

(800) 222-4700 • www.sweetwater.com

Fall 2002 Issue

digidesign



digi 002

The complete, affordable FireWire-based Pro Tools LE music production system

From its humble beginnings, **Digidesign** has become a major force in the industry with cutting edge hardware and powerful, flexible software. Their **Pro Tools** systems are at the heart of some of the top studios in the recording industry, producing hit after hit and more chart topping albums than ever! But even though Digidesign is the professional's choice, they are still strongly committed to supporting *all* musicians with products that set a lofty new standard for home and project digital recording systems.

With that in mind, the company is pleased to announce **Digi 002** — an astounding FireWire-based advance in hard disk studio technology. Digi 002 (\$2,495 list) offers functional options and flexibility never before available in project studio products of any kind. Digi 002 features everything you could want in a computer based audio production system, and then some - easy FireWire connectivity, a touch-sensitive moving fader control surface, balanced I/O with 24-bit resolution and up to 96kHz sample rate support, plus **Pro Tools LE 5.3.2** software for both Windows (XP Home) and Macintosh (Mac OS 9.x). But wait, there's more!

Digi 002 provides the means to create everything from demos to remixes to radio spots. Its analog, digital and MIDI capabilities enable Digi 002 to handle a wide variety of I/O configurations, while dedicated monitor and

headphone outputs allow you to keep a close ear on progress — all with a simple, single FireWire interface to the host computer.

What really sets Digi 002 apart is software and hardware access to the intuitive power of the company's critically-acclaimed Pro Tools. Borrowing the same technology found in Digidesign's Control|24, Digi 002's array of touch-sensitive faders, rotary encoders and LCD scribble strips give you tactile and visual command over nearly every Pro Tools LE feature and parameter, including plug-in manipulation.

Additionally, the single-box design includes all inputs and outputs. Remarkably, for live applications, Digi 002 can pull double duty: with the push of a button, the 002 can be shifted into "stand-alone" mode and act as an 8x4x2 digital mixer with onboard EQ, dynamics, delay and reverb!

Digi 002 ships with Pro Tools LE 5.3.2 software as well as a healthy collection of bundled plug-ins, offering more power and flexibility than ever before, including up to 32 tracks of simultaneous playback. And PT LE 5.3.2 isn't some stripped down, bare bones software: The user interface, editing software, and file formats are identical to the software used in top-flight commercial studios everywhere.

Digi 002 clearly represents a truly revolutionary breakthrough on several levels: No other
— Continued on Page 2

Tuck it under your arm, take it to a gig, use it as an 8X4X2 digital mixer

Inside this issue:

ACCESS VIRUS SYNTHS

If you're looking for the classic warm, fat sound of a vintage analog synth, but one that also has a few more sonic tricks up its sleeve, then you just might be looking for one of the **Access Virus** line of synths and rackmount modules. — **SEE PAGE 3**



TASCAM SX-1 POWERHOUSE

Not long ago, the concept of a compact "all-in-one" studio meant making compromises, mostly in audio quality. But now, **TASCAM** has finally built a digital workstation in the new **SX-1** that can go toe-to-toe sonically with the "big boys." Offering a complete host of pro features, the SX-1 just might be perfect for *your* studio! — **SEE PAGE 4**



NEW GEAR EXPLOSION!

If your feet hurt, your heart's pounding, but you still find yourself wondering just how much of a credit limit is still available on your plastic, you're probably at one of the many industry tradeshows! Our reporters keep you up to date on all the cool gear manufacturers have unveiled. — **SEE PAGE 7**

MOTU DIGITAL PERFORMER 3.1

Not only is it totally awesome, but MOTU's latest version of Digital Performer is a free upgrade for owners of DP 3.0. We give you an exciting "first look" at the program's newest features, then provide you with hot tips and tricks in our "Manufacturer's Corner."

— **SEE PAGES 11 and 12**



PLUS: The Sweetwater Musician's All Access Platinum Card, Roland MMP-2 and much more!

— Continued from Page 1

single product on the market combines tactile control with digital audio production prowess like Digi 002. Equally significant, no other product prepares you as effectively to make the transition from an all-in-one home/project solution to the professional DAW environment of a full blown Pro Tools|HD system, and Digidesign provides the 002 user with an upgrade path, ensuring the value of your investment for years to come. And speaking of value, no other product can touch the value of Digi 002 — with a \$2,495 base price that includes bundled over \$2,000 worth of plug-ins, it is far and away the best investment users can make for a solution of its kind.

Digi 002 is a full-featured studio-in-a-box that works with your Window XP Home or Mac OS9.x computer to give you all you need for superior MIDI and audio production. Comprised of a single unit that includes a comprehensive control surface along with analog, digital, and MIDI I/O, Digi 002 communicates with your computer via a single FireWire cable (included). Pro Tools LE software comprises the final component, offering 32 tracks of record and playback, 128 MIDI tracks, real-time plug-in support, and a host of additional features. From beginning to end, Digi 002 places you in an ideal position to realize any project.

Getting your Digi 002 system up and running is quick and simple. First, you load the Pro Tools LE software onto your computer. Second, connect your computer to the Digi 002 unit with the included FireWire cable (most PC users will need to purchase a compatible FireWire card). Third, power up Digi 002. Fourth, connect your signal sources — mics, instrument cables, patch cords, etc. — to the I/O on the back of Digi 002. Lastly, you launch Pro Tools LE software. At that point, you're ready to go — hey, how hard was that? Your audio and MIDI information travels back and forth between the computer and Digi 002 via the FireWire cable, along with information generated by or returned to the Digi 002 control surface. Any changes you make via the Pro Tools software interface are reflected on the control surface and vice versa. It's really that simple.

Digi 002 includes two modes of operation: Pro Tools mode, described above, and with the push of a button, your Digi 002 unit enters Standalone mode and becomes an 8x4x2 digital mixer, complete with EQ, dynamics, delay, and reverb with snapshot automation. Pro Tools LE is disabled in this mode, and your computer is no longer needed for Digi 002 to operate.

PRO TOOLS LE SOFTWARE FEATURES

Audio. Digi 002's Pro Tools LE software enables you to record and play back up to 32 tracks of audio at sample rates of up to 96 kHz. As soon as your audio enters Pro Tools, it enjoys a 24-bit signal path. Coming or going, the sound involved with your sessions also benefits from high-quality A/D and D/A converters, ensuring that the integrity of your audio is maintained throughout.

Mixing. Digi 002 has made mixing extremely easy on your eyes, ears, and hands. You can use either Digi 002's integrated control surface or the Pro Tools LE software interface to tweak every component of your mix. They share information, so what you do on one is instantly reflected on the other. As your computer's processor transparently crunches mixing data, you guide the mixing process via either the intuitive Pro Tools LE user interface or the Digi 002 control surface, or both.

MIDI. Pro Tools LE's integrated MIDI environment (which includes functioning as a dedicated MIDI interface) gives you full control over the MIDI components of your projects. MIDI events and sequences can be manipulated as easily as audio, eliminating the need to learn yet another operational paradigm. Pro Tools LE supports the import, creation, and export of MIDI data as well as multiple MIDI device protocols. Regardless of the amount of MIDI you involve in your

projects, you'll be thrilled by Pro Tools LE's integrated MIDI environment.

Editing. Just as with Pro Tools TDM software, a single screen within the Pro Tools LE interface — the Edit Window — enables you to adjust literally every aspect of both audio and MIDI data at sample level resolution. Trim waveforms, reprocess regions of audio, pitch-correct a compromised performance, replace drum sounds, rearrange song sections on a whim. The nondestructive approach to editing enables you to act instantly on your decisions without having to commit to them, allowing you to go back to the original file and try something different over and over again. And with tools like SoundReplacer available for Pro Tools LE, there's always a tool available to fix what is — or isn't — broken.

Plug-Ins work in conjunction with Pro Tools LE, and facilitate everything from dynamics to effects to sound design. To use plug-ins, you simply activate them within the Pro Tools interface. At that point, you are free to employ presets, customize settings, and/or automate a given plug-in's activity within a mix. Unlike outboard gear, you don't need a rack of EQs, delays, or compressors to get the job done!

Pro Tools LE-compatible plug-ins take two forms. RTAS (Real-

Digi 002 sets an amazing price-to-performance ratio that offers pro quality sound in just about any studio

Time AudioSuite) plug-ins afford you all the benefits of real-time processing and can be assigned to multiple tracks as frequently as you like within the limits of your system. AudioSuite plug-ins are non-real-time, and once applied to your audio, result in the generation of a new audio file with the processing intact. Of course, you also have the option of saving your original file.

Mastering. Editing capabilities and plug-ins used in conjunction with the Pro Tools LE software interface enable you to make the necessary fine adjustments to your final mix to achieve the perfect combination of warmth, presence, and balance. Additionally, Digidesign's MasterList CD, a software application specifically designed for creating Glass-Master quality CDs, can be used to prepare a mastered CD with professional results. (MasterList CD is available for Macintosh only. There are many off-the-shelf options for PC users to produce Red Book-compatible CDs from their final Pro Tools mix.)

Hey, we're out of space! But by now you know the drill, right? All you need to do is call your Sweetwater Sales Engineer for any other information you might need or to order a Digi 002 system of your own!

sweetwater.com/digi002



DIGI 002 AT-A-GLANCE

- 8 discrete analog inputs (4 mic/line/instrument (DI) preamps; 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
- 24-bit/96 kHz converters
- > 108 dB Dynamic Range; > 98 dB (0.002%) THD+N
- Monitor output includes dedicated volume control knob
- Headphone output includes dedicated volume control knob
- 8 moving faders with touch control circuitry (Control|24 fader type and resolution)
 - Transport controls
 - 8 rotary encoders used for pan/send/meter/plug-in control
 - 10 scribble strips for track name, pan, send, fader, plug-in values, and timeline position
- 8 channels of ADAT optical I/O and 2 channels of S/PDIF I/O
- MIDI I/O - 1 input port/2 output ports (16 channels in/32 out)
- Footswitch for QuickPunch control, transport start/stop



The newest, easiest way to buy gear. Apply online at www.sweetwater.com

ACCESS VIRUS: Throwback synths dripping with character

Not long ago, if you wanted a synthesizer, you could choose from a handful of models from a few manufacturers, many of whom were simply copying each others designs. One small company that broke out of the mold was European-based Waldorf, a direct descendent of the company that designed the legendary PPG Wavesynth. The PPG was famous for producing sounds that were unlike any other instrument. Continuing in the tradition of building exciting synths that not only sound great, but are actually inspiring to play, Waldorf has introduced the Virus line: Four cutting edge instruments that produce the kinds of sonics that drive today's hottest music.

