip currently supports PT/MIX and MIX farm cards. It can process 6 channels per MIX DSP chip (either 6 mono or 3 stereo pairs in any combination). All MIX DSP chip types are supported. This means you can do a 24-channel mix on a MIX core system with gate, dynamics, 6-band EQ and delay on every channel. Each additional MIX farm card provides enough DSP for 36 additional channels of processing.

By providing access to all critical channel-processing parameters at once, ChannelStrip brings a new level of control to the TDM user.

ChannelStrip also includes interactive process response graphs for the EQ transfer function, compressor knee and gate knee. The knee diagrams provide real-time metering of the gate and compressor processes. These response graphs and meters can be instantaneously hidden or disclosed at will, providing you with complete control over your Pro Tools workspace.

As a mixing tool, ChannelStrip provides exceptional sound quality and an interactive "All-controls-available-at-once" user interface that allows you to arrive at a particular sound and feel faster and more naturally than with any other combination of plug-ins on the market. It also greatly increases the number of tracks of processing per DSP and decreases the amount of time you spend waiting.

Believe it or not, we have more plug-ins to talk about, like the incredible products from **Waves** (like their new C4 Compressor), but quite honestly, that will have to wait until next issue since the editor is already coming unglued over the length of this article (the author admits he is nuts for plug-ins).

Want to know more about any of these incredible plug-ins? Want your special low Sweetwater price? Just pick up the phone and call your Sales Engineer right now. With these phenomenal plug-ins available, your music will sound even better than you ever imagined!

— **Michael Rief**



INSIDE THE SWEETWATER DIFFERENCE

— Continued from page 12 depth of knowledge. Is this a good thing for the general public? Perhaps. Is it a good thing for the people who really need help or really need access to better products, support or service? Probably not.

At Sweetwater, we talk about *value* an awful lot. We are fortunate in that, due to the volume of business we do, we are able to offer very aggressive prices to our customers. In fact, we're often able to provide the lowest prices available, period. Having said that, we don't claim to have the lowest price in the universe on every product we carry. There is a point where we would have to decide what to give up to offer this: Do we hire low-level clerks instead of the top industry professionals as our Sales Engineers (I guess we'd have to call them "Order Administrators" or "Clerks" then)? Do we close the Web site or limit the amount of information and our daily, if not hourly, updates to it? Do we shut down the Service Department and just tell our customers to send their broken gear back to the manufacturers for repair (often with 6-8 week repair times)? Do we send our customers to the manufacturer for technical support in configuring their equipment and overcoming technical problems instead of being to help them make the whole system work (not just helping to get a specific piece of equipment working)? Do we start using less ex-

pensive freight companies instead of FedEx and UPS? Do we stop production of informational publications like inSync (electronic) or Sweet Notes? Do we close our Soundware Development Facility? Do we print our Equipment Directory on Newsprint and fire our Marketing Department, so all we offer is black and white pictures with a price instead of producing the great and extremely helpful comparison charts and text? I know my answer (and I'll shout it from the highest mountain top if allowed to do so). What is yours? The cool thing about all of this is that you, the customer, get to decide what you really want. The "votes" you cast with your hard-earned cash will steer the industry in whatever direction you desire.

Personally, I believe there is no one "perfect" business model and that the big brick and mortar chain stores provide a tremendous service for their customers. I think the big catalog discounters and "e-tailers" have a place, as well. I think you've proven via your vote that a company like Sweetwater is not only needed, but appreciated. We've experienced amazing growth over the years and are already having a record year. This wouldn't happen if we weren't addressing a specific need for customers who appreciate the quality of our service.

Ultimately, this is me thanking you for being so discerning, caring about quality, and understanding the real meaning of the word "*value*."

Rock and Roll!

— **Jeff Radke** is Vice President of Sales at Sweetwater

Our huge warehouse is home to thousands of the hottest new products. Call us at (800) 222-4700

First of all, let me admit up front that as I'm writing this, it is under the influence of several glasses of an exceptionally fine Chablis. However, despite the fact that I am feeling quite good at the moment, I am in complete control of all my faculties, so I know I am going to make some enemies today. What can I say to make people angry, you ask? Okay, here it is: PC owners — you win! It's no contest. You are tougher and smarter and just plain better than me.

