Sweetwater SWEETNOTES

Digi 002 Rack: FireWire Pro Tools LE Studio-in-a-Box

Channel your creativity with the newest, hottest Pro Tools project studio innovation: **Digi 002 Rack** ($1295 list), the first-ever rackmountable FireWire-based Pro Tools product from **Digidesign**.

The Digi 002 Rack is a two-unit, rackmount design that includes a single FireWire (or IEE-1394) connection to handle the exchange of information to and from your computer, so you just plug in and you're ready to go. Along with the included **Pro Tools LE** software, Digi 002 Rack provides the means to create everything from top-notch demos to masterful DJ mixes to superb radio spots, all with astonishing 24-bit clarity and up to 96kHz sample rate support, for true ultra-high resolution audio. Its analog, digital, and MIDI capabilities enable Digi 002 Rack to handle a wide variety of I/O configurations, while dedicated monitor and headphone outs allow you to keep a close ear on progress.

Painless setup. Getting your Digi 002 Rack system up and running involves a quick, simple, five-step process. First, you load the Pro Tools LE software onto your computer. Next, you connect your computer to the Digi 002 Rack with the included FireWire cable (If your PC or Sony computer happens to sport a 4-pin FireWire port, you may need a 4-pin to 6-pin FireWire cable to make the necessary connection). Third, you power up Digi 002 Rack. Fourth, you connect all of your signal sources — mics, instrument cables, patch cords, etc. — to the I/O on the back of Digi 002 Rack. Finally, you launch the Pro Tools LE software. What could be easier?

Digidesign is touting the Digi 002 Rack as a full-featured studio-in-a-box that works with your Macintosh OS X-based or Windows (with **Pro Tools LE 6.1** software) computer, giving you everything you need to capture your ideas and to achieve superior audio and MIDI production results. Since all communication with the host computer is via a single FireWire cable, you're able to take it with you anywhere, ready to record whenever inspiration hits you. The Pro Tools LE software features a very user-friendly interface, with 32 tracks of simultaneous record and playback, 256 MIDI tracks, real-time (RTAS) plug-in support and DigiRack plug-ins, plus a host of additional powerful features.

All in the family. Just like its bigger brother, the original Digi 002, FireWire connectivity means your Digi 002 Rack is as portable as you want it to be. Work on Pro Tools LE sessions at home, then take your Digi 002 Rack to a gig to record live inspiration. Either way, you get professional Pro Tools quality, full cross-platform session compatibility across the complete Pro Tools product family, and the easiest, most powerful way of affordably bringing your music to life.

Whether you're a DJ, an electronic musician, a singer/ songwriter, or in a band, the Digi 002 Rack covers your audio and MIDI bases like only a Pro Tools solution can. And while the unit is fully functional in and of itself, many products are available to increase the scope and performance of your Digi 002-based Pro Tools LE environment. Although the unit ships with *nearly $1300 worth of plug-ins*, other high-powered RTAS (real-time) and AudioSuite (file-based) plug-ins, designed and built by Digidesign and their development

MOTU 828mkII FireWire Interface for Mac and Windows

When **MOTU** introduced the original 828, it was an immediate best seller. Now, the company has improved upon the original design, while keeping the same $795 list price with the new **828mkII**, a single rack-space, FireWire audio interface for Macintosh and Windows computers. The 828mkII adds many new features, including more simultaneous inputs (now 20) and outputs (now 22) along with 24-bit / 96kHz operation, 8-bus monitor mixing with front-panel LCD programming, stand-alone operation, front-panel mic/guitar/instrument inputs with preamps and sends, SMPTE time code sync and full MIDI input/output connectivity, so there's no need to carry around an extra MIDI interface.

The 828mkII is equally well-suited for both studio and stage, offering users all the analog and digital I/O they need for desktop recording, including convenient front-panel mic inputs with sends for a compressor, EQ or guitar amp. Users can program multiple monitor mixes on-screen with the included CueMix Console software, hit the road, and then tweak mix settings at a gig using the front-panel LCD display, without requiring any computer at all.

Built-in CueMix DSP monitor mixing. The 828mkII provides DSP-driven digital mixing and monitoring for all 20 inputs. Users can connect mics, guitars, synths and even effects processors, and monitor everything right from the 828mkII's main outs or the headphone jack with no separate mixer needed and absolutely no

WHAT'S INSIDE:

The MOTU 828mkII FireWire Solution for Mac and Windows

latency. The 828mkII supports up to four separate stereo monitor mixes assigned to any four digital or analog output pairs. Each mix can support all 20 inputs (eight TRS analog, two mic, eight ADAT optical digital and stereo SPDIF digital). A new "CueMix Return" feature lets the user route one of the four CueMix DSP mixes back to the computer. For example, musicians can record their entire mix, including monitored inputs, back into the computer.

Front-panel programming. 828mkII owners can access their mixes, or any 828mkII setting, directly from the front panel using six rotary encoders and a 2x16 backlit LCD display. Mix settings such as input gain, panning, +4/-10 input level, 6dB boost, stereo pair grouping, mix output assignment and others are quickly accessed, clearly marked and easy to adjust. Users can create, save, recall and duplicate eight global presets.

Stand-alone operation. An 828mkII user can program the unit at the studio with the CueMix Console software and then take the 828mkII on the road for mixing/monitoring without a computer. Any setting can be changed on location with the backlit LCD and front-panel controls.

Front-panel mic/instrument inputs with sends. Tired of reaching around in back to make a connection? Two front-panel Neutrik combo (XLR/TRS) jacks with preamps and phantom power allow users to connect a microphone, guitar or any quarter-inch input with front-panel convenience. The XLR jack serves as a low-impedance mic input, and the TRS jack serves as a high-impedance guitar/instrument input. Before A/D conversion, the pre-amplified signal from each front-panel input is routed to one of two rear-panel quarter-inch analog sends so that users can insert a favorite outboard EQ, compressor, amp or effects processor to the mic/guitar input signal before it is converted to digital form.

20 inputs / 22 outputs. The 828mkII provides the following simultaneous, independent inputs and outputs: eight channels of quarter-inch TRS 24-bit / 96kHz analog I/O (with individually switchable reference levels on input), two mic inputs with high-resolution preamps and phantom power, eight channels of 24-bit ADAT optical digital I/O (four channels at 96kHz), 24-bit / 96kHz SPDIF digital I/O, headphone out and stereo main out. All inputs and outputs can be individually addressed from host audio software running on the computer. All inputs can also be individually addressed in the 828mkII's built-in CueMix DSP mixer.

Features:
- FireWire connectivity
- 20 inputs and 22 outputs
- Support for 96kHz via ADAT (S/MUX)
- MIDI I/O
- Front-panel control
- CueMix DSP for DSP-driven monitoring
- Stand-alone operation: program your mixes then bring the 828mkII to your gig!
- Front-panel mic & guitar inputs
- 8 TRS analog I/O
- ADAT lightpipe I/O
- S/PDIF I/O
- Sync includes Word Clock, ADAT Sync In and SMPTE I/O
- Includes AudioDesk for Mac OS and OS X

www.sweetwater.com/828mkii

The MOTU 828mkII or Digi002 Rack: Which unit is right for *your* needs?

The best thing about having two such powerful, affordable packages available to choose from is that there is *no* wrong choice! Aside from a few differences in I/O configurations, both units offer stunnning 24-bit / 96kHz audio right out of the box, so there's not going to be any appreciable difference in sonic quality. So the main differences really come down to the way you work.

While this is an oversimplification, musicians that are doing a lot of MIDI-based sequencing — laying down the basic tracks with a few hardware modules or keyboards — then sweetening with audio (vocals plus a guitar track or two) will probably find the **828mkII,** with its direct connection to MOTU's ultra-sophisticated **Digital Performer** software, the perfect choice.

Meanwhile, those who are mainly recording live tracks and then sweetening with MIDI will probably find the **Digi002 Rack** to be the way to go, particularly as many thousands of musicians, engineers and producers have worked with some version of **Pro Tools** along the line. If you're one of those thousands, then stepping up to the Digi002 Rack will feel like slipping into your favorite pair of old shoes — nice and comfy.

Naturally, there is also the issue of your budget, and at $795 list, the MOTU 828mkII is a bit lighter on your bank account than the $1295 list Digi002. But beyond that, both hardware units will work with almost any current audio workstation software. A Digital Performer user can use a MOTU 828mkII or Digi 002 Rack, and so can most other applications. At present however, Pro Tools software will *only* run on a Digi 002, which is the only known exception.

Got concerns about compatibility? Call your Sweetwater Sales Engineer. They know these products and can match your specific needs to either unit!

Digi 002 Rack from Digidesign

partners, are available for virtually every signal processing, sound design, and specialized editing purpose. These software applications work in conjunction with Pro Tools in both real-time and non-real-time formats, emulating and often improving upon the hardware counterparts that they frequently emulate.

The addition of a FireWire hard drive is also a wise choice, improving the performance of your system by virtue of increased throughput and data transfer speeds. And you always have access to upgrades and updates to Pro Tools LE software, often available for free to registered users.

www.sweetwater.com/digi002

- 8 discrete analog inputs (4 mic / line / instrument preamps w/phantom power selectable in two channel increments)
- Alternate Source Input for monitoring −10 dBV audio equipment (tape players, CD-players, etc.) directly to the monitor outputs
- 8 discrete analog outputs, all balanced/unbalanced +4 levels, plus a separate balanced/unbalanced monitor output
- Precision 24-bit/96 kHz converters • 8 channels of ADAT optical I/O
- 2 channels of S/PDIF I/O
- > 108 dB Dynamic Range; > 98 dB (0.002%) THD+N
- Monitor output includes dedicated volume control knob
- Headphone output includes dedicated volume control knob
- MIDI I/O – 1 input port / 2 output ports (16 channels in / 32 out)
- Footswitch for QuickPunch control

Moog Voyager: It's the MiniMoog for the 21st Century

Let me state the obvious: nobody had more influence on the world of synthesized music than Bob Moog. In fact, the original MiniMoog, which was first introduced way back in 1970, literally set the standards for all synths that would follow, all the way to the present day. So when **Moog Music** announced a brand new synth that would redefine analog synthesis, the music world naturally took notice.

