KURZWEIL'S AMAZING PC2 See Page 6

Sweetwater Music Industry NEWS AND PRODUCT INFORMATION STATE OF THE ST

MUSIC TECHNOLOGY DIRECT

EARLY SUMMER 2000 ISSUE



Let's see a show of hands: How many of you out there would love to have a digital project studio at home but think it might be too expensive? Okay, let's see those hands ... wow! That many! Gee, have I got great news for you. Now you can have the studio you have always wanted, and with capabilities you never thought you could afford thanks to the new BOSS BR-8!

Carrying a list price of just \$845, the BR-8 is a sophisticated 8-track digital recording workstation for guitar players and other musicians seeking a simple, yet high-powered alternative to tape-based recorders. Its acclaimed V-Studio technology — including Virtual Tracks, COSM effects processing and true non-destructive operation — is enhanced with unique features specially designed for gui-

tarists including a Rhythm Guide, Phrase Trainer, and a built-in chromatic tuner. But you don't have to be a guitar player to want one (or to make great recordings).

What Roland learned through engineering the best-selling VS-Series digital workstations (and that's quite a lot), they put to good use in designing the BOSS BR-8. Imagine a self-contained 8-track digital recording studio with 64 Virtual Tracks; a built-in Zip drive for recording to convenient, inexpensive 100MB Zip disks; a simplified user interface with graphic LCD that makes digital recording almost effortless (no steep learning curve on this baby) and a wide range of superior quality effects including COSM guitar and bass amp models and — Continued on Page 2

INSIDE THIS ISSUE: HOT NEW E-MU MODULES

No other company has been building samplers as long as **E-MU**. They were also the very first manufacturer to introduce the sample playback module. In fact, E-MU has a long list of industry firsts. But we think their latest innovations are some of their finest, from the sophisticated **Virtuoso 2000** Symphonic Module to the outrageous **Mo'Phatt** Urban Dance Synth. — **SEE PAGE 3**

TAKAMINE LTD2000

An outstanding combination of craftsmanship, stunning appearance and playability makes **Takamine's** latest Limited Edition acoustic, the **LTD2000**, a real winner and a guitar player's dream come true. — **SEE PAGE 4**



LINE 6 FLEXTONE II AMPS

The very first digital modeling amp ever made was the Line 6 AxSys 212. Now guitarists in search of the perfect tone have even more choices thanks to the incredible Flextone II Series and its TubeTone technology . What's so special about these amplifiers? — SEE PAGE 7

PLUS: MOTU 2408mkII, Cakewalk Pro Suite, Yamaha PSR9000, Manley Labs and more!

ROLAND XV-88

Is the new 128-Note Expandable Performance Synthesizer their best ever? — See Page 2



128-VOICE EXPANDABLE PERFORMANCE SYNTH

Just take a look in the latest Sweetwater Equipment Directory (or any industry magazine, for that matter) and you'll quickly see that there's a mountain of synthesizers available these days for every possible need and in every price range.

I remember when I decided to buy my first synth. There were maybe three or four models available that

anyone could consider "pro" quality. But today, you get so much power and performance for your money that it's almost mind-boggling (I'll admit my mind is easily boggled). Here's just one example . . .

The XV-88 128-Voice Expandable Synthesizer is, according to the manufacturer, Roland's finest performance synthesizer to date, featuring powerful XV-3080 synthesis, an 88-note precision hammer-action keyboard and other expressive features like the infrared light-sensing D-Beam controller. This synth offers a



full 128 voices (no more dropped notes in performance), true stereo waveforms per tone, expressive Matrix Control, expandability via new 64MB (in 16-bit linear format) SRX- and popular SR-JV80-Series wave expansion boards, and a host of new studio-quality effects, marking the XV-88 as performance synth of the highest order.

Let's take a look at the XV-88 in detail. First of all, there's the feel of the instrument. You get a full 88-note precision hammer-action keyboard that's modeled

after the most popular piano keyboard in the world (like the letter on Superman's cape, it starts with an "S"). When you play the XV-88, it feels like you are playing a \$10,000 piano, with silky smooth action that's been maintained by the best piano technician around! Call up a piano preset and you'll feel like you're pounding the keys of a true concert grand. But unlike any grand on the planet, this one comes with full aftertouch capability, an arpeggiator and more!