I mean, let's face it, there are really just two kinds of people in the world: Those who use Macs and those who use PCs. Sure, there are some folks out there who don't use computers at all, but if they did, they would — like the rest of us — choose a side and stick to it. I, as it happens, am a Mac person. There are millions of us, but we are few in number compared to the legion of PC users out there in the world.

What brought all this on? Good question. I was recently forced to use a PC to complete a sound design project and let me tell you, I am still recovering from the experience. Like all Mac users, I am used to a drag and drop, double click kind of reality. My mouse, I am not ashamed to admit, has but one button. My G4 does not even have a floppy disk drive . . .

My friends, after being thrown (defenseless, I may add) into the strange and double-buttoned land of the PC, it didn't take me long to loudly cry "Uncle." Trapped in a room with a PC, I felt as though I were in some sort of alternate universe where the most basic of rules that I live by no longer applied. Truth is, after weeks of living in PC land, I still don't know which button on the mouse I'm supposed to click on to open a file in Windows. More importantly, I don't care — I just want my Mac!

See, I'm not afraid to admit that I'm just not tough enough to make it out in the world of Windows98. More importantly, I'm overjoyed that I don't have to be. Sure, I know I'm in the minority, but that's absolutely okay by me. Still, I have friends who swear by their PCs (and most of them actually still like me, despite my "prejudice"). It's just that a lot of their "pro PC" arguments no longer hold water.

They say: "You get more for your money with a PC." They claim that the PC world has infinitely more options available and that PCs are faster than Macs. Finally, they say "You Mac people are in the minority and you'll never catch up."

While statement number one was true a few years ago, you only have to look at today's Mac prices to see you get a whole lot of computer for your hard-earned cash. What's more, you can yank most Macs out of the box and be browsing the Web in less than ten minutes. I swear, it took me two days just get that PC configured properly and able to figure out where the heck my files went.

As for options, you only have to browse a catalog from one of the Mac super retailers or talk to your Sweetwater Sales Engineer to see that there's no lack of options for anything you may want to do on a Mac.

Speed? Well, if you just look at numbers (say a 800MHz PC vs. a 500MHz G4), it may look on the surface like the PC will be faster. But that doesn't take into account everything that happens inside a personal computer when you tell it to perform a task. Those speed numbers merely indicate how fast the processing chip deals with the actual math, not how much information can be processed at one time. The new "super" Macs process data in huge 128-bit chunks, while most PCs are still slogging away trying to process 32- or 64-bits of data. To put it into music terms, think of a sampler that's outputting 8-bit sounds vs. one that is outputting 16-bit sounds. Which one do you want?

In fact, Apple just released this bit of information: Using six of Intel's own tests (they are, after all, the developers of the Pentium processor), the 500MHz G4 (with its 128-bit Velocity Engine) operates twice as fast as the 800MHz Pentium III.

Hey, I'm not writing this to sling mud at PCs or their owners. I think everyone should own the computer that makes him or her the happiest — particularly since I cannot imagine a world any longer that is without computers. If you are a PC owner, I'll take your word that Windows is wonderful. Only please, don't make me use it!

I also have to sneak this in: Statistics show that while PC users may switch over to Macs, the reverse is not likely to happen. Mac owners like me love our



machines. Yes, there were dark days when we honestly didn't think Apple had a clue where they were taking their products. Thankfully those days are over, and today's Macs are unquestionably the best ever. Don't believe me? Try one for yourself. Whatever model you might be looking for is almost certainly sitting in the Sweetwater warehouse, just waiting to be shipped to your door. But don't be surprised if you decide to make the switch yourself and join the millions of us who wouldn't trade our G3s, G4s or Powerbooks for anything.

I guess that ultimately, it comes down to personal preference. Some people like to drive a car with a stick

shift. Myself, I prefer an automatic. If I'm going somewhere, I want to enjoy the ride, not have to do the work of changing gears manually (particularly in traffic).

Having said all that — and hoping that you're still with me — I want to say that it's great that we live in a time and in a country where we actually have such choices. There are still a lot of people in the world who will never, ever see a Mac or PC, let alone own one. We can pick up our phones, call Sweetwater and have a brand new Mac at our doorstep the next morning. Really, how cool is that?