Dubbed the **MiniMoog Voyager** ($2995 list), this all analog performance synth incorporates virtually all the functions of the original Moog synths, as well as adding a number of new features that bring this classic into the 21st Century and beyond. If you want *the* Moog sound, this is it. Period. This is no digital approximation, this is the real thing, with Bob Moog's legendary synth design expertise in its circuits. It sounds amazing, looks amazing, and feels amazing.

> **If you want *the* Moog sound, this is it. Period. Not a digital approximation, this is the real thing. It sounds amazing, looks amazing, and feels amazing.**

With original Moog keyboards selling at astronomical prices, the Voyager is actually a bargain. What's more, thanks to technological advances made in the last decade, the Voyager has all the fat analog sound you crave, but in a much more stable design.

Naturally, your first question is how does it stack up to the original? The Voyager is monophonic (one note at a time) and it incorporates virtually all of the sound resources and functions of the original Model D MiniMoog, which was produced from 1970 to 1982. It also includes a three dimensional touch surface, comprehensive MIDI implementation, extensive patching facilities and lots of new panel features. But the bottom line is this: It sounds just like a Moog!

The signal path starts with a bank of three wide-range, ultra-stable voltage controlled oscillators, one noise source, and one audio preamplifier for externally-applied audio signals. The sound modifiers include two sweet Moog filters and one stereo VCA (Voltage Controlled Amplifier). Modulation sources are two ADSR envelope generators and one multiwaveform LFO. Control devices include a 44-key keyboard with velocity and afterpressure outputs, pitch bend and modulation wheels and many control / pedal input jacks. Like the original, the Voyager has a hinged, multi-position front panel and a great-looking, solid hardwood cabinet.

For those of us who honed our chops on a MiniMoog, the Voyager will feel like an old friend, albeit one that will remember 128 patches in non-volatile memory, so unlike the old days, where you could only approximate the same sound a week later, the Voyager will remember the position of every knob and switch. This is like analog synth heaven! Now we can finally stop beating ourselves up for selling that original MiniMoog for cheap back in the 80s!

www.sweetwater.com/VoyagerPerf

Apple's Newly-Engineered, Super Slim iPod

The original **Apple iPod** was a certified best seller for the company, but now they've introduced a new super-slim iPod that can hold up to 10,000 songs, and download music at blazing speeds. It's available for both Mac and Windows starting at $299.

Smaller than ever, the sleek new iPod fits comfortably in the palm of your hand or into your pocket. Yet the iPod gives you a huge 10GB, 20GB or 40GB hard drive. Do the math: that's space enough to store about four weeks of music — played continuously, 24/7 — or one new song a day for the next 25 years or more.

The new iPod has been re-engineered for enhanced durability and sensitivity. With an LCD screen and buttons that feature a backlight for clear visibility in low-light conditions, iPod is designed for easy one-handed operation. The 20GB and 40GB iPod models come with a dock that makes charging and syncing easier than ever.

An elegant, convenient home base for iPod on a desk or connected to a home stereo system, the dock provides syncing via FireWire or USB 2.0, charging via FireWire and an audio line out for connecting to powered speakers or a stereo system. Put a dock in any room and pop in your iPod for instant access to your music library.

Savvy music pros know that beyond playing music, the iPod is a great, compact hard drive that allows them to save full-bandwidth AIFF or .WAV files, scratch tracks or even entire mixes, making it easier than ever to carry your latest projects in your pocket and work on them whenever inspiration hits you.

Check out our feature story on Apple's new **iTunes 4** and the **Apple Music Store** on page 8 for two more reasons *you* need to own an iPod.

Now Shipping!

It seems like every day, another manufacturer releases a groundbreaking new product at a price that's almost unbelievable. But how can you possibly keep up with all the newest equipment?

Simple! We do it for you! Just open up a copy of Sweetwater's **New Gear 2003** for all the latest developments in the world of music technology from the best names in the business.

Regular subscribers to *Sweet Notes* will automatically receive a copy. But if you just happen to be reading your best friend's copy right now, why not give us a call at **(800) 222-4700** to get a **New Gear 2003** of your very own!

Roland Fantom-S88: The Perfect Mix of Sampling and Synthesis

There's no shortage of instruments these days that claim to be a complete pro audio workstation. But are they really? Roland's Fantom keyboard workstations have already been highly praised by many industry publications, and now, with the introduction of the **Fantom-S88** ($3495 list), it's clear that **Roland** has its sights on pulling ahead of the pack — way ahead!

The Fantom-S88 starts off with a great-feeling 88-note Progressive Hammer-Action keyboard. From there, you can explore entirely new sonic landscapes with 64MB of onboard wave ROM created exclusively for the Fantom-S88 (no recycling of sounds you've already heard over and over again). These new stereo samples are the finest building blocks ever offered in a Roland keyboard. And you can start making music right away with an entirely new set of inspiring Patches and Rhythm Sets sure to fit into any music style.

An Audio and MIDI Powerhouse. Emphasis was placed on the way audio and MIDI are integrated. Audio can be sampled using the stereo analog inputs or imported via USB, then integrated directly as a waveform in the expressive stereo 4-Tone synth engine. Audio can also be sequenced alongside MIDI data. The Fantom-S88 will even automatically stretch your samples in real time to match any tempo!

> *"Instead of just adding sampling, Roland carefully thought out new ways to make it even more useful in audio production."*

Beyond Sampling. Instead of just adding sampling, Roland carefully thought out ways to make it even more useful in audio production. The S88 comes with 32MB of sampling memory installed, expandable to 288MB — more than any other workstation and enough space to resample an entire song! The onboard USB port makes it easy to load .WAV or .AIFF files or export your finished song to a computer for CD burning or internet distribution.

To make triggering samples easier, Roland added a *Dynamic Pad Bank* that will remind you of the classic MPC-60. Samples can be easily mapped to the touch-sensitive pads which can be used to play ROM sounds or RPS patterns. Another Roland innovation is Skip Back Sampling. This function continuously samples your performances so you'll never lose a great idea.

Complete Studio Effects and Mastering. The S88 is loaded with a set of pro-quality effects like 24-bit reverb that rivals dedicated outboard gear plus a dedicated chorus processor that serves up warm, rich chorus and delay. Three multi-effects processors handle everything from tempo-synced delay and Lo-Fi processing to COSM Guitar Amp Modeling, Slicer, Isolator and more. A dedicated mastering processor lets you add the finishing touch with multi-band compression.

The bottom line? If you're looking for the world's most comprehensive keyboard-based workstation, you need to take a long look at the new Fantom-S88!

www.sweetwater.com/FantomS88

THE ROLAND FANTOM-S88 AT-A-GLANCE

- 88-note Hammer-Action keyboard with velocity and aftertouch
- Seamless integration of audio and MIDI with realtime timestretch
- Dynamic Pad Bank with 16 velocity-sensitive trigger pads
- Integral USB port for .WAV / .AIFF file exchange with a PC or Mac
- All-new Patches and Rhythm Sets built from 64MB wave ROM
- 32MB of sample RAM onboard expandable to 288MB
- 16MB of flash RAM with optional SmartMedia storage
- Expandable via four optional SRX-Series Wave Expansion Boards
- Four line outputs, stereo line input and 24-bit S/PDIF digital output

TASCAM US122 USB/MIDI Interface

You say you own a computer and want to get audio in and out without spending big bucks? You just want a box that does its job with very little hassle and, yes, it should carry a reasonable price tag. There's a new solution that combines affordability and ease-of-use with powerful capabilities and excellent built-in compatibility with your computer: the **US-122** from **TASCAM** ($269 list).

The US-122 features two XLR-based, phantom-powered mic inputs plus analog inserts, so you can place hardware devices (compressors, etc.) into the signal chain. Two line-level inputs on balanced 1/4" TRS jacks are included (switchable to guitar-level for DI recording) plus line level outs with a dedicated control for adjustable zero-latency monitoring plus headphone jacks. The US-122 also gives you 16 channels of MIDI I/O for use with synths and other sound generating equipment.

The US-122 includes drivers for ASIO, WDM, GSIF and Apple Core Audio (OS X) systems, so you can turn nearly any USB-equipped computer into a powerful audio recording system. The US-122 even comes packaged with TASCAM's GigaStudio 24 sampling software and a special version of Steinberg's Cubasis recording / sequencing software!

www.sweetwater.com/US122

Sony Oxford Plug-Ins: Million-Dollar Processing

While many home and project studio owners may not be aware of the legacy of the new **Sony Oxford Plug-ins**, people who make their living in the pro audio world are blown away by the prospect of Oxford processing in their computers. Essentially, Sony has made plug-ins that effectively emulate the sonic characteristics of their Oxford digital console, which happens to carry a price tag that can easily reach a million dollars! So when we say "million dollar processing at a fraction of the cost," it's not just marketing hype!

The **Oxford EQ** plug-in is designed to offer three different styles of EQ that take into account sophisticated Gain/Q dependency, as well as overall control ranges. It's available for Pro Tools (HD/Mix, TDM/RTAS, OS9/OSX) and TC Electronic's Power-Core for Mac and Windows. The **Oxford Dynamics** plug-in is modeled on the extremely flexible and capable unit used in the OXF-R3 professional mixing console and is available for Pro Tools (HD/Mix, TDM/RTAS, OS9/OSX). No matter how limited, compressed and crushed your recording may already be, the Inflator will provide even more loudness as well as repair and add musicality to previously clipped signals! The **Oxford Inflator** is available for Pro Tools (HD/Mix, TDM/RTAS, OS9/OSX), as well as PowerCore (Mac and Windows).

Call now for additional information and your special Sweetwater pricing!

www.sweetwater.com/OXFR3Mac

INSIDE SWEETWATER
Chuck Surack
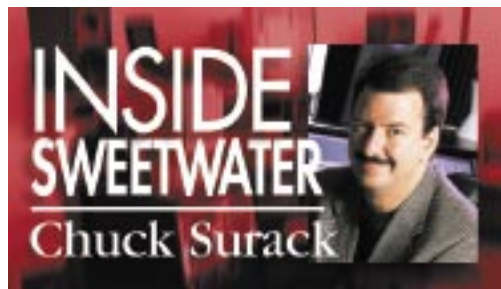
You might think that after all the years I have spent in the music technology business, I would be pretty immune to everything that is happening in our industry right now. But the truth is, I am just as excited by each and every hot new product as I was way back in the beginning. Whether it's a new synth or a new Mac or some revolutionary software, I still feel the same sense of wonder that I did when I unboxed my very first four-track recorder in the 1970s.