VIRUS RACK CLASSIC. When Waldorf developed the **Virus Rack** (\$1,195 list), their highest goal was to create a musical instrument

all the polyphony, all the effects, all the virus, all the time. The front panel of the **Virus Rack XL** (\$1,795 list) delivers the highest level of creativity at your fingertips. And with all the expanded polyphony, new effects, and new features in your hands, it's creative freedom and inspiration you'll appreciate more than ever.

The front and rear audio inputs will also take you to new levels of excitement, because now guitarists, DJs, and anyone else who wants to penetrate the possibilities of pure processing can do it like never before! Best of all, Virus Rack XL is amazingly portable, yet equal in power to the Virus C, KC, and Indigo with 32-voice polyphony and 16-part multitimbral capability, 1024 programs, an amazing four oscillators per voice

24-voice, 24-bit Indigo is equipped with pitch bend, mod wheel, two switches, a control pedal, 32 knobs and 64 LEDs. The instrument ships standard with 512 programs and if you're after super fat sounds, there are four oscillators per voice, including sawtooth, variable pulse, sine, triangle waves and 62 additional spectral waves plus FM for the oscillators with external input signals.

Naturally, such an advanced keyboard comes standard with 16 independent arpeggiators with a vast assortment of patterns and real time parameter access which can be modulated in realtime. For the icing on your sonic cake, how about 82 simultaneous DSP effects plus a 32-band advanced vocoder.

There are two individual inputs with various signal processing features such as filter, distortion, vocoder, FM, ring modulator, envelope follower and groove-delay plus six individual high quality outputs and full surround sound capabilities. The synth also ships with free Emagic SoundDiver Virus based editor/librarian for Windows and MacOS.

ACCESS VIRUS INDIGO V2. The Indigo-2 picks up where the original Indigo left off, delivering all the delicious analog stylings of the flagship Virus synth in a compact keyboard version. But the Indigo-2 boasts several excellent enhancements that make it a must have, like a redesigned front panel (like the Virus, the Indigo-2's front panel includes a "knob for every job"), the powerful Virus C engine, and a 3-octave velocity sensitive keyboard with Aftertouch!

Compact enough to be a great companion for a laptop based



which brings together the excellent user interface of the original Virus series, with the compactness and excellent value for money of a rack device.

Editing the Virus rack, unlike other compact products, doesn't require constant reference to cryptic manuals. With five knobs and buttons, you'll be able to directly access 35 key parameters, without looking at the display or getting lost in submenus. Furthermore Waldorf includes free Emagic SoundDiver editor/librarian software for direct on-screen access to all parameters.

Like some of the analog synths of yesteryear, the Virus Rack lets you manipulate any audio source with the Virus synth engine. Just plug into the audio input on the front panel, and let your imagination run wild! Maybe you love to filter and vocode, or you're in need of a multi effect processor — it's all part of the legendary Virus engine. It even offers advanced features such as the acclaimed Access reverb algorithms and the Groove-Delay.

The Virus Rack is amazingly portable, yet surprisingly powerful with full 24-bit internal processing, five Knobs, 12 Buttons and 16 LEDs along with 16 multitimbral voices, 1024 programs (256 User, 768 ROM, 128 Multi) and three oscillators per voice for a super fat sound. You get sawtooth, variable pulse, sine, triangle and 62 additional spectral waveforms with two fully independent filters per voice (lowpass, highpass, bandpass or band reject) and four filter routings in serial/parallel configurations. Powerful DSP effects sweeten your sound without need for outboard processing and 16 independent arpeggiators with tons of patterns plus real time parameter access/modulation including swing and note length.

VIRUS RACK XL. Now you can have the entire capacity of Waldorf's critically-acclaimed Virus C Desktop in a single-space rackmount unit:

for a fat, juicy sound you'll have to hear to believe.

You get sawtooth, variable pulse, sine, triangle and 62 additional spectral waves along with DX-style FM [Frequency modulation] with or without external input signals plus dual filters selectable as lowpass, highpass, bandpass or bandreject. As you'd expect in such an advanced synth, there are 16 independent arpeggiators with a huge assortment of patterns (remember when all arpeggiators could do was up, down, and up/down). Need some effects? How about 98 simultaneous DSP effects onboard, including all the standards (reverb, delay, chorus, etc.) and a few you've never heard before.

If you're looking for the sound of a true vocoder, the Virus Rack XL is all you'll need, with an expressive 32 band vocoder onboard. You also get the Virus Analog Boost for true vintage tonal characteristics, Advanced Modulation Matrix with six source and nine destination slots along with full 24-bit internal processing, true surround sound capabilities and free SoundDiver Virus editor/librarian for Windows and MacOS.

ACCESS VIRUS INDIGO. If you're craving all the delicious analog stylings of the Virus in a compact keyboard version or lusting after those super sweet retro synth sounds, Virus Indigo is for you! Compact enough to be a great companion for a laptop based portable studio, the 37-note, velocity sensitive **Virus Indigo** (\$2,595 list) offers you everything needed to produce state-of-the-art sonic textures. The sounds may be authentic analog, but Virus Indigo's thoroughly modern design lets you create without being restricted by traditional analog limitations.

Like tweaking your sounds without accessing level upon level of mind-numbing submenus? The



portable studio, Virus Indigo-2 offers you everything needed to produce state-

of-the-art sonic textures. The sounds may be authentic analog, but Indigo 2's thoroughly modern design lets you create the ultimate in virtual analog sound without being restricted by traditional analog limitations. All in all, the Indigo-2 packs power, portability and the legendary Virus sound into a stunning instrument with the style and substance to take you anywhere your imagination desires.

If you're tired of those wimpy, anemic synth tones, maybe it's time to contact your Sweetwater Sales Engineer for complete information (and your special low pricing) on all of the fantastic line of Access Virus instruments available right now from Waldorf and in stock at Sweetwater!

sweetwater.com/access-virus

TASCAM SX-1: The complete production powerhouse

Not long ago, recording music on so-called "all-in-one" studios meant making compromises. Sure, they were compact and a breeze to use, but their sonic quality was, let's say, less than stellar. But thankfully, all that has changed over the last few years.

The **TASCAM SX-1** (\$8999 list) is an entire professional-caliber music and audio production studio in one integrated package, and like most TASCAM products, is setting a lofty standard for other companies to compete with.

Designed to meet all the needs of serious project studios, educational institutions, music ministries, commercial recording facilities and sound for picture post-production, the SX-1 combines hard disk recording, digital mixing, MIDI sequencing, plug-in effects, advanced DAW-style editing and full mastering capabilities. It's easy to understand why the feature set of the SX-1 is unrivaled by any other system available, at any price.

From the outset, the SX-1 design team envisioned a machine that would combine the power and flexibility of computer-based recording and editing, MIDI sequencing, hardware surface control, dynamic mix automation, on-board and plug-in effects, stereo and surround mixdown, and data backup — all of which would be accessible via a powerful and intuitive user interface.

Their vision was to enable musicians, composers, and music production professionals to stay focused on the joys of creating and recording music. What's more, they worked long and hard to incorporate all of the important 21st century technologies, but eliminate the hardware and software incompatibilities and resulting instabilities that often accompany computer-based systems.

The SX-1 offers not only an incredibly powerful feature set, but also a carefully considered user interface design that ensures smooth operation, reliability, and ease of use for a host of professional applications in music composition and production.

The SX-1's audio quality is superb, with 24-bit resolution and state-of-the-art 24-bit ADCs and DACs. Like TASCAM's critically-acclaimed MX-2424 Hard Disk Recorder, the SX-1 can use high sampling rates including 96kHz/88.2kHz with half the track and mixer channel count of its standard 48kHz/44.1kHz modes. Its plug-in effects architecture ensures that in addition to its built-in effects by TASCAM, TC Works and Antares, recordists will be able to access a wide

variety of third-party effects by other manufacturers.

Its wide variety of interfaces allows you to easily mesh the SX-1 with other gear in your studio and its XVGA output means that you can plug in a monitor and get all the information you need, including sample-level waveform editing, plug-in effects control and much more. Plus, an optional cascade module allows for it to be connected to TASCAM's DM-24 for even more digital mixing channels.

Check out the features below, then call your Sales Engineer for more information and (of course) your special pricing on a new TASCAM SX-1 for *your* studio!

sweetwater.com/sx1



SX-1 FEATURES

- Extremely flexible 40 input, 32 x 8 digital mixing console with 100mm, touch sensitive faders, advanced built-in dynamic automation and 16 high-quality phantom-powered mic preamps.
- Full-function, 48kHz/24-bit, 16-track hard disk recorder with internal IDE disk drive. 8 tracks of 96kHz recording is possible with a software upgrade. Additional IDE and ultrawide SCSI drives may be connected via a front-panel slot or rear panel SCSI interface.
- Highly integrated and intuitive waveform, MIDI, and automation data editing via an internal recording/editing engine that uses a fast, reliable, multimedia-optimized operating system and powerful graphics engine.
- Complete surround mixing capabilities with the ability to record a full 5.1 mix to the internal HD along with the original 16 tracks.
- 128-track MIDI sequencer with advanced editing modes.
- Built-in CD-RW drive for printing stereo mixes, data backup/archiving and importing

sounds from audio or data CDs.

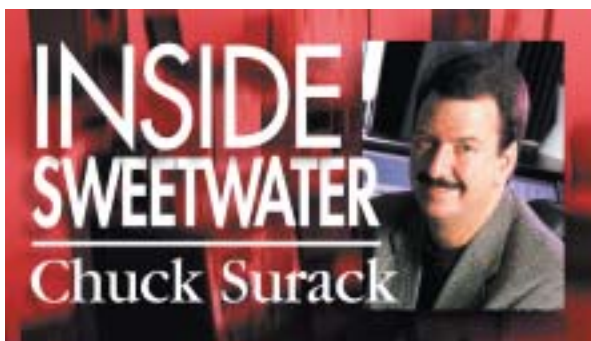
- DSP plug-in technology that offers built-in effects by TASCAM, TC Works and Antares.
- Extensive analog, digital, MIDI and computer interfacing: 16 balanced XLR and 16 1/4" TRS inputs, TRS inserts on each analog input, an onboard speaker switcher, eight channels of ADAT Optical, two stereo S/PDIF inputs (with sample rate conversion) and outputs, wordclock In/Out/Thru, two MIDI inputs, four MIDI outs, SCSI port, two USB ports, Ethernet jack for future FTP capabilities, separate studio and control room monitoring.
- Built-in timecode/sync support via SMPTE/LTC, video sync, and Sony P2.
- Onboard LCD screen that offers a wide variety of editing and automation information (including waveforms)
- XVGA output that acts as a complete, stand-alone DAW interface for total control of the machine with no external computer.
- MP3 support with software upgrade.
- Jog/shuttle wheel for scrubbing audio and MIDI data simultaneously.