Roland's new 128-voice synth engine allows for extensive layering and multitimbral applications. Some "pro" synths are still limping around with 64-note polyphony or less. If you've ever played back a sequence or been in the middle of a piano performance and heard those notes dropping out, you know how important this feature is. The Roland XV-88 obtains its 128-Voice polyphony through a single, powerful sound engine, which means even the most complex multitimbral arrangements and layers can be created using just one XV-Series synthesizer.

Besides its excellent polyphony, the Roland XV-88 offers the world's most advanced digital synthesis technology, which translates, first and foremost, into incredibly expressive sound — and it doesn't matter how much polyphony you have if you can't get sounds that inspire you. The XV-88's internal wave memory, on par with many of today's high end samplers, comes with 64MB of ROM sounds standard — or four times that of the best-selling JV-2080. There are 424 new waveforms, each painstakingly sampled to achieve a level of realism never before possible. These new waves include everything from sonically rich stereo grand pianos to sophisticated sampled guitars capable of reproducing slide and harmonic performances. In addition, there are new expressive Rhodes pianos, rock organs, saxophone, orchestra unisons, and analog synthesizer waves — plus all new drum sets that must be heard to be believed.

In addition to these new waveforms, the XV-88 includes all of the waveforms of the JV-2080, ensuring backward compatibility with all XP/JV-Series synths. Roland even mined the archives to include 112 waveforms from the legendary JD-990. These waveforms are perfect for sound designing and offer a variety of analog waves, attack transients and spectrum loops.

Continuing Roland's commitment to expandability, the XV-88 can use a combination of new quality-intensive SRX-Series 64MB wave expansion boards and any of the current SR-JV80-Series boards. The next generation SRX-Series boards boast more memory than any other expansion card currently available, yielding

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— Continued from front page acoustic / bass guitar simulators. The BR-8 also includes a truly innovative Rhythm Guide with various built-in patterns for building a rhythm track, plus an integral chromatic tuner and dedicated Hi-Z guitar input, and even a Phrase Trainer that actually slows down recordings to half-speed for learning guitar licks. You even get an optical digital output for connecting to digital devices such as DAT or MD.

But what really sets the BR-8 apart is simplicity. Yeah, you can spend months learning a whole new system for recording on an expensive digital machine, and that's perfect for some people, particularly those that use it almost every day. But for me, I want a machine that I can use when inspiration hits me. I don't want to have to yank all my cables, reconfigure my patchbay, reassign channels on my mixer, take a refresher course on how to

use the recorder . . . no, I want plug and play!

What about some digital effects? Yes, today's outboard units are incredibly sophisticated and infinitely powerful, but what if I don't have to deal with external units, patchbays and running those annoying wires all over the place. Not to worry: The BR-8 comes with onboard effects, and let me say up front that they sound great.

Essentially, the BR-8 looks and works just like a portable tape recorder — maybe very much like

that multitrack cassette unit you just decided to retire. All the functions are clearly labeled, and it's very clear exactly what does what. There's not even a Shift key, just plainly marked controls like the Play button and eight track faders for the digital mixer.

At first, you might be tempted to think the BR-8 is just an 8-track recorder, but it's really a 64-track thanks to what BOSS calls "V-Tracks." True, you end up with eight "final" tracks, but saying it's an 8-track is like saying a 24-track digital recording studio is really a 2-track because you end up with a 2-track master. With the BR-8's 64 recording tracks, you'll probably run out of ideas before you run out of tracks.

On the back you'll find a clearly labeled guitar input, as well as two mic inputs, and a stereo line in for a keyboard, another recorder or whatever. With a BR-8, you could just plug your guitar into the input and start playing. Also on the back is a headphone jack with a volume control. This lets you work late at night without bothering anybody (I don't know about you, but I get inspired at about 2 AM).

If you plug your guitar in and it's out of tune, with one press of the button marked "TUNER ON/OFF", you can tune up using the BR-8's backlit LCD. Press it again, and just like advertised, the tuner goes off and the BR-8 (as well as your now-in-tune guitar) is ready to go. Brilliant.

How's this for simple and logical: For example, if you want to record your guitar and a vocal at the same time, all you have to do is plug a guitar into the guitar input, a mic into the mic input, and press the two Input Select

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SWEETWATER PRODUCT PROFILE



E-MU MODULES

When the history of sampling is written, you can bet that the first chapter will be devoted to the accomplishments (and innovations) of **E-MU**. Few people remember that E-MU started out building analog synthesizers in about 1971. These were huge, modular instruments that practically took up a whole wall in the studio. Few musicians were actually able to afford one; fewer still understood how to program it.