By all reckoning, 2003 will be a year to remember, with so many advances and innovations that just listing them here would fill up my column in record time. And I wouldn't want that, since I have a lot more to share with you.

"Ch-ch-changes!" I mentioned last issue that *Sweet Notes* will be going through some changes, and by now I'm sure you've noticed that we are including a lot more articles and features than ever before. With printing and postage costs rising, space becomes all the more precious here. Still, there are certain products that deserve to be discussed in greater detail than we have room for. So what's the solution?

As we all know, things that don't evolve are usually doomed. Sometimes that's a good thing, otherwise we might be dodging ravenous Velociraptors on the way to our cars after work. For a business, however, failing to evolve is most often tragic for the owners and the employees and, sometimes, the entire economic infrastructure of a community. So we are talking about some very serious issues here.

Thankfully, our company has always been at the leading edge of innovation, thanks to our philosophy, our excellent management team, our "best-in-the-business" employees and our thousands of loyal customers. All of which means we believe we have put together a game plan that will not only guarantee our future success, but knock your socks off, as well.

So what's in store? Our game plan is one with long-range goals and objectives, which means things don't happen overnight. However, you will soon see a lot

more in-depth product reviews on our website — reviews that a few years ago might have appeared in *Sweet Notes*. Oh, and the armlock Jim Miller has put on me? Well, that's so he can write an online version of his popular "Tech Notes" column on a regular basis (who knew Jim was on the wrestling team in high school?). All joking aside, from the amount of e-mail that Jim receives, it's plain to see that readers enjoy his column and his unique brand of humor mixed with thoughtful commentary. Meaning you want to read more, just as much as Jim wants to write more. I love it when everyone benefits from a good idea.

You will also see a lot more customer involvement, as each and every one of you is welcome to contribute reviews and ratings on products you have purchased. Love it or hate it, post your feedback on our website for everyone to see. Naturally, our popular electronic resources like inSync, GearNET and online tech support will continue. I think that a year from now, we'll look back and wonder how we got along without the cool features and innovations we will be introducing.

I've saved the best for last. You know how it always seems like rich people get what they want using other people's money? Well, here's your chance to do just that!

Thousands of customers have already taken advantage of the **Sweetwater All Access Platinum Card**, the only credit card that gives you an insider's buying power for all your music equipment needs. You could easily own a new Fender® Stratocaster® for as little as $10 per month, or a Digidesign system with new Mac starting at $46 per month (see our website for the complete details). Fill out the application and send it back to us, or apply online at *sweetwater.com/allaccess* for instant response!

But there's more: on a regular basis, we will be offering extended payment plans. How about no interest until the year 2005? *But you need to call us, as these special offers will change often.* You'll always have the option of no interest for 90 days, for instance, but when you call about gear, ask about special All Access Platinum Card payment plans for the very latest in hot deals!

If you need a guitar, a keyboard or an entire studio full of gear, you need the Sweetwater All Access Platinum Card. Oh, and that grinding sound you hear? That's all the other music retailers gnashing their teeth in frustration.

More updates next issue!

Ten years ago in Sweet Notes: Kurzweil's K2000 was still hot news, but the most revolutionary advance at the time was the first CD recorder. Who could live without one today?

Q&A

Q: What exactly is AAC and what's so special about it?

A: AAC stands for Advanced Audio Coding, and it's a big part of the MPEG-4 specification. While we could go into all the technical stuff, all you really need to know is that AAC is a cutting-edge audio codec that's perfect for the Internet, as its encoding compresses much more efficiently than older formats like MP3 (which iTunes still supports, by the way), while delivering quality rivaling that of uncompressed CD audio.

In fact, many listeners have judged AAC stereo audio files compressed at 128 kbps to be virtually indistinguishable from the original uncompressed audio source. If you're working on a Mac, iTunes 4 and QuickTime 6.2 (or later) is all you need to get started. Dolby Labratories have made AAC available to any manufacturers who wish to license it, so we would expect to see it employed in a PC format shortly.

Q: What is the safest way to clean out the insides of my older equipment. I've heard this is a good way to prolong its life.

A: We get asked this so often, it's worth repeating here. Cleaning your equipment (old or new) is a good idea. Electric current causes a positive charge on many parts, which can then attract dust. While many people use a vacuum or hair dryer to do the cleaning, there is always a chance that these methods will generating a static charge — not a good thing. When using these cleaning methods, you should wear a static strap (available at any Radio Shack).

We recommend compressed air as the safest, most efficient solution for cleaning gear. This allows you to get into all the little nooks and crannies with ease. You might want to do this in a well-ventilated room when cleaning really old equipment. You can purchase compressed air in a can from (where else?) Radio Shack or a shop air compressor will also do the trick .

Q: I've heard that guitars purchased via mail order must be professionally set up after shipping. Is this true?

A: Guitars are shipped from the Sweetwater warehouse only after receiving a pro setup by our master luthier. Barring unforseen accidents, they will arrive at your doorstep ready to rock!

dbx DriveRack Studio: The Ultimate Monitor Management System

Most project studios, and even some smaller pro studios, have to make compromises when mixing because they are limited by the number of monitoring options available. If you're like most studio owners, you probably have just one or two sets of monitors in your control room, and no matter how good they may be, you could always use a second, third or even a fourth pair. But that costs big bucks, right?

Designed by the DSP wizards at **dbx** and programmed by the studio experts at Sweetwater, the **DriveRack Studio** ($859.99 list) is designed to deliver not only the benefits of several different monitoring systems in a single rackspace module, but a host of other functions essential in today's studio control room environment.

The DriveRack Studio concept. The DriveRack was designed to solve problems inherent in PA systems for live sound applications, but the recording engineers at Sweetwater Productions recognized that the vast array of tools available on the unit could be used to address a variety of studio monitor management tasks. So they set about programming a series of monitor emulation presets using the most popular monitors of the day from companies such as Yamaha, JBL, Mackie, Tannoy, Event, Auratone, Genelec and more. The product engineers at dbx were so impressed with these presets that they built them into a special DriveRack unit and thus was born the DriveRack Studio!

> **"You'd spend thousands of dollars on other gear to get everything the DriveRack Studio gives you for just a few hundred bucks!"**

What is studio monitor emulation? Every type of studio monitoring system has a particular sonic "signature." Studio owners have historically relied upon several different monitor systems to test how a particular mix translates to various playback environments. While a huge stack of speakers might look impressive, it eats up valuable studio space and is prohibitively expensive. The DriveRack Studio addresses this dilemma by emulating the sound of various environments and monitoring systems! In addition to its dimming and matrixing functions, the DriveRack features 17 internal presets that digitally adapt the output signal to accurately recreate the experience of listening to your material on a wide variety of popular studio monitor platforms, as well as things like built-in TV speakers, boom boxes and more.

Tune your room for maximum accuracy! Pro studios use expensive tools to "tune" their room to compensate for the frequency anomalies inherent in all acoustic spaces. That need is increased dramatically in today's average recording environment: a spare bedroom, converted garage or basement studio. Using the built-in Real Time Analyzer, you can quickly and easily find the frequencies that are being boosted or attenuated, then the DriveRack Studio automatically adjusts its own EQ settings to compensate.

The "must-have" studio device! The DriveRack Studio is easily one of the most useful additions to *any* studio, large or small. You'd literally have to spend thousands of dollars on other gear to get everything the DriveRack Studio gives you for just a few hundred bucks. Got more questions? Since Sweetwater helped voice the DriveRack Studio, we can answer all your questions and then some, so call your Sweetwater Sales Engineer today and get the full scoop!

www.sweetwater.com/DriveRackStu

THE DBX DRIVERACK STUDIO AT-A-GLANCE

- Emulate 17 of the most popular studio monitoring systems
- Tune your studio for maximum accuracy via RTA (Real Time Analyzer)
- Onboard equalization (multiband parametric and 24-band graphic EQ)
- Classic dbx compression, limiting and crossover filters
- Output matrix allows audio to be sent to monitors, recording devices, amplifiers, outboard processors and headphone systems
- Super clean 24-bit A/D and D/A converters
- 24 factory presets plus 24 user programs • Full graphic LCD display
- Subharmonic synthesizer • 2-channel XLR input / 6-channel XLR output
- Front-panel Real Time Analyzer XLR input with phantom power

Yamaha Compact, High-Performance MG Series Mixers

Yamaha has been innovating, leading, and (in many ways) defining the development of modern mixing consoles. If you need a high-performance, compact analog mixer for PA applications, the **Yamaha MG Series** may well be the first — and last — place you should look. In short, they offer extraordinary performance and mixing power at remarkably affordable prices.

If you simply need to mix a few analog sources to stereo, but insist on the finest audio quality, the **MG10/2** ($129 list) is compact and convenient to use, but won't compromise your signal in any way. If you don't need effects, or already have an arsenal of outboard favorites, the **MG12/4** ($239 list) or **MG16/4** ($329 list) may offer all the capabilities you need. If the idea of having some of the finest effects available built right into the console appeals to you, then consider the **MG16/6FX** ($419 list).

If your application is live sound reinforcement, you'll want all the channel capacity you can get – just in case. With 24 and 32 input channels, respectively, the **MG24/14FX** ($1099 list) and **MG32/14FX** ($1299 list) are ready to handle almost any sound reinforcement needs. The MG24/14FX has 16 mono mic/line channels while the MG32/14FX has 24. Both also offer four stereo line channels, and with dual SPX digital effect systems onboard, you won't need racks of outboard gear to get the sound you need.

Call your Sales Engineer for additional information and special pricing, or check out the MG Series on our website.

Yamaha MG16/6FX

www.sweetwater.com/YamahaMG

Focusrite Platinum TwinTrak Pro

Designed principally as an affordable, high-spec dual mono/stereo tracking device, the **Focusrite Platinum Twin Trak Pro** ($700 list) also boasts latency-free monitoring and unmatched digital connectivity. Each channel features Focusrite's award-winning Class A, discrete mic preamp, embellished with the option of instant "air" and variable input impedance for improved mic performance. A mid-scoop EQ provides variable frequency and depth of cut for vocal problem solving and miked-up cabinet ambience.