I would love to believe that every *Sweet Notes* subscriber takes the time to read my column each issue, but I know that's not always the case. However, I sincerely hope everyone holding this issue in his or her hands will take a few minutes and learn about the exciting new **Musician's All-Access Platinum Card** from

Sweetwater, a credit card that gives you an insider's buying power for all your music equipment needs.

Right from day one, the concept behind Sweetwater was to make shopping for music equipment simple and hassle-free. We have always looked for ways to make it fast and easy to get exactly the right equipment for your specific needs. It's why we have highly trained, knowledgeable Sales Engineers on staff rather than "order takers."

I'm thrilled to announce yet another Sweetwater first, designed to help our customers get the gear they want when they want it. Our new Musician's All Access Platinum Card makes purchasing professional



purchases. You'll never have to sift through a box of Visa or Mastercard receipts again, trying to get all of your gear purchases together come tax time. What's more, whenever you use the card, you're entitled to make no payments for 90 days and, absolutely no interest accrues if the balance of your purchase is paid off within 90 days.

Even if you choose to extend your payment period past 90 days, you still get incredibly low monthly rates. For example, you could easily pick up one of the beautiful new Fender® Stratocasters® we've got in stock for as little as \$10 per month, or a Digidesign hard disk

recording system with a new Apple computer for less than \$50 per month. In fact, most of the products on our website now provide you with an All Access Card monthly payment amount, so if you've been trying to figure out how to afford that guitar, keyboard, or hard disk system you've had your eye on, check out our website – the gear of your dreams may be closer than you think! Naturally, as

awesome as our new All-Access Platinum Card is, it's not the right solution for everyone, which is why we have so many ways for you to get the

gear you want and need. Payment options include all the major credit cards (of course), as well as Western Union, programs like Apple's Instant Loan, the Yamaha Card, and a variety of leasing options — even cash!

The bottom line here is that we not only have the equipment you're looking for in stock, but we've got more payment options than any other music retailer, so no matter what you're trying to purchase, from an accessory to a full studio, we can help you figure out how to pay for it.

We happen to think the Sweetwater All-Access Platinum Card is pretty exciting. Naturally, if you'd like to know more about it, you can call your Sales Engineer. If you're ready to take advantage of all the card's many benefits, apply and get yours today!

sweetwater.com/allaccess



Q: Why won't my 1/4" microphone plug work when I plug it into my **Mbox**?

A: When the Mbox inputs are set to "mic", they only accept signal from the XLR contacts of its input ports. Microphones with 1/4" TS or TRS connectors will not work. Try the "inst" or "line" settings instead.

Q: My new **Mac Dual 1GHz G4** is much faster than my old G4, but it's also louder than my old G4. Is there anything I can do to reduce the fan noise?

A: While the new G4s are indeed faster than their predecessors, they do have a tendency to run hotter, as well. As a result, the new machines have temperature sensitive, variable speed fans, which are a bit louder at normal speed but at high speed, they're *much* louder than previous G4 models. Fortunately, resetting the machine's firmware will take care of the high speed fan problem. The procedure for resetting the firmware can be found on Apple's site.

Q: When I change to a different Amp Model in my **POD 2**, my volume changes, and I have to readjust the Channel Volume.

A: All the amp models in the POD are optimized for the best possible combination of gain, headroom, and signal to noise (s/n) ratio. Since the different amps can have very different gain characteristics, a setting of 6 on the Channel Volume knob isn't necessarily the same absolute volume on any two given models.

When you change to a new amp model from the Model Select knob, it automatically loads an optimized Channel Volume setting (this setting is different for each model) so that, as you step through all the models, they are all about the same level. If you've cranked the Channel Volume on a particular patch and then change the model, it just loads the default setting as a starting point. Channel Volume cannot be saved as part of a user preset.

Q: Exactly what audio formats does the **iPod** support?

A: While it's no secret that the iPod supports MP3 files (from 32 Kbps to 320 Kbps, as well as Variable Bit Rate), more and more audio professionals are realizing that it also supports .WAV and AIFF files, as well. With the expanded capacity of the newest 10 gig and 20 gig models making storage of larger audio files more practical, the iPod is finding it's way into more and more professional facilities as a pocket sized playback option for auditioning rough mixes.



audio equipment easier and more straightforward than ever. There's no waiting for approval on loan applications, no delay while your check clears. In fact, applying for the card couldn't be easier – simply apply online at sweetwater.com/AllAccess. You'll have a response to your application in an instant! If you'd prefer filling out and mailing back a paper application, that's OK too; just call your sales engineer and they'll get one out to you right away.

Sure, a Sweetwater credit card in and unto itself is nice, but as with everything we do, we wanted to give our customers more value than "just" a credit card, so we've upped the ante a bit. The All Access card is just that – it gives the cardholder access to exclusive, one-of-a-kind offers, as well as a convenient way to keep track of all of your musical equipment

TIPS, TOOLS and TECHNIQUES

Capturing the elusive acoustic drum kit

Last issue we discussed some basics on getting good recordings of acoustic and electric guitars. This issue, we tackle drums, which requires an entirely different approach. While many Sweetwater customers are old hands at this, I have yet to meet an engineer who doesn't enjoy discussing mic techniques with his or her peers, picking up little tricks along the way. Besides, you can bet that even as you're reading this, someone is miking up his or her very first drum kit.

In most cases, you're going to want to record your drums in stereo, since this provides a natural sound with significantly more impact than mono. My favorite "minimalist" mic setup is one stereo pair for the kit and an extra dynamic (or muscular condenser) on the kick drum. Some engineers prefer placing their main stereo pair above the kit, but that has always sounded unnatural to me and tends to emphasize the cymbals a bit too much. I prefer setting up my main mics (or a stereo mic) about four to six feet out from the kit at about ear level. The farther away the mics, the more room ambience and "air" will get captured, while moving the mics closer emphasizes attack and impact.

Naturally, just as we always do, we check to make sure our stereo mic will produce an acceptable mono image by panning both mics to center on our mixer and having a listen. A thin or "phasey" sound indicates the mics are not in proper position in relation to each other and some phase cancellation is occurring. Stereo mics (like the **Crown SASS-P**, **Rode NT-4** and others) are already adjusted to eliminate phasing problems. I like working with **Earthworks** omnidirectional mics (in my case, **TC40Ks**) which are very forgiving of positioning and always deliver a clean, clear sound, though I have also had excellent results using

AKG C414Bs.

Next we'll want to position our kick drum mic. Here I normally use a **Shure SM57** or an **AKG D1200** dynamic (unfortunately, the D1200 is no longer available, though the newer **D112** is a favorite kick drum mic for countless engineers). You have a choice of setting the mic up close to the front of the drum for a deep thump,

or on the back of the kick facing the beater for more snap and attack. At times, I have used two mics, one on either side. You'll want to do some amount of

equalization here, but I typically make my final adjustments during the mixdown to make sure the kick blends well with the other drums as well as the bass guitar.

This is a good place to discuss drum tunings. I have met excellent drummers that are actually unable to tune their kit, so you end up with wobbling decays and harsh dissonance between the toms. I cannot stress this enough: A great drum recording begins with a drum kit that is properly tuned. Some drummers actually like to tune their toms to specific pitches, resulting in intervals, like major thirds, which can produce a tight, consistent sound that won't muddy up a mix. Whether the kit is tuned to specific notes or not, every well made drum has a pitch at which the shell resonates naturally, and it's a good idea to stay around this pitch for each drum to get the most out of the kit. Space prevents further discussion, but definitely talk openly with the drummer about how he likes to tune his kit. One ill-tuned tom can ruin an otherwise excellent recording.

Now that you're set up, have the drummer play something, then listen back to your recording with a critical ear to make absolutely certain that you have captured the drums accurately. If the drums sound a bit wimpy, you might want to move the mics in closer or raise/lower the mics and try again. Usually, if the mics are placed where your ears tell you the drums sound good, you'll be right on the money.

One piece of gear that I have found invaluable in achieving a punchy drum sound is the **BBE Series Sonic Maximizers**. I use a **Model 422**, but there are newer models available, including plug-ins. These processors work (and I'm oversimplifying here) by adjusting (correcting) the tiny time offsets between high and low frequencies that can smear sonics, making for mushy bass and thin highs. All the drums on the Sweetwater **Total Stereo Session Drums** CD-ROM were recorded using the BBE 422 and it earned a *Keyboard* magazine "Best Buy" award.

Since we're discussing processing here, a natural question is whether to use compression on your kit. I personally have very rarely used it, and when I have, it's usually as an insert effect at mixdown. Many engineers do

use some compression when tracking live drums to keep your transients under control, but too much compression will actually end up making your drums sound squashed and wimpy, so proceed with caution.

If the snare doesn't have quite the impact you'd like, I would probably suggest adding a dedicated snare mic. Beware, however, the more mics you add, the more difficult it will be to keep the kit sounding focused and natural. Several manufacturers make clip-on snare mics, but a mic that most engineers own at least one of — the **SM57** — is probably the most widely used snare mic in history. One thing to be aware of when using an **SM57**: You need to place it as close as possible to the snare head to avoid bleed-through of the hi-hat signal.

Some engineers will actually put mics on every single drum in order to be able to fine tune the volume of each snare, tom, hat, kick and cymbal during mixdown. While there's no denying such overkill results in a punchy, well-balanced drum sound, it's my feeling that you lose the openness and natural stereo spread of the kit, not to mention the overall room sound which just cannot be duplicated artificially (though we are getting closer all the time).

Essentially, by miking each drum, you are combining a whole bunch of monophonic signals, rather than creating a natural stereo image. No matter how much panning you might do, it will never sound like real drums in a real room. However, in much of today's music, that's less of a factor than it used to be. A lot of dance music actually depends upon processing (or even over-processing) each drum to sound hyper-real or even totally unrealistic. If this is a sound you're after, by all means use as many mics as you have available along with all the outboard gear or plug-ins at your disposal. There is no wrong way to record drums as long as you end up with the sound you're looking for.

One big thing to look out for when you're recording drums (or any other source, for that matter) with multiple mics is phase coherence.