But the real reason E-MU (then known as E-mu Systems) achieved its current lofty position in the music world is thanks to the introduction of the original Emulator sampler in about 1981. The instrument listed at \$7,900 and only about 500 were built (the first one went to Stevie Wonder!). By 1984, the immensely popular Emulator II was introduced and the rest, as they say, is history. The company went on to build the first 16-bit sampler (the EIII), the first truly affordable drum machine with real drum sounds (the Drumulator), the first rackmount sample playback module (the Proteus) and many more.

Still, we're not here to take a history lesson — we're here to learn about some truly amazing new modules that may be every bit as groundbreaking as anything E-MU has done up until now. So sit back and relax as we take you on a tour of E-MU's latest and greatest instruments.

To this writer, nothing is more exciting than the new **Virtuoso 2000** 128-Voice Virtual Orchestra (\$1395 list). The Virtuoso 2000 ships fully loaded with 64 megabytes of all new orchestral instrument (and section) samples, all of which were recorded in the same acoustic space by the same symphony orchestra and soloists. What this means is that you get a super consistent sound across all the instrument groups.

In the past, you might have an oboe recorded up close in a dry studio, while the English horn was re-

corded from six feet away in a hall. Put them together and you had a totally unnatural sound. Most listeners probably wouldn't know why the sound was, well, a bit weird, but it was easy to tell that the resultant mix was not natural. And when you added other instruments recorded in other acoustic environments — from dry studios to ultra live halls — it would all end up sounding totally wrong — murky and unfocused.

Which is why E-MU finally decided it was time for the ultimate sampling session. They started negotiations with a prestigious, world class orchestra in a major city (which, we're sorry, but we cannot name for a number of reasons) and finally the session was set. I've personally been present at many sampling sessions, and I know they can be grueling. Plus, you go back to the studio with dozens of hours of digital information, faced with the task of finding each of the best, most consistent

notes from all the instruments of the entire orchestra. Then everything needs to be looped . . . Yikes! It's truly enough to make your head spin.

But the good news is that the end result was totally worth the monumental effort. Everything is here in meticulous detail, from solo and section strings to brass, woodwinds and percussion — all sampled from the same symphony under absolutely ideal recording conditions.

With its massive polyphony, 32 MIDI channels, 24-bit dual stereo effects processor, two expansion slots, six balanced analog outs, lightning-fast processor and versatile I/O, the Virtuoso 2000 is sure to please even the most demanding composer — like you and I. It will even play back Flash ROMs that have been authored on E4 Ultra samplers, meaning you can add your own custom samples to the Virtuoso 2000 and take it on the road and leave all of your expensive gear at the studio where its safe.

You want upgrades? The Virtuoso 2000 will accept the following upgrade kits: **9081 Holy Grail Piano** (16 MB), **9082 Protozoa** (16 MB Sounds of the Proteus 1, 2 and 3), **9083 Definitive B-3** (32 MB), **9084 Techno Synth Construc-**

and 512 user presets, 64 voice polyphony (expandable to 128 with the Turbo upgrade), outstanding rotary speaker simulation, 12 assignable real-time front panel controls, dual outputs (expandable to six plus S/PDIF w/Turbo upgrade) and a builtin 24-bit dual stereo effects processor. Like the Virtuoso, the B-3 plays back Flash ROMs authored on E4 Ultra samplers. Upgrade kits include all of the upgrades for the Virtuoso, plus 9085 Orchestral Sessions Vol. 1 (32 MB) and 9086 Orchestral Sessions Vol. 2 (32 MB), which together add all the sounds of the Virtuoso to your B-3 module! The 9190 Turbo Module Upgrade adds four additional analog outputs, S/PDIF I/O, 128 voice polyphony, 16 additional MIDI channels and two additional ROM slots.

The aptly-named **Xtreme Lead-1** (\$895 list) is E-MU's new techno / electronica BPM synthesizer that gives you an incredibly diverse dance soundset, powerful filters and unparalleled rhythmic capabilities in one rackspace. The XL-1 also introduces E-MU's new SuperBEATS Mode, which allows you to effortlessly trigger, latch and unlatch synced loops and grooves from separate keys on your keyboard. Add to this up to 16 simultaneously synced arpeggiators, and you have an



They may not match your decor, but E-MU's new tone modules are simply awesome: B-3 (top), Mo'Phatt (middle) and Xtreme Lead-1 (bottom)

tion Yard (32 MB), 9087 Sounds of the Ensoniq ZR (32 MB) and 9088 Planet Earth Vol. 1 (32 MB)

E-MU's new **B-3** sound module (\$895 list) delivers the magical B-3 tonewheel organ sound in one rack space. Meticulously sampled, E-MU's B-3 offers you an exhaustive palette of authentic drawbar settings, distortion and tremendous rotary speaker control via the B-3's real-time controls. The B-3 even offers you percussive features that play just like the real thing — no other module can touch it! And the B-3 is expandable with an additional ROM slot (for up to 128 MB with the Turbo upgrade), letting you fit even more power and sounds into this amazing one rackspace unit. Experience the magic of E-MU's B-3 module for yourself — nothing else sounds closer to the real thing.