The TT Pro includes a powerful optical compressor along with side-chain inputs and the ability to operate as a true 'twinned' stereo pair. What's more, TT Pro is the first in the Platinum line to feature a 24-bit / 192kHz digital-to-analog (D/A) converter as standard. The D/A converter enables the user to feed mono or stereo digital signals into TT Pro, which can then be fed either into the stereo latency-free monitoring section or via line inputs for further processing.

www.sweetwater.com/TwinTrakPro

Apple's Power Mac G5: The World's First 64-bit Personal Computer

There is no longer any way a person can say that they have the world's fastest computer, since the minute the words are out of their mouths, a newer, faster, and altogether cooler model is on its way. However, for the moment, at least, the **Apple Power Mac G5** is the world's fastest personal computer and the very first with a 64-bit processor — which means it breaks the 4 gigabyte barrier and can use up to 8 gigabytes of main memory. The new G5 processor — available at speeds up to dual 2GHz with a new ultra high-bandwidth system architecture featuring AGP 8X and PCI-X — makes the Power Mac G5 a true breakthrough in desktop processing power. And models start at just (can this be possible?) $1999.

How fast is fast? The new Power Mac G5 blows right past both the fastest Pentium 4 and a dual-processor Xeon workstation when tested using industry standard SPEC CPU 2000 benchmarks. The PowerPC G5 processor dramatically accelerates performance in real world applications, too. When compared head-to-head against other "super fast" computers in a series of Photoshop tests, the dual 2GHz Power Mac G5 is 2.2 times faster than the 3GHz Pentium 4-based system and almost twice as fast as the dual 3.06GHz Xeon-based system. Additional tests reveal similar performance gains for things like pro audio and digital video applications!

Three powerful models. The G5 product line comes in three muscular configurations: 1.6GHz, 1.8GHz and a dual 2GHz model. They all feature the legendary SuperDrive (DVD-R/CD-RW) along with two FireWire 400 ports, three PCI expansion slots, ADC connector, DVI connector, analog audio in and out, optical S/PDIF in and out, front headphone and speaker jack and built-in Gigabit Ethernet — all standard. All models are AirPort Extreme-ready, and offer Bluetooth capability as an option.

Bandwidth to burn. The Power Mac G5's ultra-high bandwidth system architecture features a 1GHz frontside bus — one on each processor — for maximum throughput. And a point-to-point system controller lets data move directly between subsystems, without affecting processor function. The Power Mac G5 also comes with three PCI-X slots, giving you the benefit of the newest advance in PCI technology. The PCI-X protocol is perfect for high-performance devices, increasing speeds from 33MHz to 133MHz and throughput from 266MBps to 2GBps.

The 64-bit PowerPC G5 processor. Jointly developed by Apple and IBM, the PowerPC G5 delivers the largest gain in processing power in the history of PowerPC architecture. 64-bit processors enable the Power Mac G5 to break through the 4GB barrier and support up to 8GB of 400MHz, 128-bit DDR SDRAM — four times more than a typical PC. More memory and blazing fast 6.4 GBps throughput means you can write large projects to memory 40x faster than to a hard disk.

Whisper-quiet operation. Anyone who has owned (and loved) their "Quicksilver" G4 will tell you they are (ahem) just a tad noisy. The Power Mac G5's enclosure houses four discrete thermal zones to compartmentalize the primary heat-producing components. Fans in the zones spin at very low speeds resulting in a system that's actually three times quieter than the G4.

The first G5's have arrived at Sweetwater and the systems we've put together so far have lived up to the hype - they are indeed blazing fast, ushering in a new era in desktop music production.

> *Jointly developed by Apple and IBM, the Power PC G5 delivers the largest gain in processing power in the history of PowerPC architecture.*

www.sweetwater.com/G5/1.8sp

New Sweetwater CD-ROM Collections

In the past, Sweetwater's CD-ROMs for the Kurzweil K-Series were acknowledged as the best in the business. Now, we're teaming up again with the sound design experts at Stratus Sounds to deliver two new CD-ROMs for the Kurzweil family of instruments. Well, maybe more like one and a half. Our original Grand Piano CD-ROM set a new standard for sampled pianos. **Grand Pianos Version 3.0** ($229.99 list) includes all the sounds that made our original disc a best seller and adds three "mega" sized grands, with nearly 200 megs of brand new material, including a 64 meg version of our Bosendorfer Grand! Owners of previous versions of this disc can upgrade at a special price (call us for details).

In the "all new" category is our highly anticipated **Historical Keyboards** CD-ROM ($229.99 list). Included on this amazing collection are stringed keyboards, including two phenomenal (and quite different) Harpsichords. But the real stars of this show are the Pipe Organs. We sampled the best series of stops from each of three very different instruments for some truly inspired sounds.

Kurzweil owners have come to expect the very best from the comprehensive Sweetwater CD-ROM libraries and these two new discs will not disappoint.

Zoom's Red-Hot Fire-Series Guitar Amps

From **Zoom**, the company that revolutionized guitar effects, comes the **Fire Series** Guitar Amplifiers. The **Fire-15** ($289.99 list) and **Fire-30** ($459.99 list) both feature amp modeling and multieffects built into compact cabinets with solid power and great-sounding speakers. From vintage combo to modern high gain amp sounds, Fire amps give you the tone you want at the turn of a knob. From vintage tube to acoustic to solid state thrash metal, Zoom amps have it all. A clean amp setting is also provided for use with your outboard effects and pedals.

Every amp model is finely tuned to deliver a wide palette of tones for every kind of music. Naturally, as a leader in guitar effects processing for over a decade, Zoom equipped these amps with a full complement of awesome effects like chorus, flange, phase, delay and reverb, so there's a sound for every song.

	Power Output	Speaker	Amp Models	Effect Program	Effect Module	Patch Memory
FIRE-15	15 watts RMS	8-inch	11	17	5	20 10 user/10 preset
FIRE-30	36 watts RMS	10-inch	22	19	7	30 10 user/20 preset

www.sweetwater.com/ZoomFire

Apple's iTunes 4: All Your Music, All in One Place

The cover of the July issue of *Macworld* says it all: "Apple Rocks!" With the company's new **iTunes Music Store**, you can instantly browse and buy music from your favorite artists, at less than a buck a song. And **iTunes 4**, the stunning new rendition of one of Apple's greatest hits, comes with an appealing new feature: access to the fabulous iTunes Music Store, which is stocked with hundreds of thousands of songs you can preview and own with just one click.

The world's best digital music player now supports the new AAC audio format (think high-quality sound with even smaller file sizes — see Q&A on page 5) as well as MP3 files and lets you share your music with other Macs on your local Ethernet or AirPort wireless network. And if you have a Mac with a SuperDrive, you can archive your entire music library to DVDs for safekeeping.

Music sharing. iTunes 4 uses **Rendezvous** to give you remote streaming access to your personal music library from any room in your house. Let's say, for instance, that you have thousands of AAC and MP3 music files stored on a Mac in your home office. With iTunes 4, you can stream that music to other Macintosh computers anywhere in your house. And you won't have to manually configure anything, either: Rendezvous seeks out the other Macs on your local network and connects to them automatically.

The software part of the equation, iTunes 4 (which is part of the newest **Apple iLife** package), integrates seamlessly with any **iPod**, letting you carry up to 10,000 songs in your pocket, automatically synchronizing with the iPod at blazing speeds over FireWire. Simply connect an iPod to your Mac with FireWire and download an entire music CD in just 10 seconds. What's more, iTunes lets you stay in sync with Play Count, Last Played, Song Ratings and where your Audible spoken word content left off. When you listen to an audiobook on your Mac or iPod, the software creates a virtual bookmark. So the next time you sync your iPod with your computer, iTunes 4 will remember exactly where you left off.

> *Simply connect an iPod to your Mac with FireWire and download an entire music CD in just 10 seconds!*

The Apple Music Store. This Apple innovation is so significant that it just may change the way consumers buy their music — *forever!* The days of having to pay $18 for a CD that only has one really great song on it will likely become as rare as the Dodo, the Edsel (ask your grandparents) or the full-service gas station (ask anyone over 40). The record companies are quick to blame piracy, but the fact is, music lovers want more choices when they purchase their music and are just plain tired of paying absurdly inflated prices for CDs. Writers in many magazines, from *Time* to *Stereophile*, have predicted this.

Working hand-in-hand with iTunes 4, you can think of the Apple Music Store as a virtual shop where you can buy and download both complete albums (I recommend Santana's "Shaman") or individual tracks by artists working in many different genres, from hard rock to hip-hop to the classics. You have to be running iTunes 4 in **OSX 10.1.5** or later, and you'll need to create your own Apple account (which is a snap), but then you're ready to browse.

Just like an old-fashioned music store, you'll see graphic representations of thousands of albums. Click on any cover to see the contents. And here's the best part: for each track in the Music Store, there's *a 30-second streaming preview*, which means that unlike the old days, where you bought a CD and hoped that great song you heard is actually on it, you can listen to all the material and find the specific track you're looking for. In most cases, tracks sell for less than a buck — 99 cents to be exact, though certain material is less expensive and some more expensive (for example, some tracks are available only by purchasing the entire album).

True, in some cases you will only see partial catalogs or incomplete albums, but considering that Apple only opened up the Music Store in April, the amount of material available is nothing short of phenomenal and continues to grow every day. The bottom line is that for music producers and consumers alike, the opportunities represented by iTunes and the iTunes Music Store are sure to change the music distribution landscape for the foreseeable future. And for most of us, that's a very good thing! —*J.M.*

inSync

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Alesis ProLinear 720 DSP: Affordable Active Monitors

There was a time when active monitors were only to be found in top pro studios. We all know that active monitors, with drivers precision-matched to internal power amps are typically much more accurate than passive systems, but they were just too expensive for home and project studios. But all that's changed! The **Alesis ProLinear 720 DSP** ($450 each list) employs custom DSP technology to deliver sound quality and accuracy that was unavailable at this price until now.