— Continued on Page 13



Crown SASS-P Stereo Mic



AKG C414B TLII

It used to be that new equipment was introduced at one place: Winter NAMM. But with an astonishing assortment of new gear being developed all the time, manufacturers now debut hot items at the NAMM Summer Session, the AES Show and other venues across the country throughout the year. Naturally our reporters are there to cover these events exclusively for you, so sit back, relax and take a sneak peek at what's coming your way in the months to come. We gathered information on all the things we thought you'd be most interested in hearing about, and some stuff that we just thought was cool. If you see anything that catches your attention here (and we think you will), please give your Sales Engineer a call today! He or she can give you all the updated information.

AKG: Their

Project Pack features two of AKG's all-time best selling microphones, the **C1000S** and the **C3000B**, at a low price (\$658 list). Separately, these two mics would cost you over \$800! Every studio owner needs at least one large diaphragm mic and one small or medium diaphragm mic in their collection. Now the Project Pack takes care of both necessities with some of the finest mics around.

ALESIS: The

company continues its line of cool products with funky names with the **Ion**, a 49-key analog modeling synthesizer with eight voices (with three oscillators and two multimode filters per voice) and a four-part multitimbral sound engine. Of course, an analog modeling synth wouldn't be worthy of the name if its console didn't feature more buttons and knobs than the command center in a Japanese monster movie, and the Ion delivers. You get no less than 30 realtime control knobs, over 70 direct-access buttons, a pitch-bend wheel, and two assignable modulation wheels. There are even onboard effects, including chorus, flange, phase shifting, echo, distortion, fuzz, compression, and 40-band vocoding.

Alesis was also showing off their **ModFX Series** line of eye-catching mini digital signal processors. There are 14 models including Fidelity X, Vertigo, Spectron, Bitrman, Koruz, Phlgr, Formantz, Lymitre, Metavox, Faze, Phltre, Nastify, and Smashup. They all feature stereo 24-bit converters, 28-bit internal processing, a 48kHz sample rate, unbalanced 1/4" analog I/O and a special ModLink feature that allows cable-free connection of multiple units.

Building on the highly successful HD24, Alesis also announced the **HD24XR** (\$2999), which is capable of 12 tracks at 24 bit/96 kHz right out of the box. The ADAT tradition of superb, affordable quality continues!

AUDIO TECHNICA: The company introduced a new line of mics specifically engineered for professional live sound applications. The **AE2500** (\$699), with its revolutionary dual element design combines both dynamic and condenser technology in a kick drum microphone. Dynamic element delivers the aggressive attack of the beater while the condenser captures the round tonalities of the shell. The **AE5100** (\$379) is a low profile, large diaphragm side address condenser microphone for instrumental applications. Great for overheads, percussion, acoustic

guitar, strings and other acoustic instruments. The **AE5400** (\$579 list) is a high quality, large diaphragm handheld condenser microphone with built in shock technology which ensures low handling noise and quiet performance. The **AE3300** (\$439 list) features exacting detail, brilliant clarity and uncolored realism in a highly affordable hand held condenser. The line also includes the **AE6100** and **AE4100** (both \$289 list) dynamic microphones, both road-ready.

BRIAN MOORE GUITARS: The bass players among us were getting all hot and bothered by the **i2000 Series Bass**, the world's first 13 pin Roland-ready bass. Available in both four-string (\$2,314 list) and five-string (\$2,514 list) versions, the great-looking iBass features include built-in toggle switches for piezo (13-pin)/pickup/blend, as well as a switch for navigating patches on the **Roland V-Bass** or other 13-pin type processor.

CLAVIA: The company proudly announced the release of the **Nord Electro 2** Virtual Electromechanical Stage Keyboard. The Electro 2 (\$2099 list for 61-key and \$2299 for 73-key versions) is the next big step in the development of the Nord series of stage keyboards. The Electro 2 introduces the aptly named Mega Clavinet sound, which offers all the filter and pick-up variations of the original Clavinet D6!

This means that you'll be able to access no less than 60 all new samples plus four different Clavinet D6 sounds in the Electro 2 downloadable (24MB) file or get a CD-ROM directly from Armadillo. Other features include double the polyphony in the piano section, terrific new

effects and full 88 note MIDI implementation.

dbx: Everyone loved dbx's **Drive Rack PA** (\$749.95 list)! It's like pennies from heaven for anyone who has struggled with PA setup and operation hassles — i.e. pretty much all of us. The Drive Rack PA eliminates all those setup and operation hassles by consolidating all the EQ and control features in a single unit, and one that takes up only one rack space, at that.

DIGIDESIGN: The really big news was the hot new **Digi 002** (\$2499 list — see cover story this issue). The Digi 002 is like a Pro Tools rig in a box — just add a computer.

E-MU: The company didn't have to show off a booth's worth of new gear since their current line is pretty exciting already. But the really huge news that made people take notice is that they are cutting their prices across the board, making their instruments more affordable than ever!

KORG: The Korg booth was practically overflowing with ultra cool stuff. First up is the **Triton LE 88** (\$2399 list), the 88-key version of their streamlined Triton LE monster synth workstations. It includes all the great features of the Triton LE Series — like 16-track sequencer, 62-voice polyphony, etc — plus the keyboard itself boasts graded action, making it even more of a thrill to use the awesome 16MB Stereo Bosendorfer grand piano which is built-in.

On the other end of the spectrum is the diminutive **microKorg** (\$500 list). State-of-the-art analog modeling and multi-band vocoding are finally

— Continued on next page



NEW GEAR EXPLOSION **Special Report**

— Continued from previous page
finally available in a compact, portable instrument. With 37 velocity sensitive keys and 128 user re-writable programs, the microKorg Synthesizer/Vocoder is perfect for the performer, producer, computer musician or beginner looking for an affordable synthesizer.



Stunning new bass guitars with flamed maple tops from Brian Moore

Based on the dual oscillator MS2000 sound engine, you get an 8 band vocoder (microphone included!) and 71 oscillator waveforms w/64 exclusive DWGS waveforms from Korg's classic DW-8000. This allows for the reproduction of instruments like bells, pianos, guitars, basses that are otherwise difficult to reproduce on an analog synth. The instrument also features three types of modulation effects (chorus/flanger, phaser, ensemble) and two audio inputs (for connecting CD players).

The 61-key **PA60** arranger keyboard (\$1599) is a more affordable little brother to Korg's popular PA80 and includes many of the same features, like 62 voices and a 32MB ROM memory. There are over 660 programs, including a great stereo-sampled piano and 256 factory-preset styles plus the 48 user styles. There are also editing features, a generous effects section, and much more. All-in-all, it's an excellent arranger or performance keyboard, with a price tag that keyboardists are going to love.

The company was also showing the latest addition to their SP line of portable, interactive digital keyboards, the **SP-300DB** (\$1250). It's an 88-key keyboard with hammer action, 30 realistic and versatile sounds, and some great-

sounding speakers built-in.

The **D1200** is Korg's new 12-track recording workstation (\$1250). Sort of a follow-up to their popular D12, the D1200 offers an easier-to-use, more straightforward interface than its predecessor. It's a great workstation for the price, with a beefy 40GB drive, CD-RW bay, editing and effects, including plenty of modeling to keep the guitarists happy.

All you DJs and dance artists out there will be pleased to note that Korg also unveiled their new **Kaoss Pad**, the **KP-2** (\$350), boasting a better interface and better sampling performance than the original, but priced about the same. The KP-2 has been talked about for months, but this is the first time we've seen it in action. We were very impressed — and we thought the first Kaoss Pad was pretty awesome to begin with! Not only was the sound generally better, but the overall performance seemed head-and-shoulders above the original, with faster, more intuitive control. A new BPM feature lets you easily synchronize effects to the BPM. The Auto BPM function calculates the BPM automatically, detects BPM from the MIDI Clock, or sets BPM by repeatedly pressing the Tap switch.

Finally, Korg has the **Karma 2.0** update available on their Web site as a free download. A few of the new features include one touch recording setup, tap tempo and swing quantization (using the existing timbre/track key), in sequence tone adjustments

(without affecting general comb/prog settings) and "Freeze Randomize" which captures that "magic" Karma moment for a future recall. See page 13 of this issue for more.

LINE 6:

The folks at Line 6 showed us their hot new **Duoverb**,

available as either a Combo or Head, with "2 Amps At Once" technology in an amazingly simple-to-use package. You get 16 stellar amp models, and great sounding reverbs. Also on display was the Duoverb **FBV Shortboard Foot Controller** (\$369), a smaller, more portable version of FBV Custom foot controller. Both were very cool, of course, but the *real* story at Line 6 was the **Variac**, the company's new breakthrough modeling guitar! Yes, you read that correctly — it's a modeling guitar (\$1399) that combines

Line 6's exclusive modeling technology with a well-crafted (but "no frills") solid body axe, and reproduces a huge range of classic 6 and 12 string electric and acoustic guitars, plus resonator, banjo, and even electric sitar! A few of the onboard models are: Fender® Stratocaster®, Telecaster®, Gibson ES-175 and ES-335 electrics, Gibson J-200 acoustic, Gretsch 6120 (also originally known as the "Nashville"), Martin D28 acoustic, Rickenbacker 360 and more! The sounds are accessible with just one knob and the 5 way pickup selector. You can bet we'll be following up with an in-depth, hands-on look at this baby, so watch upcoming issues of *Sweet Notes* for more.

MACKIE: The **Mackie Control** (\$1299) MIDI controller garnered a lot of raves. It's a nine-fader (eight channels plus master) MIDI controller that offers in-depth mixing, editing, automation, and navigational control for any supported digital audio workstation. Currently, drivers for **Digital Performer** are available now on MOTU's Web site. The list of features is impressive, with all the high-quality mixing, editing, automation, and navigation functions you'd expect from a professional, state-of-the-art control surface. If you need more than nine faders, there's also the **Mackie Control Extender**, a console with all the channel strip features of the Mackie Control, but without the master section.