Features include 32 MB of sound ROM with 384 ROM

all-in-one dance module that buries the competition. And the XL-1 has an additional internal ROM expansion slot (or more with the Turbo upgrade), that allows you to expand your sound arsenal with the many Proteus expansion ROMs available, or even create your own custom ROMs using E-MU's E4 Ultra samplers. Take the lead with E-MU's XL-1 and don't look back.

Features include 32 MB sound ROM with 512 ROM and 512 user presets, 64-voice polyphony (expandable to 128 with the Turbo upgrade), 12 assignable real-time front panel controls, Rhythmic Pattern Generator / Arpeggiator, 12th order filters, dual outputs (expandable to six plus S/PDIF with the Turbo upgrade), a super clean 24-bit dual stereo effects processor, one additional internal ROM expansion slot (expandable to three) and 16 MIDI channels (expandable to 32). As you might

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Some of you may look at the guitar on this page and think, "Gee, that's a gorgeous instrument." Well, you'd certainly be right about that, but there's more to the story behind the creation of **Takamine's Limited Edition 2000** guitar than meets the eye — a lot more.

While many of you are aware that Takamine builds a new Limited Edition acoustic each year, you might be surprised that this is actually the 14th year the company has undertaken such an ambitious project. And arguably, this may indeed be their finest work to date. Previous Limited Edition models have gone on to become true collector's items, as much for their beauty and design as for their playability and outstanding tone, not to mention the fact that very few of these guitars are built each year, making them highly prized among those who appreciate the craftsmanship that goes into building such an exquisite guitar.

For the Year 2000, Takamine went all out. I've seen this guitar and played it and let me say that no picture can possibly do it justice, nor will my words be adequate to describe what it's like to hold one in your hands. Never before has any manufacturer designed an instrument where the peghead, fretboard and rosette were all one integral piece of art. Nor has any manufacturer put together so many materials to create such a stunning design: From choice woods like black jacaranda, padauk, maple and walnut, to polished brass, aluminum and even acrylic mirror.

A single, continuous stellar cascade illuminates the entire neck of the guitar. This richly inlaid design delicately weaves itself from the top of the headstock, down the full length of the fingerboard and ultimately ends up spilling its stars into the rosette, where a stunning acrylic mirror comet streaks across the night sky of January 1, 2000. If you look closely, you'll see that the constellations of Orion the Hunter and the Big Dipper (part of the constellation Ursa Major, the Great Bear) are actually positioned exactly as they were in the southwestern and northeastern skies respectively at midnight on the dawning of the brand new century. Tastefully selected woods actually form olive branches at the base of the rosette which are a traditional

As great as this all might sound, you cannot begin to imagine what all these hand selected materials look like up on stage. The acrylic mirror stars and comet literally appear as if they are illuminated by a laser when seen under the bright stage lights, creating an effect that's visually compelling (to put it mildly). Trust me — nobody seeing you play this guitar on stage will forget the experience for quite a while.

sign of peace around the world.

Still, as gorgeous as this instrument is, it had better play well and sound fantastic. And it does! The traditional Takamine minijumbo sized NEX cutaway body shape has now been used for 11 years, and its combination of comfort, balance and playability are as good as it gets. A bone saddle and bone nut guarantee warmth and clarity with just the right amount of attack and sustain.

Destined to be a Classic, the
Takamine Limited Edition 2000
celebrates the dawn of our new
century as an instrument of unparalleled artistry and workmanship. With
a top made of choice solid Spruce with Xbracing, a fine Mahogany neck and Rosewood



Art and Music Come Together to Celebrate the Dawn of a Brand New Century

back, sides and fingerboard, this is an instrument of uncompromising quality.