Clarity, imaging and transient response are truly outstanding. But great sound is just the start: the ProLinear DSP's internal processing allows users to configure the speaker for almost any application via the front panel control or the included graphical PC application software. What this means is that the monitor can essentially "mimic" other popular studio systems or be precision-tuned to maximize the frequency response of the monitors to any room.

Great speaker designs start with the best drivers and the custom drivers in the fully-shielded ProLinear 720s are, in one word, exceptional. The woofer has a cast frame with a 7" Kevlar cone and oversized magnet. The tweeter is a 28mm silk dome with flat frequency response and low resonance to reduce harshness and is ferro-fluid cooled to provide outstanding power handling.

www.sweetwater.com/ProLin720DSP

Max Ax: New Guitars from the Top Manufacturers

Just when we were thinking 2003 was unquestionably the "year of the keyboard," a whole lot of great new guitars from the best names in the business were shown at Summer NAMM.

Fender® blew everyone away with the sheer number of new models. To list them, we'd need an extra 16 pages in this issue, so just the highlights for now. The most significant development is the new **S-1 switching**. All American Series HSS, HH and HH Hardtail **Stratocaster**®, **P Bass**® and **J Bass**® guitars now come equipped with this impressive switching system, so players can choose from an endless array of pickup configurations! With the simple push of a button (located on the top of the master volume knob) you can switch humbuckers into single coils instantly! The switch is visually undetectable but it turns your instrument into the most versatile ax on the planet!

While it may not get your money for nothing or your chicks for free, the **Mark Knopfler Strat**® will help you conjure up the same tones that made the legendary Dire Strait's guitarist famous! It features a '57 Strat design on an ash body and a vintage '62 C-shaped maple neck with a rosewood fingerboard and three Texas Special single-coil pickups.

Designed in collaboration with the late Kurt Cobain, the **Jag-Stang**® reissue blends features from two distinctive designs, the **Jaguar**® and **Mustang**®! In 1993, Cobain came to Fender with some cut-up photographs of his two favorite guitars stuck together and the Jag-Stang was born.

Brian Moore 81.13 in Natural

The **Highway 1 Series** has put American-made Fender guitars into the hands of working musicians everywhere. Building on this theme, Fender showed the **Highway 1 Texas Telecaster**®! By pairing an ash body and one-piece maple neck with a modern 12" radius and jumbo frets, Fender has created a guitar that feels as familiar as your favorite lounge chair. Two new **Hot Vintage** pickups and strings through-the-body bridge with brass barrel saddles adds vintage vibe!

Finally, in an unexpected move, Fender will now be handling **Gretsch** guitars. High-profile Gretsch players have included George Harrison and Chet Atkins, and this year marks the company's 120th anniversary. This author's dream guitar? The gorgeous **G6120 Nashville** reissue with figured maple top and amber stain. Yikes, hide the checkbook, dear!

The **Custom, Art and Historic Division** of **Gibson Guitars** celebrated its 10th anniversary with special models featuring Diamond White Sparkle finish and highly engraved gold hardware. The **CS-356**, a highly ornamented version of its unique, semi-hollow-body design joins the **L-4 Thinline** and **'68 Les Paul** reissue. Custom also pays tribute to influential guitarists with the **Lee Roy Parnell CS-336**, **Joe Perry Signature Les Paul** and the **Allen Collins Explorer**. Stars of the highway also receive the Custom treatment, with a Les Paul **50th Anniversary Corvette**, a **Hummer H2** and a one-of-a-kind instrument to introduce the new **Chevy SSR**.

Gibson's **Epiphone** division introduced the **Lynyrd Skynyrd Limited Edition Les Paul**, which has previously been available only through a promotion for the band's 30th anniversary tour, and the **Bob Marley Les Paul Special**. Gibson Montana, the company's acoustic division, commemorates blues legend Robert Johnson with a signature **L-1**, modeled after the small-bodied Gibson used by Johnson, plus a highly ornamented, limited-edition version. The first Montana-produced **Chet Atkins CE/CEC** solidbody classical models were also on display.

In conjunction with **Parker Guitars** 10th Anniversary Celebration, the company unveiled new versions of the original **Fly Classic** and **Fly Deluxe** models. The new Flys represent the first

Fender's Ultra-versatile S-1 Switching

> *Just when we thought 2003 was the "year of the keyboard," a whole lot of great guitars were shown at Summer NAMM!*

significant updating to the line since production began a decade ago. Improvements to the originals came after an exhaustive analysis of input and suggestions provided by hundreds of Parker Guitar owners, enthusiasts and dealers. All improvements have been incorporated into the newest member of the Parker Fly family, the Parker **Mojo**, whose characteristic sound comes from its one-piece composite-reinforced mahogany neck and solid mahogany body along with Seymour Duncan Jazz and JB pickups for extraordinary warmth and midrange.

Brian Moore Guitars showed its new, aggressively priced **i1000 Series** at the show. Ranging from $595 to $1,195 (list), the guitars in the i1000 series continue the Brian Moore tradition of "blending art and technology." The new i1000 Series features many of the Brian Moore design elements including beautiful figured wood, the comfort-contoured top and sculpted headstock, at a surprisingly affordable price. Each model is available in six exciting colors: Cinnamon, Turquoise, Emerald Green, Purple, Natural, and Charcoal Gray. The iGuitar features the RMC 13-pin
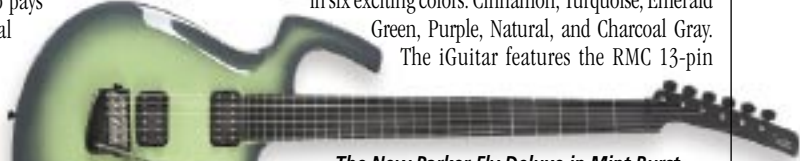
The New Parker Fly Deluxe in Mint Burst

system for superior tracking performance for Roland 13-pin products, such as the GR-33 ad VG-88. It also features the RMC piezo system for a rich, warm acoustic tone.

We came across the **Little Martin** over at the **C.F. Martin** booth and think that guitarists will really appreciate all that it has to offer, including the little price! It's comfortable to play, tonally viable, affordable, environmentally responsible and compact.

Anyone who has listened to the radio in the past year has heard John Mayer's voice and rhythmic guitar signal the arrival of one of the hottest musical talents in recent memory. Mayer depends on Martin guitars to achieve his signature sound. Based on the **OM-28,** Martin rolled out the **John Mayer Signature Model** which includes an interior label personally signed by John.

Also wowing the crowd was the stunning **D-50 Koa Deluxe Limited Edition**. This beauty won't find its way into many players' hands: with a price tag of $45,000, the D-50 Koa is constructed with Hawaiian koa back and sides. The soundboard is premium Sitka spruce with heavy bearclaw figuring and also features a genuine African ebony fingerboard with an exquisite Tree of Life inlay.

That's all we have room for, though we've just barely scratched the surface. Check out upcoming issues for more detailed information as well as my *Tech Notes Online* column for in-depth looks at the hottest new guitars from all the major players! —*Jim Miller*

Sweetwater "Makes the Band" on MTV Hit Series

When MTV needed a professional audio production rig for the second season of their hit reality series, "Making the Band," they knew they not only needed help selecting and putting together the right gear, but also needed an industry heavy hitter to pull together all the equipment and have it up and running in short order.

So it came as no surprise that they turned to the music technology experts here at Sweetwater for help! The reason is simple: our company is uniquely qualified to organize such an undertaking due to our remarkable relationship with all the top manufacturers and our ability to design, install, maintain and service an entire studio at literally a moment's notice!

A huge MTV hit, "Making the Band 2" follows the trials and tribulations of an aspiring hip-hop group as they strive to become the next big thing. P. Diddy, one of the most recognizable figures in the entertainment industry, developed the show and serves as the band's mastermind, helping the group build their sound and image and putting the young performers through what amounts to "music industry boot camp."

For the series, MTV needed a high-end audio production center for in front of the cameras that would be used to record and produce all the music the performers create on the show. In other words, millions of television viewers were going to actually see music being made via this studio. This meant the system had to be versatile and powerful enough to deliver pro quality recording, editing, mixing, and mastering.

Sweetwater put together over $80,000 worth of gear from today's top manufacturers, all built around a state-of-the-art Pro Tools|HD2 system running on a dual processor Power Mac G4.

Sweetwater put together over $80,000 worth of gear from many of today's top manufacturers, all built around a state-of-the-art Digidesign Pro Tools|HD2 hard disk recording system running on an Apple dual processor Power Mac G4.

With an audience of millions tuning-in week after week to check out the progress of P. Diddy's protégées, it was essential that the show's audio production rig reflect the industry's current state of the art, while also providing both the performers and audio engineers with equipment that they were familiar with. The core of the system used on the show was based on the essentials of P. Diddy's own production facility.

A number of other issues had to be taken into account, such as the camera crew's ability to maneuver around all the equipment and capture the action as it happened. As experts in pro audio, MIDI and computer-based audio production for over two decades, Sweetwater was uniquely qualified to handle the task.

P. Diddy, along with the show's producers, had definite ideas about some of the audio equipment they wanted to work on. For the rest of the gear, Sweetwater served as a consultant, helping with decisions on everything from microphones to monitors, as well as other items based on the producers' requirements. While this was in and of itself a very cool gig for our company, it also carried a bonus feature: at the end of production, much of the equipment would be donated to charity.

Thanks to Sweetwater's involvement, many of the industry's top manufacturers stepped up to the plate with donations of gear that any aspiring artist would love to have access to. You can see the results of this collaboration on MTV's "Making the Band 2" on Wednesday nights at 10 PM (East Coast time) or check out the full "Making the Band" Gear List at *sweetwater.com/mtv*.

Novation Introduces KS Rack Virtual Analog Synth

The new **KS Rack** synthesizer ($1,099 list) from those virtual analog mavens at **Novation** features four-part multi-timbral operation, 16-voice polyphony and four individual audio outputs. The ergonomically designed front panel is simple to use with all the important sound shaping controls all logically laid out for you. For ease of editing, the 2 x 20 character backlit LCD screen accepts full descriptions for program and parameter naming. Recall a named factory preset, tweak it and instantly save it in any of the 400 program or 100 performance locations.