MARTIN: The venerable company whose acoustics are legendary introduced the striking new **Graphite X** (\$1349) whose features include a composite graphite fiber and polycarbonate body, which gives this acoustic incredible projection. Martin has long had a lofty reputation as builders of fine instruments made from premium woods with the highest quality finishes, the Graphite X



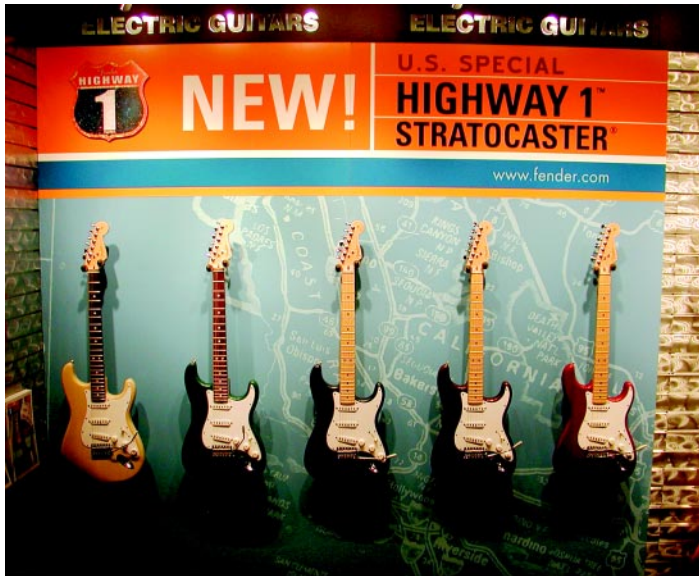
The Mackie Control MIDI Controller offers in-depth mixing, editing, automation and navigational support for supported digital workstation

still manages to pull off both amazing sound and looks and serves to establish Martin as a real player in the nontraditional acoustic realm. A built-in Fishman Prefix Pro pickup makes this acoustic ideal for use on stage or in the studio.

PARKER: The new **Nite Fly Bass** rounds out Parker's innovative line of hybrid wood / composite guitars. It features a 34" scale length, maple top and back and a unique multilayer spruce body construction, which is layered for strength and musical resonance. Onboard are

both a piezo bridge pickup as well as dual active pickup electronics. The Fly Bass is very light, weighing in at a mere 6.75 lbs. It's available in both four- and five-string versions.

PRESONUS: The folks at Presonus were showing off their **FireStation** (\$899.95), a FireWire computer interface offering all the



Take a moonlight cruise up the Pacific Coast Highway with a Fender® Highway 1™ Strat®

benefits of a high-speed FireWire connection. This is Presonus' first foray into the FireWire arena and the results are amazing. Features of the FireStation include two dual-servo preamplifiers with switchable tube circuit; two 1/4-inch instrument preamps; balanced preamp sends via 1/4-inch TRS connectors; 10-channel analog mixer; MIDI I/O; eight channels of analog I/O; eight channels of ADAT I/O; S/PDIF I/O; and much more.

ROLAND: The company had a lot — and we mean a lot — of new gear to show us, so we'll get right to some of the highlights. The **KC-60** (\$359) 3-Channel Mixing Keyboard Amplifier is the newest addition to the renowned KC-Series family. This affordable 40-watt amp is also the first to feature a Subwoofer output for enhanced low end. We got a look at Roland's new Cube guitar amps, the **Cube 15** (\$139) and **Cube 30** (\$299). Though they're called practice amps, they're both pretty powerful, especially considering the price. The Cube 30 even offers 8 COSM models. The newest addition to their VGA Series, the **VGA-3** (\$649) delivers a stunning range of electric and acoustic guitar models plus unique GK effects from any GK-equipped guitar. Even without the GK pickup, guitarists can tap into 11 COSM amp models and three effects processors for killer tones galore.

Of course, there were keyboards. Their 76-key **EP-760** (\$799) is a reasonably priced (and fun to play) digital piano with a great collection of piano sounds and other instruments. Also in the digital piano category were the **F-30** (\$1095) and **F-100** (\$1595), full 88-key instruments with some of Roland's best sounds onboard! The **XV-2020** (\$695) 64-Voice Expandable Synthesizer Module puts Roland's flagship XV sounds in a

convenient half-rack design complete with a USB interface. Expandable via two **SRX-Series** Wave Expansion Boards, it's like a powerful "plug-in" synth with up to 192MB of sounds, three independent effects processors and intuitive editing software. And speaking of the SRX Series boards, Roland showed us four new ones, the

SRX-06 Complete Orchestra, the **SRX-08 Keyboard Sounds and Loops Collection**, the **SRX-09 Dance Collection**, and the **SRX-09 World Music** board (\$395 each list).

The **Studio Package Pro** (\$1,495 list) gives musicians everything they need to record and mix music on any Mac or PC. It includes a hardware control surface with high resolution 24-bit/96kHz I/O and 13 motorized

faders, a PCI audio card (the RPC-1), plus a powerful sequencing and recording software package from **Emagic, Logic RPC Pro**.

The **MC-09 PhraseLab** (\$445) is a hot creative tool for producing loops. Combining an analog modeling synth, step sequencer, four-part audio looper, and effects processor, this instrument helps musicians develop loops with multiple variations. The MC-09 is a must for musicians, DJs and synth enthusiasts who want powerful analog-modeled synthesis at an affordable price.

The **DS-30A** (\$245) 24-bit Digital Reference Monitors are the most affordable way to add pristine 24-bit/96kHz digital monitoring to your studio. These ultra-compact monitors utilize a 30-watt bi-amp design with custom crossover circuitry to deliver crystal-clear sound and flat frequency response.

Now on to electronic percussion: The **PM-1** (\$499) is a high-quality monitor powered by a 60-watt amp and specially designed for the needs of electronic drummers and percussionists. Also of interest to drummers, the **TDA-700** (\$1199) is a new amp system for the V-Drums, boasting 300 watts of juice in a standing cabinet. Versatile inputs give drummers the ability to monitor band-mates directly or make it possible to plug in CD players or similar

devices for practice.

Finally, what good is electronic drum amplification if you don't have anything to amplify? Meet the **V-Stage Set** (\$3295), a new easy-to-assemble **V-Drums** kit sporting the TD-8 sound module, new V-Cymbals and a five piece V-Pad set. This is just a fraction of what they had to offer. Check out all the new gear from Roland, Boss, and Ediol on our web site at sweetwater.com.

YAMAHA had a whole mess of things to show us, from sound expansion cards for your synth to great new keyboards. The **PLG150-DR** (\$249.95 list) expansion board is an ear-ringing collection of stereo sampled drum sounds, more than 80 kits worth of percussion, while the **PLG150-PC** (\$249.95 list) Latin groove percussion expansion board offers up 80 more kits with a distinctive Latin flavor.

For the guitarists, Yamaha unleashed the **UD Stomp** (\$649 list) an awesome stomp box with a huge range of modulation based effects, and essential control options to get really creative with your sound.

Yamaha's AW recording workstations have been a big hit, and they've added to the AW line with the **AW16G** (\$1299 list) which records up to eight simultaneous tracks of 16-bit, CD-quality digital audio without data compression. Each track features up to eight virtual tracks and records directly to the internal 20GB IDE hard drive. An onboard CD-RW drive is included.

The versatile **S08** 88-key synthesizer (\$1495 list) boasts over 749 voices and 31 drum kits within its sleek, lightweight, and portable design. Their other synth, the 88-key **S90** (\$2350 list) boasted more advanced features and seemed destined to join the ranks of



Why is this man smiling? Could be that Roland V-Bass system he's playing . . .

Yamaha's most acclaimed instruments. You had to wait in line just to get a chance to play this synth! Perhaps most impressive was the fact that the sounds are the same as those used in Yamaha's monstrous Motif synth/workstation.

Naturally, all this doesn't even begin to cover everything we saw, like **DigiTech's** bass effects pedals, **Drawmer's** warm-sounding **Tube Station 1** . . . well, the list is practically endless! A comprehensive report on the NAMM Show is on-line at "sweetwater.com/SummerNamm2002". Watch these pages for more!

SWEETWATER PRODUCT PROFILE

HANDS ON: ROLAND MMP-2

New modeling preamp is a true sonic chameleon

When I heard that Roland would be sending me their new **MMP-2 Mic Modeling Preamp** (\$695 list), I was intrigued. When I actually got my hands on one I was amazed! Here's why:

The MMP-2 is a microphone preamp with two channels of XLR and 1/4-inch phone jacks that can handle a wide range of input sensitivities. It's also equipped with 24-bit/96kHz digital outputs. Its circuitry is a direct descendent of the innovative preamps designed for the best selling Roland VS-2480. So okay, it's a high quality mic preamp, but what really sets it apart is the stellar mic modeling and comprehensive input processing (dynamics, EQ and even virtual "plug-ins"). There's also a USB-MIDI interface with a convenient editor program for either your Mac or PC.

While the MMP-2 will accept any dynamic or condenser mic, for the best results, Roland recommends that you use an **AKG C3000B** Condenser. The unit is also set up to work with a **Roland DR-20** (an inexpensive dynamic mic), a "generic" small dynamic microphone (which we will assume to be a **Shure SM57/58**), a head-worn (headset) dynamic mic and a miniature condenser mic. There's also a "Flat" setting for line input. Presumably, the idea is that by using one of the recommended mics as a "control" input, the MMP2 can produce predictable results.

Now I don't happen to have either an AKG C3000B or Roland DR-20 in my mic collection, so

input you care to throw at it. Peak LEDs are located right underneath, but despite a wide range of audio, mine never lit up.

Finally, below that you'll see buttons for Phantom



Roland MMP-2

power, Phase and a Lo-Cut filter, along with Channel link for those stereo applications.

Another thing the MMP-2 has going for it is its compact size: It's larger than a paperback, but smaller than your average Stephen King novel, meaning it's easy to pack up and take out on the road and doesn't eat up a lot of studio real estate.

Power up the MMP-2 and the unit display defaults to the input meters (you'll note the green Meter light above the backlit display is lit). Press the Patch button and patch number P01 appears in the display: "01>MicModel" which is based upon the *Model+EQ+ Dynamics* algorithm (the other algorithm is *Model+Dynamics+Plugin*). To activate this, you press the orange Enter button, then select your original source and

output (modeled) mics by pressing the green mic button beneath the display and you're ready to go. Yes, it's that simple!

The MMP-2 ships with 43 superb presets, created by those tasteful tone masters at Roland. They include everything from basic mic modeling to presets that will bring out the best in a wide range of acoustic instruments, from nylon guitar to grand piano to solo winds and strings. Also included are models of vintage

consoles and even classic tube amplifiers.

First impressions: When using the AKG 414 and SM57 mics, I was able to achieve an incredibly wide spectrum of timbres. Hearing the \$146 (list) SM57 sound very much like a famous large diaphragm condenser mic in the \$1000+ price range was enough to put the MMP-2 high on my list of "must have" studio tools. And running through presets like "Rock Male Vocal" and "Smooth DJ" were enormously satisfying sonically.

I particularly liked preset P41 ("Amp MillHV") which produced a warm, finely detailed recording of a jazz trio (piano, upright bass and drums) direct to a Masterlink hard disk recorder using just two SM57s. When I switched over to a pair of AKG 414s, it was pure sonic nirvana.

Only people with so-called "golden ears" would ever doubt that the recording had been made with anything less than an astronomically-priced console and premium mics.