Just as this issue was approaching deadline time, Daniel Fisher from our Soundware Development Facility sent me an e-mail to say that our "Total Stereo Session Drums" CD had just won a "Key Buy" award from *Keyboard* magazine. Now I don't usually take up space here saying how great my samples are or how terrific the programming is on the Sweetwater CD ROMs (you know, like the 20 out of 20 stars the magazine gave us for our "Ultimate Guitars" disc), but to get recognized twice in a row by those picky people at *Keyboard* (and I mean "picky" in the best possible way), well I felt I had to mention it here.

Considering the fact that *Sweet Notes* now has more than double the circulation of *Keyboard*, there are thousands of people out there who won't see the review, so I thought I'd throw out a few quotes. "Considering the hundreds of sample libraries on the market today," writes Greg Rule, "you might wonder why a company would bother making another collection of drum and percussion samples . . . Then I loaded these kits into my K2500 and . . . cowabonga! These samples are gorgeous, lush, and exquisitely recorded." Aww, pardon me if I blush. After all, I spent many months tracking down great kits and the drummers to play them, so it's very gratifying to know that the Editor of *Keyboard* recognized how special these samples really are.

Greg continues later in the review: "Of the 29 kits in this collection, almost all put a smile on my face. Love those muted and slappy samples in the Garage Kit, to name one." Jim Aiken, who is Senior Editor at the magazine (and a man who can detect even the tiniest flaw in any sound) also had a listen and concluded: "Overall, I'm knocked out by the sound of the samples. They have plenty of presence and just the right amount of room ambience. I'd recommend this CD in a heartbeat to anyone who is trying to sequence realistic drum tracks."

Sound design isn't a high profile gig. I don't get recognized by people on the street ("Oh wow, that's the guy from Stratus Sounds who played and sampled all those incredible guitars!"). The hours are sometimes long and arduous. So when people whose opinions I respect bestow my "babies" with so much praise, it feels pretty darn good. Of course, a lot of the credit also goes to Daniel Fisher and Gary Phillips, who took my raw samples and turned them into terrific kits and used their programming wizardry to take the sounds right up to the next level. Thanks guys!

And thank all of you out there for your correspondence lately. Seems like I spend at least an hour a day responding to your e-mail. I just hope that I've been able to help in some way, get you pointed in the right direction. I'm honored that you feel like you can come to me with your questions and even more pleased when you just write to say you appreciate some particular column or support one of my more outlandish theories. Believe me, it's one of my greatest joys to hear from you!

Jim Miller can be contacted at "jim_miller@mindspring.com"



Sweetwater

5335 BASS RD, FORT WAYNE, IN 46808

Address
Service
Requested

BULK RATE
U.S. POSTAGE
PAID
SWEETWATER
SOUND

inside THIS ISSUE

ROLAND VM-7000 DIGITAL MIXING SYSTEM
TODAY'S HOTTEST NEW PLUG-INS
FOCUSRITE PROCESSORS
TC ELECTRONIC M•ONE and D•TWO
NEUMANN KMS 105
TASCAM CD BURNERS and DUPLICATORS
MONSTER CABLE and much more!



Our Store is Open 24/7

You're a musician. Well, all of us here are musicians, too, so we know how it is: You spend some time scanning the magazines, talk to your Sweetwater Sales Engineer a few times, then decide (with his or her help) exactly what it is you need. And then you wait until the middle of the night to realize you just can't possibly live without that new mic, mixer, multitrack, etc. Hey, we can't explain it either — it's just one of those musician things. Back in the old days, you would have to wait until the next day to place your order. But with the Sweetwater Online Store, you can order whatever it is you need 24 hours a day, seven days a week. In most cases, the item will ship out the same day we receive your order!

It's so easy. And it's totally secure. What's more, you're dealing with the music industry's most trusted retailer, so you can buy with confidence, knowing you're completely covered by Sweetwater's 100% BEST VALUE GUARANTEE. If you're not happy with your purchase, we'll take it back with absolutely no hassles. You also get a nice warm feeling knowing that our award-winning Tech Support staff is available to help you get your purchase up and running (and you making music) — and they're just a phone call away. So what are you waiting for? We're adding dozens of new products every day, so the odds are good that what you're looking for (or really need) is right there on our Web site. Order tonight and your order will be on its way to your door tomorrow!

www.sweetwater.com/store

And, oh yes, everyone else can still call us during normal business hours to place their orders. So all you, umm, radicals can just dial (800) 222-4700 to get exactly the product you need at a great Sweetwater price!

Sweetwater online store