- Desktop or rack mount 5U package with 33 knobs and sliders
- Liquid analog sound based on the enhanced K-Station engine
- HyperSync editing for instant sync and effects settings
- Four-part multi-timbral with four individual outputs
- 16-Voice Polyphony plus 16-band Vocoder
- Four arpeggiators • 2 x 20 character backlit LCD
- Audio input for processing of external signals
- 400 memories (200 pre-programmed) and 100 performance memories (50 pre-programmed)
- 6 high-quality simultaneous FX on each part: Reverb, Chorus, Phaser Delay, Panning and more

www.sweetwater.com/KSRack

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Hardware to Software: Virtual Instruments for the 21st Century

The earliest hardware samplers, despite being an amazing achievement, had a lot of limitations. The earliest samplers shipping with a paltry 128k or 256k of sample memory, had limited polyphony (usually 8 voices or less on some early units) and cost a lot of money.

While hardware samplers did increase in the RAM and polyphony departments, those improvements came with a heftier price tag. But then, a few years back, some forward-thinking companies saw the potential for software samplers that would tap into the huge amounts of RAM typically onboard modern computers. And thanks to faster, more powerful PC processors, polyphony was increased dramatically.

The first software sampler that ever found its way into my hands was the **Unity DS-1** from **Bitheadz**. After so many years of working with hardware, this was pretty radical, but after working with it for a while, I could see that software sampling had some distinct advantages, not the least of which was the low cost — like most other musicians, I already owned a computer.

But Unity was just the start. Though it may not have been the very first software sampler, **GigaStudio**, which is based on the **TASCAM GigaSampler** format and its Endless Wave technology, allows huge sample files — up to 4.3 gigabytes — to be streamed directly off the hard drive, instead of from RAM. How about polyphony? With

> **Companies saw the potential for software that would tap into the huge amounts of RAM and fast processors onboard modern PCs!**

a top-of-the-line GigaStudio, users have 160 disk-based, streaming voices of polyphony available in real-time, so there's no more voice-stealing or drop-outs. Listing at a mere $699 and weighing just two pounds, GigaStudio 160 has to be the cheapest, most versatile "per voice" sampler available for the PC (sorry, no Mac version — yet).

Just before going to press, **MOTU** shipped their highly anticipated **Mach Five** software ($395 list), whose claim to fame is its ability to read almost any sample format ever invented, from Akai and Kurzweil to Roland and even the Giga format! What's more, it will run as a plug-in from within any Mac or PC audio application. This is the very definition of cutting edge software, and by all odds, this one is going to be huge! The next upgrade will offer disk-based sample streaming.

"**I am so impressed with the response time and the service I've received since buying my gear. I'll definitely tell all my musician friends about you guys!** — *Lisa Brady*

Beyond Giga and Mach 5, we have all manner of software samplers: there's **Sampletank** from **IK Multimedia**, which runs as a plug-in from within host applications that accept VST plug-ins or in the MOTU MAS environment. **Native Instruments** offers **Kontakt**, which can run either as a plug-in or in standalone mode.

Another immensely popular product is **Reason** from the geniuses at **Propeller-head**. This is more than a software sampler; it's a full-blown software workstation for both Mac and PC that literally does it all: sampling, synthesis, multitrack recording and effects, plus step time drum machines. Reason has gotten rave reviews from several of my friends who swear it's the most fun they've ever had — well, legally.

So are your hardware samplers obsolete? Think back to a few decades ago when digital keyboards were all the rage and everyone got rid of their analog synths, only to find out too late that they still had a great deal of value as an additional sound source with a destinctive voice. Any sampler you own now will still do everything it's always done and, personally, I would never get rid of my Kurzweil K2500.

But the best news is that anyone with a computer will find a software sampler that will run on their system. The learning curve is not particularly steep with these packages, as they essentially duplicate in software, functions that any sampler owner will find familiar.

For most of us, the change will come at whatever speed we're comfortable with. Considering how much sonic firepower these next generation samplers offer at a fraction of the cost of their older hardware relatives — not to mention their increase in polyphony — you can bet that they will find a place in every serious musician's studio soon. — *J.M.*

VariOS: The Most Flexible Roland Product Ever?

Roland is a name long associated with the finest in hardware, from the TB-303 and SH-101 to the current crop of Fantom instruments and the amazing V-Synth. At the same time, the company recognized the increasing power, flexibility, and user interface advantages of today's computer technology. Rather than abandon the benefits of a hardware instrument in favor of virtual synths, Roland did one better – they built a radical piece of gear, the **VariOS** ($1,495 list), with the open-ended architecture of a virtual instrument, plus Mac and PC connectivity for the ultimate in graphic user interface. Simply put, the unit interfaces with your Mac or PC via USB port and the **V-Producer 2.1** software, which allows you to manipulate pitch, timing and formant information, all in real time. The VariOs module produces the sounds, while the computer stores all the data. It's all actually a very efficient use of both computer and synth. And now, the company has also introduced the new **VariOS-8** and **VariOS 303** modeling synths, which effectively turns your VariOS module into a virtual Juno/Jupiter synth and TB-303! As the company that actually built these products, there's nobody else that has the inside track on just how the original magic was created.

Roland VariOS Module

The Nitty-gritty. VariOS can be customized for different needs. With the bundled V-Producer software, users can create audio-based arrangements while independently manipulating pitch, time and formant without unwanted artifacts. Load the VariOS-8 and VariOS 303 software, and VariOS can emulate some of Roland's most popular vintage synths—complete with an impressive array of effects.

Easy Audio Encoding and Arranging. Building a song is simple. Browse your computer hard drive for .WAV and .AIFF files. V-Producer can then quickly and automatically batch encode the data and transfer it via USB to the module, so you can arrange tracks using simple drag-and-drop commands.

Twist Your Loops with GrooveScope. First, GrooveScope analyzes the audio and time-slices it into separate events. Not only can these events be re-arranged to create new loops, but each event's pitch and time can be manipulated graphically without altering the original sound quality. All editing is non-destructive, so you're free to experiment as much as you please—all in real time.

To find out more about VariOS and just how it can change the way you make music, call us today!

www.sweetwater.com/VariOS

Tips, Tools and Techniques

Live Orchestral Recording by Sweetwater Productions

by Chet Chambers

Orchestral recording presents several unique challenges. For example, the acoustics of the space (as well as the acoustic properties of many orchestral instruments) are generally designed to provide the audience in the hall with an optimum listening experience, rather than provide an ideal recording environment, and there's little room for error – if you don't capture the performance live, it's virtually impossible to convincingly overdub a single instrument later!

Sweetwater Productions, our Recording Studio division, records the Fort Wayne Philharmonic Orchestra during live performances about a dozen times each season for later broadcasts on Public Radio. Each performance presents a unique challenge because in addition to the issues outlined above, the details change each time; i.e. size of the orchestra, recording venue, instrumentation, style of the music and so forth.

The Gear

In our portable "live studio" environment we record using an **Apple G4 Platinum Powerbook** into **Digital Performer**. The interfaces we use are the **MOTU 828** FireWire interface and a **Presonus Digimax** mic preamp, giving us up to 10 channels of mic inputs into Digital Performer. We monitor through a set of **Genelec 1029A** monitors — they're remarkably compact and yet they sound great!

Our favorite mics for recording are a pair of **B&K 4011**s, a pair of **Earthworks** Omnis, and then an assortment of mics for soloists including the **Neumann KM184**, **AKG C414BULS**, **Rode NT5** and **Shure SM81** and others as needed. The B&K's are on a stereo bar suspended about six feet above the Conductor's ears and steadied into position with clear nylon fish line attached to the balcony level of the venue. This is our main pair for capturing the overall sound of the Orchestra, much as the Conductor hears them.

The Earthworks Omnis are suspended from the ceiling, ten to twelve feet above the far corners of the stage and are pulled into position with clear nylon fish line. These mics give us a great recording of the sound of the room, the Orchestra shell, and the audience reaction. Soloist mics are generally placed on stands, four to six feet in front of the performer and are used to capture the sound of the soloist in addition to the audio on the two stereo pairs. Often the signal from these mics is sent through a splitter to provide a feed to the house sound reinforcement system.

> **"There's little room for error — if you don't capture the performance live, it's virtually impossible to convincingly overdub a single instrument later."**

The Locations

The Fort Wayne Philharmonic Orchestra, lead by Edvard Tchivzhel, Music Director, is recorded at two different venues. One is the Embassy Centre, a beautifully restored 75-year-old, 2800-seat theater with a large stage, balcony level, and plenty of fabric on walls, seats, floors, and curtains throughout. Our recording equipment is set up in a dressing room in the basement area of the Embassy so, unfortunately, we can't see what is going on up on stage. This venue is where the Orchestra performs their Masterworks series of concerts; generally larger orchestral pieces, sometimes with vocal soloists or even a large vocal chorale.

The Fort Wayne Philharmonic Orchestra at a Christmas concert at the Embassy Centre. Note the two soloist's mics off to the conducter's left.

The other venue is the Performing Arts Center, which is a 600-seat auditorium with a smaller stage, bare concrete walls and ceiling, and an entirely different sound than that of the Embassy Centre. This particular room has a balcony-level sound booth where we can conveniently view the concert while recording. These are smaller Chamber style concerts, usually with less instrumentation.

We record both the evening performance and the final morning rehearsal of each concert. This allows us to edit the evening performance should there be any problems with the recording or performance. It's sort of an "insurance policy" against any and all potential problems. We generally only edit and insert entire movements rather than just measures of music, which helps keep the continuity of the sound and cuts down on production time.

Once the tracks are recorded we import them into a **Pro-Tools|HD system**. Here's where we time-align all the tracks, EQ where necessary, edit sections as needed, insert limiting to the mix to make it better suited for radio broadcast, and add the pre-recorded announcer information. We also put the mix into the Notre Dame Cathedral preset in the **Altiverb** reverb plug-in for ProTools. Altiverb's sampled environments allow us to make the Orchestra sound warm, crisp, and "larger than life."

The final mix is burned to CD using **Roxio Toast** and is ready for broadcast on public radio. Including setup and teardown, recording, editing, mixing, and mastering we generally spend about 12-15 hours per performance creating the broadcast CD from start to finish. Today's DAW workstations and powerful laptop systems have made recording live orchestral performances much easier, saving our clients time and money, our two-man crew from backaches and our engineers from headaches, all while providing a better recording for the listening audience.