As if all that weren't enough, the Limited Edition 2000 features Takamine's finest electronics, the Graph-EX preamp with bass, mid and treble controls plus an onboard exciter. Did I say exciter? You bet, but this isn't one of those pedestrian exciters that atificially add highs (and to my ears sound like fingernails on a blackboard). For this guitar, Takamine employs an exciter that actually adds clarity and glossy harmonics while taming the sharp edge that many preamps deliver when plugged in (if you've ever played a guitar with inferior electronics, you know exactly what I mean). It's a smooth, natural acoustic sound that floats right through your mix with well-defined bass and mids and those sweet highs you crave.

Another cool feature is that the entire preamp is interchangeable! That's right: If Takamine unveils a newer, better sounding set of electronics somewhere down the road, you simply pop out the existing preamp and drop in the new one. It's that simple. So simple, in fact, that you wonder why other manufacturers didn't think of it before now — though you can bet they'll start adding that feature to their high end models soon.

As for playability, well, I have to say that the neck feels darn near perfect, with just enough chunkiness so you can really grab hold

of those big chords, but also with just a hint of that slinkiness that we electric guitar players like in our acoustics. In short, it's a terrific compromise that will have you playing long into the night without the typical, painful hand and finger fatigue that you suffer



with a guitar that sports a poorly-designed neck.

Finally, a smooth gloss polyurethane coating is applied giving it a finish that perfectly complements all the other elements. For my taste, a gloss finish is perfect. I know that satin finishes are getting popular because they don't show those unsightly fingerprints. But a guitar with this much gloss and sparkle just screams out for a slick gloss finish, and I'm glad they did it here.

Hey, don't just take my word on this. You really owe it to yourself to check out this magnificent instrument. If you've dreamed of playing a guitar that just feels right in your hands — one that is as gorgeous as it is great-sounding, this is the one. And considering just how limited the Limited Edition 2000 is, you'd best call right now. Believe me, your Sales Engineer will tell you exactly how much magic is in this guitar. What's more, he or she will also be happy to give you your special Sweetwater pricing on what is a once-in-a-lifetime investment. So call now. — *Jim Miller*



I hope you'll take the time to read this issue's column because it's about you! Yes, you personally, our valued customer. I'd be kidding myself if I thought that everyone read "Inside Sweetwater" in each issue of Sweet Notes, but as you'll see, there's a good reason for wanting you to read this one.

If you're in business — any kind of business, from retail sales to running a studio - you know how critical it is to really know your customers. Here at Sweetwater, we go to great lengths to find out what equipment you have, what kind of music you play, whether you're a professional or have a home project studio, etc. We spend a lot of time in getting to know you as a person. We also spend a lot of time trying to get up-to-date information in your hands about new

products, special sales and so forth.

So here's the deal: Do we have your most current information? Do we have your present address? Do we have your name spelled correctly? Are you getting more than one copy of the newsletter? I would really appreciate it if each of you checks this copy of Sweet Notes and makes sure we have your name spelled correctly and the right street address, zip code,

etc. If not, please call us and give us the correct information — it's a toll free number and the call will only take a minute or two. If it's more convenient, you can even e-mail us at "sales@sweetwater.com" the next time you're online and get us the information that way.

Now if you're still with us, I want to bring up a subject that I have talked about many times before, and one that I'm sure I'll discuss again. As you are probably aware by now, Sweetwater is growing at an unprecedented rate. As we grow, so too does our ability to negotiate great deals with manufacturers on their hottest products, meaning we pay less, then pass the savings along to you.

I'm the first to admit our great success has been because of two things: The basic Sweetwater philosophy and the quality of our Sales Engineers. You and I know that if you call up and get an indifferent person on the phone with little or no product knowledge, odds are slim that you'll be buying from that company, no

matter how wonderful the rest of the people there might be. That's why we go to such extraordinary lengths to recruit the very best sales people (and tech support, service, shipping, marketing, etc.) in the entire music industry. In fact, we have a full slate of interviews set up for the Summer NAMM Show. But even if we were to hire every single person we interview, we will still

need additional people to join our team — that's how fast our company is growing.

Naturally, our main focus is on qualified sales people, but we also have openings in every department (just ask the graphics/marketing people how much they'd like another talented person or two to help out with the huge list of upcoming projects). For more specifics regarding our openings in the sales department, I suggest you check out Jeff Radke's column on Page 12. There you'll find the whole story on just how you can become a Sweetwater Sales Engineer. Or call (800) 222-4700 and ask for our Career Center. I know I tend to go a bit overboard on this subject, so I'll put on the brakes here and just have you read Jeff's column.