The Roland MMP-2 is built solid as a tank and will hold up to almost any amount of abuse, so you need not keep it at home when out gigging. It comes packed with great presets and is a breeze to edit. I found I could run everything without ever opening up the user's manual, though I do recommend reading it just to make sure you have a clear understanding of a few of the finer details. Having both AES/EBU and S/PDIF connections available means you'll always be able to hook the MMP-2 up to any other digital device you may add to your studio in the future or already have on hand.

For pure sonic gratification and ease of use, the MMP-2 should be another best seller for Roland. Extra points for being fun to work with — while reviewing some equipment is actually a chore; the MMP-2 was a total joy! Its low list price (and a Sweetwater price which is lower still) means almost every studio can afford to own a Roland MMP-2 Mic Modeling Preamp.

sweetwater.com/mmp2

"...all Sweetwater personnel involved in my purchase and subsequent tech support calls have been great to work with. Without a doubt, I will continue to do business with Sweetwater. Thank you to everyone."

— Rayford Jones

"Past experience with them brought me to you instead of the competition also, you beat their prices." — Bret Hazlerig



I chose an **AKG 414**

along with a Shure SM57 to test the unit with and was extremely pleased with what I heard, so if your mic cabinet doesn't happen to contain one of the mics Roland recommends, don't worry, the results delivered by the MMP2 are phenomenal no matter what the input!

If you look at the front of the deceptively simple MMP-2 control panel, you'll see input jacks in the upper left, along with switches for a 20dB pad and two rotary sensitivity knobs, meaning this unit will handle whatever levels or

MOTU releases FREE Digital Performer upgrade

MOTU has been hard at work on **Digital Performer Version 3.1**, which should be available by the time you read this. Version 3.1 is one of the most jam-packed new releases we've ever seen in a **free update** for audio workstation software. Our hats are off to MOTU for providing this much value at *no charge*.

Unlimited Undo/Redo. MOTU has taken the concept of unlimited undo to the nth degree: Digital Performer will remember everything you've ever done to your project since the moment you first created it. It remembers across sessions, across time, for as long as you prefer it to remember. You can work on a project, close it, shut down your computer, come back to it and undo something you did three days or three years ago!

DP3.1 actually offers separate undo histories for the DP project itself, POLAR loop recording sessions and individual audio files. Forever gone are the days where you permanently alter an audio file, only later to discover that "Rats! I wish I hadn't done that!" Now, the program remembers every permanent change you make to an audio file and lets you undo it at any time. In audio files, you can even modify an action in the middle of the undo history. For example, if you permanently applied some EQ to the audio file, you can simply double-click that action in the history and the EQ plug-in will open, allowing you to change the EQ settings — even if you originally EQ'd the file six months ago! Mind boggling!

Branching Undo. What is an undo branch? Well, if you do a set of actions, undo your way back through them, and then start off on a new set of actions, you've now got two separate branches: The original set of actions and the new set. Other programs forever nuke all undone actions as soon as you do something new. Imagine that you edit a rhythm guitar part with tons of slicing and crossfades for twenty minutes, undo them all, start recording on another track, only to decide that you want the rhythm guitar edits back. In any other program, you're out of luck. But in DP3.1, you can jump right back into that guitar edit branch. DP3.1 remembers all branches for all time. But it also provides powerful preferences that give you complete control over how branches are saved and discarded. In the end, the only branch that really counts is the main branch, which is the complete string of actions that lead to the state that the file is in right now.

There are many other features related to undo that are too numerous to cover. Suffice it to say that we're completely blown away by what MOTU has accomplished here.

Enhanced track grouping. This is an important feature that MOTU snuck into this release with no previous announcement. Before, you could only group track volumes. But now you can group tracks for general mixing, editing or both. You can even create your own custom groups, choosing what

track attributes are included in the group. Mix groups control all automatable parameters, including volume, panning, mute, solo, solo exempt status, record, send levels, etc.

Edit groups control anything having to do with editing, such as time range selection, inserting continuous data, and much more. For example, if you make a selection in one track, it will make the same selection in all tracks in that group. Another cool feature: If you draw a continuous data curve in one track, Digital Performer automatically duplicates it in all other tracks in that edit group — as you draw! Other track parameters can be grouped, too, such as takes, track locking, track size, vertical zoom, etc.

Loop-based production tools. DP3.1 is full of enhancements for those of you who use loops of any kind in your work. DP3.1 can now import REX



(Recycle 2.0) files. Just drag and drop a REX loop into a track and it immediately snaps to the tempo of the sequence with all of the slivers separated out so that it will "breathe" with any tempo changes you make. Quick and easy.

DP3.1 can also now import ACIDized WAV files. Just drop any ACID file into a DP track and it will automatically snap to the right tempo. Since the number of ACID libraries out there is massive and getting larger, this opens a huge world for quickly building loop-based music.

Here's a related new feature that completely knocked us out when we saw it: The new scissors tool. Aside from its obvious ability to snip audio or MIDI notes with a simple click, it's great for slicing and dicing entire soundbites into little slivers with one sweep of the mouse. Just set the edit grid to, say, sixteenth notes, drag the scissors tool across a drum loop and voila, you now have a separate sliver on each sixteenth subdivision. Do this on an ambient pad loop, use the new Mute Soundbites tool to mute slivers here and there and voila, you've transformed your ambient pad into a slammin' syncopated rhythm bed. And it only took you about two seconds to make!

Soundbites window enhancements. This may not be the sexiest feature in the program, but it sure is one of the most useful — and used — windows. MOTU has added some very powerful new sorting features. Sort by anything: time, length,

date, sample rate, you name it. If someone asks you, "Where's that bass part we laid down in this project last Wednesday?" No problem: Sort by date and boom, you're there. It also shows you the source for every soundbite. Was it created by an edge edit? By recording directly into DP? Imported? Now you'll always know. If you sort the list by folder, DP even shows you the family history of a soundbite. What soundbite did this one come from? Sort by folder to find out.

Support for Pro Tools|HD. Digital Performer 3.1 has full DAE/TDM support for Pro Tools HD, including sampling rates up to 192kHz. There are dozens of other enhancements, too, designed to make Pro Tools operators much more at home in Digital Performer. Just about all of Pro Tools' selection shortcuts are now available, as is the familiar blinking cursor. And our favorite: There are

new transport modes that link playback to memory cycle and memory cycle to selection. So you can now make a selection and DP will immediately start looping that section. Double-click a soundbite with the new I-beam tool and it begins looping. DP3.1 also includes DigiTranslator 2.0 support, allowing full round-trip session interchange with Pro Tools HD.

Post-production enhancements. The new Global Time Display feature allows you to choose — with only a mouse click — SMPTE time code or real time as the time format displayed throughout the program, including edit grids in

all windows. This one feature is huge for anyone doing work to SMPTE. The edit grid can now be set to any value in any time format, complete with grid lines that extend down from the ruler for easy editing alignment.

Many TV and film composers convert their cues to QuickTime movies and open them inside DP to enjoy the benefits of random access video and being able to cue instantly to any location. DP3.1 can now play QuickTime movies via FireWire. Just connect any FireWire video converter, camera or other video device and watch the movie play on the device. If it has a composite or RCA video output, you can connect a standard video monitor and watch full-screen, random-access video. Compare this to video editing systems with astronomical price tags.

As always, there's way more than we have room to cover here. If you're already a DP3 user, enjoy your free update, and be sure to check out the update notes. They are full of gems you'll be glad you found. You'll also find a few special tips from MOTU's Jim Cooper in our **Manufacturer's Corner** on the next page. If you're using an earlier version of Digital Performer, there's never been a better time to upgrade. If you are thinking about an audio sequencer, or if you've been thinking about switching from another workstation package, call Sweetwater now to learn more about the many recent major developments in Digital Performer.

sweetwater.com/digperf

Manufacturer's Corner

Red hot tips and tricks for Digital Performer 3.1

By Jim Cooper, Mark of the Unicorn

Everyone has their favorite new features in Digital Performer 3.1. Mine are the new memory link buttons in the control panel. Let me explain why.

Over the years, many DP users have requested a loop-based approach to transport control in Digital Performer, rather than the tape deck approach (play, stop, rewind) that the main transport buttons emulate.



Figure 1: Digital Performer's new Memory Link buttons.

The idea here is that Digital Performer should always just play or loop the section you're currently working on, either once or indefinitely until you hit stop. Choose a section, hit the space bar and go. No messing with the stop button or rewind button; no reaching for playback wipers or other cueing mechanisms. Just hit the space bar and loop.

Another related and highly requested feature is this: Make a selection, and Digital Performer should immediately begin looping the selection. For example, you might select a soundbite (audio region) to immediately begin looping the entire project for the span of that particular soundbite.

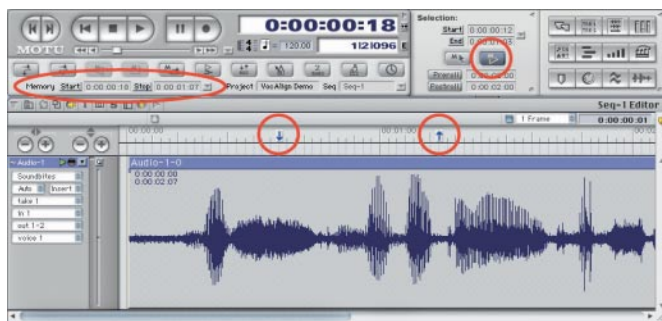


Figure 2: DP3's new 'Link Playback to Memory' button. The draggable blue Memory arrows show where playback starts and stops.

Digital Performer 3.1 gives you both of these features, plus a raft of related options, thanks to the new "Link Playback to Memory" button and "Link Memory to Selection" button. Both are found in the new "Selection" panel in the Main Control panel's pull-out drawer (Figure 1). When you turn on the "Link Playback to Memory" button, the green playback wiper disappears and is replaced by the blue arrow markers shown in Figure 2.

These moveable arrows represent the memory start and end times (circled in red), and they show you exactly where playback will begin and



Figure 3: If Memory-Cycle is enabled, playback loops indefinitely until you stop, as indicated by the brackets on the arrows.

end when you hit the space bar. With Memory-Cycle turned off, the section will play just once. But if you turn on Memory-Cycle (together with the "Link Playback to Memory" button), the memory arrows now display brackets. (Figure 3.) Now, if you hit the space bar, the section will cycle indefinitely until you stop.

But wait, there's more. If you now turn on the "Link Selection to Memory" button (Figure 4), every time you make a time range selection,

the memory arrows will snap to the boundaries of your selection, and Digital Performer will immediately begin looping the entire project over the span of your selection. (If you want it to play the current selection just once, instead of looping, just turn off Memory-Cycle.) Very cool, huh!