PowerCore FireWire: Ultimate Power and Mobility

Looking for hardware with lots of knobs, sliders, flashing LEDs, big meters and an LCD display to impress your friends? If so, it would be best to look elsewhere. But for audio pros on the move, even the most complex mixes become a reality on laptop or desktop systems with the deceptively spartan-looking **TC Electronic PowerCore FireWire** ($1,795 list).

PowerCore is the open DSP-platform for processing inside any VST or Audio Units compatible audio application. Bringing the benefits of dedicated DSP hardware to native platforms, PowerCore Firewire features a Motorola PowerPC and four Motorola DSPs for unsurpassed flexibility and quality. All signal processing is performed in the PowerCore unit, freeing up precious host performance resources for virtual instruments or native Plug-Ins.

No longer is high quality audio limited to the confines of the traditional recording studio. As laptops get lighter and more powerful, true high-res audio can be recorded, mixed and mastered in almost any environment. The only limitation is access to an AC outlet (or a really, really long extension cord). By the time you read this, a Mac OSX-compatible version of the software should be available.

www.sweetwater.com/PowerCoreFW

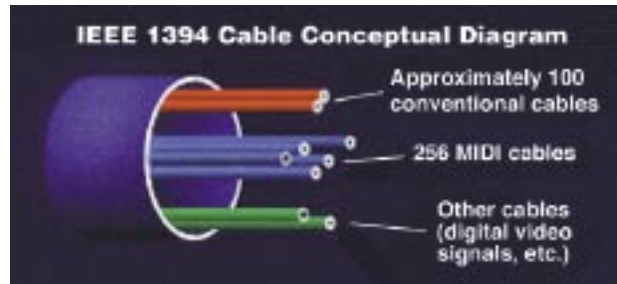# mLAN: Simple, Powerful Networking for Music Systems

In today's studios — from pro to project — the sheer number of connections involved can be overwhelming. MIDI and audio signals are routed separately, with each MIDI cable handling up to 16 channels of data, while audio, be it analog or digital, typically requires a separate cable for each channel. The situation is further complicated by numerous connector types and line level standards, as well as the care that must be taken to ensure that outputs are properly connected to inputs. This often results in a literal rat's nest of cables that make reconfiguring many studios into a nightmare.

The innovative **mLAN networking system**, as implemented by **Yamaha**, neatly overcomes all these problems by allowing many channels of digital audio and MIDI music data to be transferred via a single 1394-standard cable, also known in the industry as FireWire. Extremely powerful music systems can be quickly and easily configured using mLAN-compatible musical instruments, computer components and interface devices. Adding devices to or removing devices from an mLAN system is easy too, with none of the frustration and downtime incurred when re-configuring conventional systems.

High-speed, high-volume data transfer. Based on the industry-standard IEEE 1394 high-performance serial bus, mLAN transfers music and audio data at speeds of up to 200 Mbps. Up to 100 channels of digital audio data or up to 256 "ports" of MIDI data (16 channels x 256 connections) can be transferred via a single cable. Just imagine the bundle of cables you'd need to transfer that volume of data with conventional connections!

Here's yet another benefit: You don't need to worry about the order you connect the devices in, and mLAN ports are "hot pluggable" so you can unplug and plug in devices without having to power-down or reset your entire system like you did in the "old days." This saves an amazing amount of time and potential headaches when changing the configuration of your studio.

IEEE 1394 Cable Conceptual Diagram
- Approximately 100 conventional cables
- 256 MIDI cables
- Other cables (digital video signals, etc.)

Flexible computer-based patching. Using the software patchbay application provided with all Yamaha mLAN products, you can easily reconfigure your system – connecting and disconnecting devices as required – without having to physically plug, unplug, or re-route any cables at all. And although computer control can be an advantage in mLAN networks, mLAN also allows music and audio devices to be networked without a computer — an ideal way to set up systems for live performance.

Though it will still be a few years until all products take advantage of this technology, the writing is clearly on the wall: mLAN is unquestionably the way all studios and all musical instruments — as well as other devices, such as video and digital still camera — will be connected in the very near future. Almost all Yamaha products, as well as quite a few from other manufacturers, are already equipped with mLAN-compatible connections.

Get ready to say goodbye to that mess of "studio spaghetti" lurking on the floor and behind all your gear. Thanks to mLAN, that tangle of cords, cables and dust bunnies will soon be a thing of the past!

Roger Linn DESIGN
ADRENALINN II

The AdrenaLinn was an instant hit, so what does Roger Linn come up with to top his opening act? AdrenaLinn II ($499 list), a slick module that gives you everything the original was famous for, like beat synched filter effects, amp modeling and drum machine plus lots more, using a more powerful internal computer and expanded memory:

- Redesigned for simplified operation—quickly and easily get the sounds you want
- 12 new superb amp models for a total of 24
- New filter types for cool new sounds
- Delay time nearly tripled to 2.8 seconds
- Foot selection of presets and tap tempo
- Improved drum sounds, presets and beats

www.sweetwater.com/AdrenaLinnII

DigiTech Vx400 Vocal Processor with USB Interface

On stage, in the studio or anywhere inspiration strikes, the **DigiTech Vx400** vocal effects processor ($399 list) delivers everything you need to get your perfect sound. It's the first modeling processor with true two-way computer connectivity and extra I/O to handle vocals, along with other instruments, plus full monitoring capabilities. Basically, this is everything you need to record or perform, including a kick-ass floor processor.

Like the best-selling RPx400 Guitar Processor, the Vx400 includes direct XLR speaker-compensated outs to run to your PA, and a USB recording interface with all of the ins and outs you'll ever want or need. The Vx400 offers you the choice of multiple vocal "character" selections, with sophisticated modeling of 16 different pro microphones, plus an integrated drum machine with 30 rhythm patterns, 19 programmable instrument effects and more. But you don't have to be an audio engineer to get the most out of the Vx400. Just plug in your favorite mic, guitar, keyboard and CD player, select a preset and you're ready to go.

On stage you can have the best of both worlds by using the separate 1/4" and XLR outputs to send your sound to the PA system using DigiTech's critically-acclaimed cabinet modeling. When you're ready to record, your audio is also ready to stream directly into your PC, turning it into a professional, hands-free 24-bit multi-track recording workstation. Use the stereo line level inputs to record any instrument – just plug and play. Also included is exclusive new recording software, designed by Cakewalk and DigiTech, getting you on your way to recording and burning your next hit CD!

www.sweetwater.com/Vx400

DIGITECH VX400 FEATURES:
- Full featured vocal processor modeling
- Multiple vocal "character" selections
- Full function compressor plus 3-band equalizer
- Built-in expression pedal
- 40 factory presets plus 40 user presets
- Convenient USB audio interface
- Stereo line level inputs and outputs, plus balanced XLR outputs
- Full complement of cutting edge effects
- Jam-along input • Power supply included

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

This issue, we'll continue our virtual company tour by visiting what most of you would consider the "candy store" here at Sweetwater, our incredible warehouse! "How exciting can this be?" you might ask. Well, if you've ever seen it running full tilt during "crunch time" (late afternoon of any normal weekday) you know that this is an amazing department and a real key to the "Sweetwater Difference" in terms of providing extraordinary service for our customers.

As you can probably guess, our warehouse has grown immensely over the years and is now one of the largest in the entire industry. We've gone from being able to fit all of our inventory into Chuck's house back in the early days, to building progressively larger spaces until we moved into the *huge* warehouse we use today!

Yes, I could talk about square footage or the number of packages we ship each day, but I'd rather tell you how our warehouse is different from anybody else's. As usual, this involves some philosophy about customer service and starts with our Shipping Manager, Brian Randol. His extensive background includes well over a decade of successful warehouse management as well as experience working at UPS, so he really "gets" all sides of the shipping game. I've never met a person in his position who is so totally committed to excellence and understanding of how his crew's work affects customer satisfaction. This is indicated by his management style, which is very positive and team oriented. This team approach is critical at crunch times, where everyone has to work smoothly to get every order right and on its way to you fast.

Chris Kellum, our Assistant Shipping Manager, has been with Sweetwater for nearly nine years and also had prior shipping experience. While I'd love to tell you a little bit about each of the great folks who make this department hum, I need to move on to the reasons they are such a key to the "Sweetwater Difference".

Reason #1 – A Box Isn't Just A Box.

When you buy a product from another retailer, odds are that it arrived at their warehouse on a pallet, with the rest of the order from the manufacturer. With other retailers, that product is generally pulled off the pallet and shipped to you in the box it arrived in. Here at Sweetwater, we apply our years of experience and the millions of boxes we've shipped, and the fact is, some boxes just aren't able to handle shipping without being repacked or packed in a larger box with additional packing material.

Due to the large volume of products we ship and the experience we've gained over the years, we've been able to provide valuable feedback to our manufacturers, many of which have changed the way they package products based on our input!

Reason #2 – We're "Green."

Yep, we work very hard to be environmentally sensitive, so we avoid using Styrofoam materials as much as humanly possible. We collect and recycle boxes for packing from other local businesses, so your gear may arrive at your home not in a special "Sweetwater" box, but one from a clothing store, for instance. It's less advertising for us, but we helped save a tree! We also buy and use clear plastic "air pillows" wherever needed, as they have a minimal impact on the environment (they're 100% recyclable!).

Reason #3 – Accuracy.

I'm guessing this one is pretty self-explanatory, but when you place your order, you expect to receive exactly what you ordered exactly when you were told it would arrive (or before). To ensure accurate shipping, each order goes through a 4-step check-off process. First, the puller (who locates and carefully pulls your order off the shelves) signs off on the order once he or she has it in hand. Next, a shipping manager double-checks the order. Then, a packer (the person who boxes the order) triple checks it for accuracy while packing. Your order is checked one last time when we determine shipping methods and confirm shipping address.

Reason #4 – Candy.

I have to admit that when I made my first purchase from Sweetwater as a customer, I was pretty knocked out by the candy that came in the box. Maybe I'm easily impressed but I thought it added a personal touch and a nice tie to the "sweet" in our name. I think it also shows we really do value our customers and want to do something a little extra to show our appreciation for their business.