One final bit of news: Our Web site will be getting a

complete redesign soon actually, it will probably be up and running by the time you have this issue of Sweet Notes in

Keeping the site upto-date and making it easy to find the information you're looking for is, naturally, a full time job. It's also a learning process for everyone, since the Web is still fairly new, particularly when you compare it to printed media. Many of you probably still remember when Sweet Notes was a 4-page black and white

your hands.

Here's a sneak peek at what our new Home Page will look like. You'll find it easier than ever to find what you're looking for!

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publication. Compare that with what you are holding in your hands right now! That same evolution is occurring all over the Web these days as companies learn how to take advantage of all the latest software available, as well as having talented people on staff who really know how to put together an effective electronic document.

Essentially, this Web site "facelift" will be geared to help our customers go more directly to the products and information they are interested in. It also builds a strong and flexible framework that will allow us to make many additional improvements in the coming months — and there will be lots of them, you can be sure!

We're always looking for ways to help you make informed decisions regarding your purchases. An enhanced Web site is just one way we can make sure you get the information you need in a timely manner.

Meanwhile, I think we have another terrific issue of Sweet Notes for you, so enjoy! And I'll see you here again



Q: Why does Pro Tools LE 5.0 say "not enough disk space available" when I try to "Bounce to Disk" and I know I have plenty of free space available?

A: Sometimes a bounce error message will appear if you have Automation running and you don't select the region before you bounce. This will cause Pro Tools LE to think the region is the entire song, and if there is a "Break' in the automation, Pro Tools LE thinks the song is infinitely long — so you would never have enough hard drive space. Just use the region tool and select all the Tracks from beginning to end and then select "Bounce to Disk" and the message should go away. If not, you may want to Defragment your hard drive, as there may not be a large enough "Block" (contiguous free space) available.

Q: I boot up Logic and all I see is four audio tracks and they only show an "M" next to them. The "R" is missing. What's more, there's no sound! What's wrong?

A: Your audio driver is not being recognized in Logic. You must do two things: First, check in your Audio (audio hardware and drivers) and make sure you have "PCAV" checked. If this is not checked, Logic will go into a default "no audio" mode and will just act as a MIDI sequencer.

Secondly, go out of Logic and go to the Logic Audio Device Setup and do a "full rescan" of audio devices. This is where Logic sets up all of the possible audio drivers that Logic can use. At this point, your driver should show up on the left side, which is the "virtual devices" side. If it only shows up on the right, which is the "system devices" side, this means it is only showing up in Windows and NOT in Logic and you must Rescan.

Q: Why does my MOTU Parallel Port MIDI interface not get recognized when installing into a Windows operating system?

A: There are two main issues that will cause this parallel port device to not be recognized by Windows. One is the parallel port mode setting in the BIOS operating chipset on the motherboard. To get there, you must restart your computer and depending on what type of computer you have, hit Del, F2, F3 or maybe even F10. Most of the times you will see it written on the bottom of the screen when your computer monitor first turns on. Once you have gotten into the CMOS settings (which we call the BIOS setup), you will look for Integrated Peripherals or PCI Configuration within the options menu and within that you will see a Parallel Port Mode. Make sure the mode is set to either EPP (Enhanced Parallel Port) or Bi-Directional. We recommend EPP because it is a more reliable mode for the MIDI interface. Once that is set up you will Exit with "Saving Changes.

The next step is to determine whether or not you have a general sound card such as the Sound Blaster series. Sound Blaster cards have a function that will share the Interrupt Request for the parallel port, causing the MIDI device not to be detected. To find this, you will go to the System Icon within the Windows Control Panel. Once you have opened the System Icon you will see a Device Manager tab and down below you will see a heading labeled

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Music Systems PC2 Unparalleled audio and technical dominance...again!

Here at Sweetwater, we have sold so many **Kurzweil PC88s** that we've literally lost track. When a company designs an instrument this good, word gets out fast and we often had a hard time keeping up with the demand. But now Kurzweil has introduced what it's calling "the next generation Performance Controller," the **PC2**.

Building upon the already advanced design of their award winning PC88, the PC2 features outstanding sound and impressive master controller capabilities. A new Easy Split and Layer feature makes it both fast and easy to quickly create layers and splits. The PC2 series comes in both the **PC2** 76-note (\$2,650 list) and **PC2X** 88-note (\$3,150 list) keyboard configurations.