By enabling both Memory Link buttons (Fig. 1), you essentially link the selection and memory times. For example, if you adjust the start time of one, it will set the start time of the other as well.

Here's an important tip to remember: only time-range selections are linked to memory, not object selections. For example, if you drag across

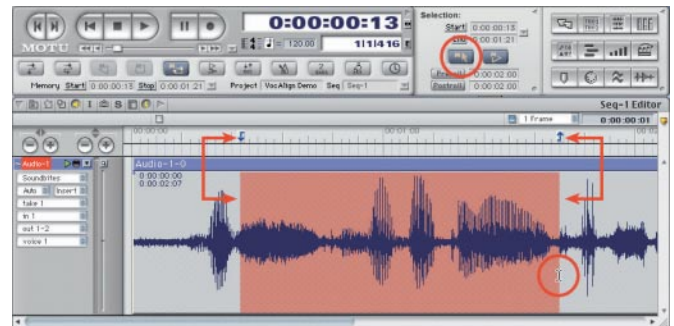


Figure 4: By adding 'Link Memory to Selection' mode, DP3 will always loop the area covered by the current time-range selection.

the time ruler with the I-beam cursor (shown in Figure 4) to make a time range selection, doing so also sets the blue Memory arrows for your playback start/stop times. But if you click a soundbite with the arrow tool, which makes an object selection, the blue Memory arrows won't move. Here is a cool shortcut, though: double-click a soundbite with the I-beam tool. This makes a time range selection over that soundbite, which does move the Memory arrows. So to make Digital Performer immediately start looping a soundbite, double-click it with the I-beam



Figure 5: Specify how much Preroll and Postroll you'd like by dragging these brackets or typing in the desired amount.

tool. To quickly (and temporarily) switch to the I-beam tool, hold down the "i" key or click the I-beam tool in the Tool palette.

You may have already noticed that these new Memory link buttons also provide a Preroll and Postroll option below them (Figure 5). Just click the buttons to turn them on and enter the desired amount of time (in beats and bars, SMPTE frames, or whatever you wish). Digital Performer will then add that amount of Preroll and/or Postroll to what it plays when you hit the space bar. The Preroll and Postroll markers can also be dragged in the time ruler. Note: Postroll is disabled when Memory-Cycle is turned on (since playback loops back at the end of the Memory-Cycle period, not at the end of the Postroll period).

I hope you enjoy using these new features in Digital Performer 3.1!

"It's fun to deal with a dealer who has the products and knows what's up . . ." — Richard Ford

"The word excellence is not enough to qualify you. People like you make the difference." — Antonio Gonzalez

"What a class operation you guys are!" — Tim Snyder

Korg KARMA OS 2 adds new effects, greater control

Just when you thought it couldn't get any better, it does. **OS Version 2.0** for the **Korg KARMA** has just been released, and it opens up a whole new level of interactivity and control for this remarkable music workstation. Offering a creative and inspiring platform from which to launch the performer or composer's musical ideas, the Karma has revolutionized the music making process for thousands of musicians since its initial release.

Since then, Korg has been working hard to keep up with a growing list of features that KARMA owners have requested, as well as enhancing a number of existing features. The result of all this effort is the new Version 2.0. This user installable upgrade is timed to coincide with the release of KARMA MW, a computer software program (for Mac and Windows) that allows in depth access to all of KARMA's creative features.

Karma comes pre-loaded with a staggering 1,190 different Generated Effects. Version 2.0 adds 320 new locations for saving and storing User GEs. These can be loaded in via floppy disk or MIDI dump, and can be created externally using the KARMA MW Computer Software. The **Dance Extreme** (EXB-PCM04) and **Vintage Archives** (EXB-



PCM05) expansion boards are currently being voiced to add new GE's that make the most of these new samples and programs.

Various degrees of randomization can be specified in controlling Karma, contributing to the unique and human sounding patterns it can gener-

ate. One of the more valuable and exciting aspects of Version 2.0 is the Freeze Randomize feature — almost like asking a musician to come up with a new phrase, and then saying "I like that one, keep playing it while I try something on top!"

Other new features packed into Version 2.0 include Time Signature and Tap Tempo control, plus new KRTC (Karma Real Time Control) display features have been added. Version 2.0 also adds a slew of new parameters for melding Karma into the sequencer. When using an external or computer based sequencer with the Karma, Version 2.0 is invaluable. Sys-Ex data can now be transmitted and received for individual parameters in the Sequencer Mode, giving you total control over all parameters of a Song.

If you already own a Korg KARMA, you absolutely *must* have the Version 2.0 upgrade. Those of you unfamiliar with the sonic sorcery packed into this amazing instrument need to call your Sweetwater Sales Engineer right now for more information, but be warned: Once you check out what the Korg KARMA can do for your music, you'll wonder how you ever lived without it!

sweetwater.com/Karma

Capturing drums

— Continued from Page 6

Though an in depth discussion of phase coherence is beyond the scope of this article, suffice it to say that if the sound you're getting is unnaturally thin, with less low end than is present in the room with the kit, then you probably have a problem with phase coherence between your mics, with certain frequencies cancelling out others, just as we mentioned in our discussion of positioning a stereo pair. Therefore, it's important to check the relationship of your mics to one another in terms of phase. The best way to do this is to use the phase reverse function on your mixer, mic pre or software, and to experiment with mic positioning.

If you're able to achieve a full, rich sound from the kit (especially the kick and low toms), and the cymbals have a full, natural decay, then you've likely got a reasonably phase coherent drum mix.

Personally, I always mix on a different day than recording or sampling drums, since the recording process is very fatiguing to my ears, causing me to use

more EQ than necessary. A properly recorded drum kit will actually need very little equalization, particularly once it's set into the complete mix. A snare that doesn't sound quite bright enough when isolated usually falls nicely into the sonic groove when auditioned along with all the other instruments. —J.M.



**AKG
D112
kick
drum
mic**

"Incredible knowledge as well as helpful tech support." — Fran Sampier

"I'm amazed! I am able to find what I need, without spending great gobs of time to do it." — Jack Jacobsen

An affordable piece of the Focusrite legacy

Unlike a decade ago, when we first began producing *Sweet Notes*, there are now a plethora (go ahead, look it up) of processors and preamps available for home and project studios (and pro installations, of course) that sound amazing and don't require a second mortgage to own. One of the most prestigious names in recording technology, **Focusrite**, has just introduced the new **ISA 220 Session Pack** (\$2,295 list) which provides all you need to record your session with precision and that classic Focusrite sonic performance. It features many of the



original circuits of the flagship \$3,495 ISA 430 Producer Pack along with some new features of its own. It also features the same digital option as the ISA 430, providing you with a high quality digital route direct into your digital recording system.

The unit begins with a Precision VU meter which is switchable to allow you to monitor either input level or compressor gain reduction. Situated above that is a 32 LED digital meter for monitoring from either the internal input or an external input which gives access to the second channel of conversion on the optional high quality stereo A/D card. To the right of the Digital Output meter is a global bypass switch to allow for real A/B comparisons.

Three switchable input options are provided to give compatibility with Mic, Line or Instrument sources. The Mic Pre is the classic Rupert Neve transformer-based design as featured in the ISA 110 while the EQ is similar in design to the critically-acclaimed Red 2 and ISA 110. Prior to the Compressor section, which utilizes the same compressor circuit as the ISA 430, the ISA 220 features a "Compressor Pre EQ" switch, allowing you to choose to place the Compressor either pre or post EQ.

Just prior to the Output section, the ISA 220 features the same De-esser as the ISA 430, based on a low distortion optical technology design, letting you transparently remove excessive sibilance from a vocal performance. The circuit uses a combination of threshold dependent EQ and phase cancellation to be smoother and less intrusive than traditional compression based designs. The limiter uses three separate stages of Optical based circuits with different limiting properties to give true distortion-free limiting. An upper threshold is fixed at +20dBu to prevent overload of the internal (or an external) A/D converter. Finally, a variable control adjusts the module output level between -60dB and +6dB ensuring optimum levels exiting the unit. If you're looking for that premium "Swiss Army Knife" front end for your audio system, you need to take a serious look at the powerful new Focusrite ISA 220.

sweetwater.com/isa220

It's time for a tour! I figured that since most of you have probably never had the opportunity to visit us here in sunny Fort Wayne, it might be a good idea to try to provide you with the next best thing. In the next several issues of *Sweet Notes*, I'll be "walking" you around the company from department to department and giving you a behind the scenes, up close perspective of the amazing people and systems here at Sweetwater, the key components that allow us to provide the level of service we do for our thousands of clients, who, incidentally, happen to be the smartest and most discerning customers in the industry.

Our first stop will be in Sweetwater's industry renowned Service Department. There are actually three individual areas in this department:



Tech Support, Installation/Integration and the Bench Technicians. Before we proceed, I should point out how rare it is for a music retailer to even have a Service Department! As most of you know, the goal for us at Sweetwater is to be the *only* place you ever need to call. From the initial consultation and selection of your gear to the technical issues and service needs you might have

years down the road after your purchase, ours is the only number you need.

This column will focus on Tech Support. While only a handful of retailers have Service Departments, how many retailers can you think of that have dedicated technical support personnel? Here at Sweetwater, we have a Tech Support Department staffed with high level folks whose job it is to answer any questions that arise about technology products.

The bottom line is that I'm confident there isn't a competitor in the world who can offer what we do in terms of our ability to provide technical support for the level of products we represent. Okay, I'll admit I'm really biased, but I still believe this to be true, and after taking a closer look, I'm sure you will too. Here are the (drum roll please) **Top Ten Reasons that Sweetwater Tech Support Rocks:**

10. It's free. That's right, for as long as you own the product you purchased from Sweetwater, we'll be right here to support you (how many manufacturers offer that these days, let alone retailers?) Please note, this does not include training (yeah, you've got to read the manual and put in the time to learn how to use the gear — we'll be happy to pitch in if something just doesn't do what it's supposed to).

9. It's fast. If you've tried calling a manufacturer for technical support lately, you know how long you usually have to hold for help. We've developed our system to the point where, even if you don't get right through to a tech support person, you will speak with a real, caring human being



who will ensure that your call will be returned promptly (calls received by 3 p.m. will be returned the same day). Heck, if necessary, we'll even work with you to schedule a call when it is most convenient for you!

8. Quantity. We have six highly qualified Technical Support folks. But, that's not all. We have a ton of other "human resources" who we can turn to for additional assistance if needed. Nearly every



one of our Sales Engineers has a large home studio (a by-product of working in a "technological candy store" and loving music!). We'll put bench technicians on the phone if they have specific insights to help a customer. Our Service Manager and Assistant Manager are both technically savvy. We can draw on the guy who writes *inSync*, the most extensive on-line technology newsletter going, as well as any number of other "gear heads" employed here.