Reason #5 – SweetTrack.

This is the most secure way possible for you to know the status of your order once it has shipped. We don't offer package tracking using the carrier's tracking number for security reasons. So we've developed a system that allows you to track your order using your Invoice number, Customer ID number or the last 4 digits of the credit card. It's convenient, fast and much safer than using the carrier's tracking numbers, plus you get the convenience of both FedEx and UPS tracking integrated into one system!

The bottom line is that, with our experienced shipping team and our gigantic warehouse, you know your order is in good hands with us here at Sweetwater!

Rock and Roll! — *Jeff (VP of Sales)*

M-Audio Ozone: Everything but the Kitchen Sink!

M-Audio revolutionized the world of the mobile musician with their Oxygen 8 MIDI controller. Offering full controller functionality (including 25 full-size keys) in a package whose price was as small as it's footprint, the Oxygen 8 fit into just about any portable musical setup. But what can they possibly do for an encore? Introducing the **M-Audio Ozone** ($399.95 list). This tiny beast packs quite a punch, and M-Audio believes that it will change the way you interface with your computer forever.

The Ozone is an all-in-one keyboard, MIDI control surface, mic preamp, USB audio interface and USB MIDI interface. What's more, it's no bigger than a laptop. Combined with your computer and software like **Reason** or **Live**, the Ozone provides a complete personal mobile studio from input to output, with a built-in 16-channel USB MIDI interface, a 25-note full-size keyboard with eight assignable MIDI controllers plus pitch and mod wheels. Add an onboard 2x2 24-bit/96kHz audio interface, XLR mic inputs with phantom power and a Direct Monitor switch for zero-latency monitoring, and you have one product that does the work of three or four, and all without a mess of connections — just one USB cable does it all.

System Requirements: Windows 98SE/Me/2000/XP; Mac OS 9.1 or OS 10.1 and higher; OMS under OS 9 (included).

When somebody tells you about some awesome new effect they've heard, you usually think about a piece of equipment that sounds amazing, but carries a hefty price tag, as well. I'm happy to report that the product designers at **Alesis** — the company that introduced the world's first affordable digital reverb, digital multitrack and 64-voice synth — have come up with some totally mind-blowing effects that also happen to have a mind-blowing low sticker price!

The rationale was so simple, you have to wonder why nobody thought of it before: Why make a musician pay for effects they don't need? Introducing the **ModFX** modules, great-sounding digital effects with a list price of just $129. And no, that's no misprint, and your Sweetwater price will be even lower.

All the ModFX units have link ports on either side which allow multiple modules to be connected as a

> ## "The rationale was so simple: Why pay for effects you don't need?"

chain with no patch cords. Audio is passed along as a lossless 24-bit digital signal. Okay, so that's pretty revolutionary to start with, but once you hear the sounds, you'll ask "How did they put all that signal processing in that little box at such an affordable price?"

Auditioning all seven of these little guys was no small task. There's an enormous amount of sound processing available from each of these cool-looking metal
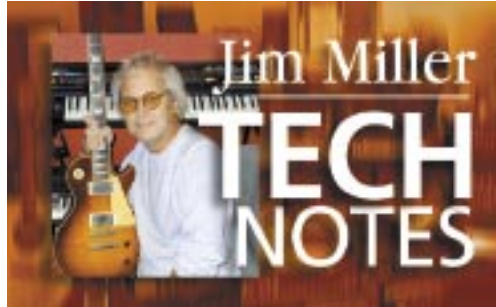

The Alesis Ion Analog Modeling Synth

modules, and discovering all their sonic capabilities took some time. In truth, each one of them deserves their own review, but that would take way too long, so I want to give you an overview here. Later in this article, I'll tell you where to find more information.

While each one has a particular function, most of the ModFX units have a full featured, synth style modulation section, typically with multiple LFO waveshapes, sample and hold, triggered envelopes, envelope followers and random pattern generators. Modulations can be matched to your music's tempo using the audio beat sync capability! The pattern mod is especially cool, because it's a 16-step repeating sequence where the step levels and the slew are generated randomly each time you turn the ModFX on or press the Mod Reset button. It's almost like getting an infinite supply of inspiration every time you hit that button.

Ampliton. You might think tremolo and autopan, while nice effects, are not normally thought of as being terribly inspiring. But when you take each effect and combine them, you create amazingly intricate spatial patterns with your audio. Both effects can be synchronized to each other, as well as to incoming signal. With a little tweaking, you can get great vintage guitar amp tremolo sounds. Wow!

Phlngr. This little beast offers five flange types, with two of them having nontraditional (contrary and asynchronous) stereo movement. What makes this box different from other flangers is the modulation section. When was the last time you heard a flanger shape that had a 16-step randomly generated pattern synchronized to the beat of your audio input? Whew!

Faze. Everything I said about Phlngr applies here, though the sound of each unit is unique. We've all heard phasors before, but typically the modulation is via a triangle wave LFO. The extra modulation types are what make the effect so dramatic. Whoa!

Philtre. This is a wonderful multimode, resonant filter that switches between 2-pole and 8-pole via the Steep button. The 8-pole filter is very unusual and near impossible to describe, while the 2-pole filter evokes the sweet Oberheim multimode filter. Knob twisting is great fun and Pattern Mod is especially cool. Whoo!

Metavox. If someone told you that you could buy a 38-band hardware Vocorder for $129 list, you'd say, "No way." Yet here it is, and thanks to its 38 bands, it's very intelligible. You can also add in a bit of noise to help recreate sibilance. The input gain can handle a dynamic mic and there's an internal synthesis source (very tasty) or you can use your own carrier. You can sweep their frequencies down into LFO range or use them with the modulation section and beat sync. Shazam!

Smashup. Each compression type has its own ratio, knee and other characteristics, some of which were modeled after classic compressors. For example the Opto type reacts like an LA2A. While you don't get all the gorgeous Class A sound quality (or the price tag), Smashup sounds great thanks to modeling, which captures the harmonic distortion characteristics of real vacuum tubes. Okay, if you want to get technical, this one's not really a modulation effect, but still . . . uh, yippee??

Bitman. This is a cool collection of nasty grungifying effects: Decimator, Bit Reducer, FM, Ring Mod and Frequency Shifter plus a Comb Filter, Dual Phasor,

Distortion, and Compression. The user interface is a little different on this box, as it allows you to change the order of the effects in your chain. If your digital audio sounds just a bit too squeaky clean, Bitman will definitely dirty it up for you. Again, not really a mod effect, but still a whole lot of sonic firepower for a tiny bit of cash.

I mentioned earlier that you could get more information on the ModFX units, so this is the perfect time to tell you that by the time this issue of *Sweet Notes* finds its way into your hands, I'll have a regular column on the Sweetwater Web site called (no surprise) "Tech Notes Online." I've been waiting a long time to do this, since there's just way too much awesome hardware and software these days to limit me

to just a single page per *Sweet Notes* issue. I hope you'll log on and check it out. Besides my current column, there'll also be an archive of past online columns, just in case there's something I've covered that you might have missed. So for more information, as well as a cool hack you can perform with the ModFX units, go and have a look at my online column at:

www.sweetwater.com/technotes

Finally, just as I was finishing up this article, Alesis sent me their brand new **Ion** Analog Modeling Synth (see photo at left), and I simply don't have room to tell you how it works or sounds, but please check into my "Tech Notes Online" column for more on yet another breakthrough product from a company that always seems to find new ways to give us musicians more sonic innovations for a lot less cash.

Sweetwater®

5335 BASS ROAD, FORT WAYNE, IN 46808

Address Service Requested

inside THIS ISSUE

- **Digidesign Digi002R**
- **MOTU 828mkII**
- **New MOOG Voyager**
- **The Power Mac G5**
- **Roland Fantom-S88**
- **New Guitars**
and much more!

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Employee Profile

Name: BOB MONDOK
Position at SSI: Senior Sales Engineer
Start Date: 6/22/98
Hired as: Sales Intern
Education: BA in Music, Baldwin-Wallace College, Berea, Ohio; Music Recording and Tech program, The Recording Workshop, Chilicothe, Ohio.
Your occupation before coming to Sweetwater? College Student
Foreign Languages: None
Technical Strengths: Synthesis and sound design, extensive knowledge of all the myriad recording systems.
Instruments you play: Drums, all manner of percussion and guitar.
Gear you Own: Roland VS-2480 workstation, Apogee Rosetta 48, Focusrite Trakmaster, TC Helicon Voice One, Roland V-Session Set and SPD20, Roland Fantom-S88, Kurzweil SP88X, Fender Rhoads mkII, Royer R121, Gibson 335, Mackie HR824s, PC with tons of software.
Family Info: Married with a baby on the way!
Other stuff we should know about you (hobbies, interests, etc.): Politics, fishing (particularly for walleye on Lake Erie), golf, and am currently installing a horseshoe pit in my back yard. I'm a dedicated Cleveland Browns and Indians fan, love to take roadtrips and, of course, write and record music.
Real Life Hero: Neil Peart. I've always admired him as a musician, but I'm currently reading his book, *Ghost Rider*, and am equally impressed by him as a human being.

Guilty pleasure of choice: Ice cream
How would your boss describe you? "A Zen Master." This was courtesy of a customer of mine who wrote it on a comment card. It just seemed to stick.
How would your best friend describe you? A genuine gentleman.
What did you dream about doing for a living when you were growing up? Pro Baseball Player (before high school when music took over my life).
What in your life best prepared you for the work you do here at Sweetwater? Teaching audio/MIDI classes to high school summer camp students while I was in college.
What do you enjoy most about being part of the Sweetwater Team? The fact that it truly is a team. Everybody helps everybody out.
What is the most important thing you've learned at Sweetwater? A better understanding of what customer service is.
Describe the most dramatic situation in which you provided the "Sweetwater Difference" for a customer or the most unusual/creative solution to a customer problem: A customer came in to pick up a keyboard that his son had dropped off at our service department. When he went to load it into his car, he discovered it did not fit (he was not driving his son's car). So, instead of having him drive the half hour back home just to swap cars, I loaded the keyboard into my car and delivered it on my lunch break.