The PC2 features many incredible sounds not found on any previous Kurzweil instruments, including a triple strike stereo grand piano, lush stereo strings,

newly recorded multistrike dual effects processors which feature preset effects of the same quality as found in their highly regarded KDFX for the K2500/ K2600 series instruments. Multiple bus architecture allows separate send levels per MIDI channel for an effect level and a reverb level. Effects include reverb, chorus, delays, distortion, rotary, phaser, flanging, dynamics processing, and more.

But while it's loaded with great sounds, the PC2 will make a great master controller for your entire studio or performing rig. Hmm, is it a controller with terrific built-in sounds or a synth that also makes a terrific controller? Umm, who cares? What's important is that this is truly a killer instrument!

Any PC2 MIDI Setup can have up to four zones, sending on up

to four

Remember the first time you heard an arpeggiator? Wow, what a great effect! Then everyone suddenly decided that arpeggiators were somehow "cheating" and companies stopped building them into their instruments. But today, they are hot again (thank goodness!) and the PC2's full-featured arpeggiator can be synced to an external MIDI clock and includes many different latch modes and play orders. This flexibility allows for the creation of endless varieties of arpeggios and percussion patterns.

Setups and has room for 128 user-created Setups. Each of the additional ROM blocks will add more preset Setups. What's more, the PC2 gives you pristine quality audio, with both analog and digital audio output. Digital audio is sent at a rate of 48kHz. It can be switched between Pro (AES/EBU) and Consumer (S/PDIF) formats and can be switched between 16, 18, 20, and 24 bit resolution. Optional Accessories in-

clude the KFP-2M Double Piano Style Footswitch, CC-1 Con-

tinuous Control Pedal and the PCMDS Music Rack.

The PC2 comes

If you're looking for a great keyboard for studio or stage that has incredible sounds and effects built-in and is also a fantastic MIDI controller, you're bound to fall in love with the PC2. With its combination of a great-feeling weighted keyboard and all those Kurzweil quality sounds — and expansion capabilities — odds are good that you're going to want a PC2 or PC2X of your own. And who could blame you? Either would be a great instrument to build an entire studio or stage setup around. And wait until you talk to your Sales Engineer and get your special low Sweetwater pricing. Well, don't wait another minute: Call Sweetwater right now for more information and pricing on the incredible Kurzweil PC2.

The PC2: a performance controller loaded with great sounds

classic electric pianos (both Fender Rhodes and Wurlitzer), brass sections, acoustic and electric guitars and basses, drums, percussion, voices (featuring Kurzweil's outstanding Take 6 vocal samples), and more. It also features Kurzweil's KB-3 modelled tone wheel organ mode, giving you ultra-realistic tone wheel organ programs. Additional sounds include mallet percussion, clavinet, harpsichord, synths and ves. much more.

The PC2 comes with 144 fantastic sounding preset programs (128 regular programs and 16 KB3 programs). All programs can be edited, allowing for changes to timbre, envelopes, and LFOs. They can then be stored to any of the 256 user locations (128 for regular programs and 128 for KB3 programs). Two additional ROM blocks can be added to the PC2 (to be released in the future), each of which will add 128 more preset programs. And with 64 voices of polyphony, expandable to 128 voices, you'll never run out of polyphony for playing all of the marvelous sounds.

Of course, every keyboard worth owning these days comes with some exceptional digital effects. The PC2 includes

"I'm amazed! (My Sales Engineer) was very helpful and knowledgeable. He took the time to make sure it was the right equipment for me and my needs."

— Dave Ammerman

large number of physical controllers can be programmed on a per zone basis, allowing you to send any MIDI controller message on any zone. Physical controllers include: four sliders, two wheels, three footswitch pedal inputs, two CC pedal inputs, a Breath Controller input, 600 mm Ribbon Input (for use with Kurzweil's Ribbon Controller), Mono-pressure and 5 programmable panel switches. Each zone can be set to play the PC2's own sounds or an external MIDI device or both. Of course, you can set the note range for each zone to create splits and layers, as well as customizing velocity response per zone. All controllers can be scaled both positively and negatively and can have offset values as well as entry and exit values to set their "state" upon program or setup selection.

WE FIX IT FAST AND FIX IT RIGHT!

different

MIDI channels. A

Got some gear that's giving you a headache? Busted, broken or just plain misbehaving? Then call our "new and improved" service department! We have a lot of new people, policies and equipment in place to speed up service. Things are so efficient that we actually look at products the same day they arrive at Sweetwater. Other dealers need to ship equipment back to the manufacturer, but not us — our staff is trained to replace parts right down to the component level. Hey, things just keep getting better around here: Not only is our Service Department functioning much more efficiently, but even our Shipping and Technical Support are better and faster. And thanks to about a gazillion bucks worth of new phone equipment and faster server systems, your phone calls and e-mail get answered in record time! So give us a call — we'll be there to fix what ails you (or at least your equipment!).