7. Brains. No dummies allowed! Every one of our support techs has a college degree, most in music technology (others in theory,

composition, etc.). Each member of our staff has considerable and ongoing training to handle even the most difficult situations. They can "go deep" with almost any product we carry.

6. Personality. Being smart and having the answers is great, but it's not enough. Beyond the technical chops, these folks are great people who really understand the true meaning of customer service. When you call in for support, you don't have to worry about being treated like a dummy or confronted with an "I don't have time for you" attitude.

5. They're pretty. Okay, I got caught up in the brains and personality thing . . .

4. Depth. With the broad amount of hands-on experience these folks have and their extensive backgrounds in audio, each of them are capable of handling an astonishing variety of tough technical problems.

3. Relationships. We're in it for the long term. That means that we must have great relationships not only with you but with our manufacturers as well. If for some reason we run into a really sticky problem, we can count

on our manufacturers giving us access to the "A Team", often the product designers themselves, to help us to sort through the situation. This is access most other retailers just don't have and a tremendous resource for you.

2. 24/7 Assistance. You read it right. With **SweetCare™** 24 hour support and care, you have access to our humongous "Knowledge Base" packed with tech tips garnered from years of experience. A few of the featured sections include "Tech Tip of the Day" Library, "Summit" articles featuring advice from the pros, "Tech Library" of articles, "Word of the Day Library" and the "Expert Forums."

1. Experience. These folks have *several hundred* years of combined musical and technical experience. Some of it comes from real world encounters with the gear. Their backgrounds as professional musicians, recording engineers and studio owners, producers and DJs make them uniquely qualified to solve the problems they face daily. As most of you know, it's darned near impossible to really talk the talk if you haven't walked the walk.

Well, that's the Sweetwater Technical Support Department in a nutshell! I could go into much greater detail (and may in some future issue) about some of the wacky stuff they've been able to sort out and some of the famous people that they've pulled out of really tight spots, but unfortunately there's just not enough room in this issue. Meanwhile, we'll pick up with the rest of the Service Department next time around.

Rock and Roll! — Jeff (VP of Sales)



Right after I finished last issue's column, I decided that I would celebrate my tenth year with Sweetwater by doing something nice for myself. After all, how often does a tenth anniversary come along? Since I'm a musician, that naturally means adding new gear. At first, I was going to treat myself to the **Line 6 DM4 Distortion Modeler** (\$349 list), a terrific pedal with a stellar range of distorted tones for any occasion. I still intend to add the DM4 to my sonic arsenal, but at the last minute decided that ten years warrants something a little more extravagant. I've owned lots of **Fender**® amps over the years, from an early 1960s blonde Bandmaster® to a silverface Super Reverb®. So I might have chosen one of the company's highly acclaimed tube reissues, like the **'65 blackface Deluxe Reverb®** (\$1,139 list) or the updated **Pro Reverb®** (\$1,499 list). But in the end, I opted for Fender's newest innovation, the **Cyber-Twin®** (\$1,749 list). I had heard Buddy Guy live a few months back and he was running through this amp, and his sound was amazing (he also plays pretty darn good, too).

About six years ago, I reviewed one of the very first of the new generation of modeling amps for *Electronic Musician*. While I thought it was a pretty good start, the technology has come a long way since then, to the point where I had to admit my ears weren't up to the challenge of being able



also stocked with two 12" speakers, I was able to dial up the exact sound in both amps. Part of the "magic" comes from Fender's use of two real 12AX7 vacuum tubes in the Cyber-Twin's preamp, meaning they didn't have to come up with a simulation of the kind of distortion that happens when overdriving actual tubes.

When you glance at the Cyber-Twin, the left two thirds of the amp looks just like any classic blackface Fender amp. However, the right third sports a gorgeous bluish green fluorescent display along with a variety of knobs, dials and buttons for

programming. You can endlessly tweak any of the built-in amps or the DSP effects and save the final result to one of the 85 user presets (the amp ships with 85 Custom Shop presets, many of which are perfect right out of the box). All of this means there are 205 presets to choose from.

One thing that really knocked me out immediately was how accurately the Cyber-Twin captures that distinctive Fender Reverb sound. If I didn't know better, I could easily be fooled into thinking there was a real reverb tank tucked into the bottom of the cabinet. You also get a number of room, hall, arena and plate reverbs, all of which sound lush and with none of the mushiness that plague a few of the reverb models in some other amps. The phaser and flanger effects are first rate, with all the (for lack of a better word) "swooshiness" you could ever want. The delays are also uniformly excellent and include a wonderful backwards delay. The two chorus modes are on par with most pedal versions of the effect and the Cyber-Twin even comes with a digital simulation of the rare Vibratone® speaker with its rotating speaker baffle. The onboard tremolos (there are two) kick vintage butt, sounding exactly like the trem circuits in those great old Fender amps like the Tremolux®. Finally, you get two wah effects (modern and vintage) which can be set for touch control or by an optional foot controller.

The amp ships with lots of extras, like a Quick Access footswitch, a reverb/effects on-off switch and even a cover. The back panel has all the requisite connections, including effects loop, S/PDIF out, stereo line out and MIDI, along with an array of foot controllers. Finally, virtually all the front panel controls are motorized, so they turn by themselves to the positions they were set at in the presets. It doesn't make the amp sound any better but sure adds to the fun factor. Too cool.

The bottom line? The Cyber-Twin gets my highest recommendation for great sound and amazing flexibility. If you've been on the fence about getting a super versatile amp, but prefer it has a brand name you've come to respect for the last half century, this might be just what you've been waiting for.

While we're on the subject of great guitar gear, I've been meaning to tell you about the **Tech 21 Killer Wah** wah pedal I got a while back (\$175 list), it's just that I keep running out of room.

It's designed by the people who stunned the guitar world with the original **SansAmp**, and though I'll admit that this isn't the wah for every guitar player, for my needs and playing style it couldn't be better. The sound of this wah is very musical and refined. Those players who want a harsh, edgy wah that will peel the paint off the walls need not consider this compact, chrome-bodied beauty. But if, like me, you find most of the waha being built today to be overly bright and want a smooth, full sound, look no further. You'll dig the unit's three way switch which can be set to emphasize either the high or the low end of the sound spectrum, plus an "extended" position which produces an extremely wide frequency sweep without getting overly strident in the upper ranges.

Both the Cyber-Twin and the Killer Wah are in stock at Sweetwater, along with hundreds of other items any die hard guitar player probably can't live without, so give your Sales Engineer a call today!

Jim Miller can be contacted at jim_miller@mindspring.com



to hear the difference between a tube amp and a well-designed modeling amplifier. Still, as Fender is quick to point out, the Cyber-Twin is not a modeling amp in the classic sense. In fact, their catch phrase is "It doesn't just sound like a great amp — it is a great amp." Fender product designers came up with an entirely new technology which allows the Cyber-Twin to actually reconfigure its internal circuitry to "become" a 1949 Champ® or a '59 Bassman® or any of 35 classic amps, from Tweed to British to Modern. So what you have, in essence, is a digitally-controlled analog amp with tubes, capacitors and resistors, etc.

Does it live up to its claims? Well, in my opinion, yes, it does. I should note that Fender designed the Cyber-Twin to pump 130 watts of stereo power into two 12-inch Celestion speakers. Though the choice of dual twelves makes perfect sense, the vintage amps it recreates had a wide variety of speakers, from a single 8-inch (in the Champ series) to four 10-inch speakers (the Bassman, among others). In some cases, different years of the same amp were stocked with different brands of speakers, so it would be impossible for two twelves to ever nail the sound of all those different size, brands and number of speakers. Fender engineers take note: It would be great to have the ability to plug the Cyber-Twin into a variety of speaker cabinets, from a single 10-inch to a full 4x12 stack. I'd definitely dig my credit card out for a 4x10 open-back cabinet.

Having said all that, the Cyber-Twin *absolutely* delivers the goods when it comes to great tone! Set up alongside a vintage Twin Reverb®, which is

Open up a whole new world of purchasing power and shopping convenience!



inside THIS ISSUE

- SPECIAL SUMMER NAMM REPORT
 - DIGIDESIGN DIGI 002
 - TASCAM SX-1
- MANUFACTURER'S CORNER:
MOTU's DIGITAL PERFORMER
- ROLAND MMP-2 REVIEW
and much more!



All contents © 2002 Sweetwater, Inc.

EMPLOYEE PROFILE

Name: MARCEL JAMES
Position at SSI: Sales Engineer
Start Date: 10/08/01
Hired As: Sales Engineer
Education: U.S. Air Force Tech School as a weather specialist.
What was your occupation before coming to Sweetwater? Home Improvement Contractor.
Foreign Languages: German
Technical Strengths: Learning software — vocoding programs in particular. Configuring turn-key computer-based recording systems.
Instruments you play: Keyboards
Gear you own: Soundcraft series 600 console, Juno-106, Yamaha CS2X, Virus Indigo, Cubase, Reason (PC), Lexicon LXP-1, LXP-5, LXP-15 (modified by Audio Upgrades), Aphex Expressor, ART Dual Levelar, Tannoy Reveal Actives, Roland JD-990, Akai S5000.
Family info: A daughter named LaRae. A black Labrador named Chase.
Other stuff we should know about you: I love basketball, lounging on the beach of southern Lake Michigan, going to concerts and I enjoy grilling gear manufacturers with my fellow Sales Engineers twice weekly in our company sales meetings!
Favorite Magazine: Computer Music **Real life hero:** Michael Jordan
Personal motto: "If you don't pave the road, you won't win the race."
Guilty pleasure of choice: Throwing a ball for my Labrador to fetch.



How would your boss describe you? Slow, but deliberate. Someone who'll push the system, when needed, to help a client in a pinch.

How would your best friend describe you? A humorous fellow that never forgets his true friends. Loves sports and writing songs.

What did you dream about doing for a living when you were growing up? Working in a broom factory. There's nothing like a good, firm broom!

What in life best prepared you for the work you do here at Sweetwater? Recording at home and in commercial studios for the past 15 years, my background in sales and the military!

What is the most important thing you've learned while working at Sweetwater? That there are more im-

portant things in life than going to Hawaii.

What do you enjoy most about being part of the Sweetwater team? Being able to talk about things I have a great interest in all day long.

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: One cool example is the time I tracked down a custom-made tweed dobro case for Stefan Lessard (bass player of the Dave Matthews Band). We even had the band's guitar tech trace the dobro so that it would fit snugly in it's case!