A lot of you may be too young to remember the '70s, but you know most of the great songs (like "Stairway to Heaven" and others), all of which were driven by strong guitar work — even if there was an occasional B-3 or electric piano thrown in at times. But then came the '80s with their synth-heavy tracks and guitarists . . . well, guitarists were often relegated to backing up the synth player.

Fortunately, the '90s brought us back to reality and a peaceful co-existence between great guitar sounds and synths. And the best thing about the '90s — particularly the last few years of that decade — was the fact that it became easier than ever to get a terrific guitar tone without taking out a huge loan or winning the lottery. And the amp that started this tone revolution was the

AxSys 212 from Line 6.

Today, classic guitar sounds are within everyone's reach. True, you still need a good guitar, but a superb amp that will give you all the sounds you'll probably ever need is more affordable than ever.

So if you're a gigging (or even a "hope to be gigging real soon") guitarist who needs (or just wants) a variety of great vintage tones, the **Flextone II Series** from Line 6 may just be the amp you need, regardless of whether you're looking for a 1x12, or 2x12 combo, or 2x12 mini stack. The best part is, if you're already familiar with vintage amps (and what guitar player worthy of toting a cool ax isn't?), dialing up a sound on the Flextone II is amazingly simple, and there's a lot less to haul out to the gig.

All Flextone II amplifiers feature: 32 great sounding Amp Models (24 legendary amplifiers, plus eight killer Line 6 originals) and 16 digital effects, along with 16 selectable cabinet models to mix and match (try, for example, the Modern Hi Caip amp model through the 1x8

Hi Gain amp model through the 1x8 Small Tweed cabinet — yikes!). Thanks to Line 6's patented TubeTone modeling, all the Flextone II

TubeTone modeling, all the Flextone II series include a truly incredible collection of guitar tones, modeled from a group of specific, much sought-after amplifiers. The TubeTone Amp models were actually developed from in-depth studies of over two dozen different amplifiers, including: a 1952 Fender Deluxe; 1959 Fender Bassman; 1964 Blackface Fender Deluxe; 1964 Vox AC15; 1964/65 Marshall JTM45; 1968 Marshall

"Plexi"; 1986 Marshall JCM800; 1994 Mesa Boogie Dual Rectifier; 1989 Soldano SLO; 1987 Roland JC120; 1996 Matchless Chieftain; a classic 1960s Arbiter Fuzz Face fuzz box; and eight custom, don't-exist-anywhereelse-on-this-planet amp models created by Line 6 that are great additions to any guitarist's tonal palette.

Straight out of the box, Flextone II gives you 4 channels of fully programmable sounds, plus another 32 channels with the addition of the optional Floor Board foot controller. This enables you to keep a full array of sounds immediately available. And thanks to enhanced power amp dynamics (that most other "modeling amps" can't deliver), you get more of the spongy, sparkly and spanky dynamic goodness you crave.

What's more, brand new Line 6 ToneTransfer capabilities lets you design your sounds on a POD and transfer them directly to your Flextone II via the built-in MIDI ports. Or, you can transfer tones the other direction (cool, huh?). Combined with their ToneTransfer Web Library and the included

SoundDiver POD software, you've got instant access to hundreds of great tones.

Uh oh . . . Inspiration striking you at 3 AM? Tired of the neighbors leaving flaming packages on your doorstep? Have no fear! Flextone's headphone out automatically silences the internal speakers and gives you full, rich guitar tone delivered direct to your ears.

Flextone II allows you do customize almost every aspect of your sound, including replacing the default amp and effect settings with your own. It has more control options than ever before over effects parameters, as well.

most economical of the new Flextone series. It's powerful enough for rehearsals and live gigs, compact enough for small studios and use as a practice amp while offering a full range of classic amp tones. Both your ears and your back will thank you.

Flextone II XL (100w stereo / 2x12 / \$1199.99 list). Want a little extra oomph in a combo? The XL has the power, it has the speakers, and it has the will to use them. This baby will fill a hall with great Line 6 sounds — and still won't clean out your bank account!

Flextone II Plus (60w mono /100w stereo / 1x12 / \$1049.99 list). With a "dual mode" power amp section that delivers 60 watts mono through a 1x12" custom

designed speaker and kicks out 100 watts stereo when the extension cab is plugged in, the Plus, allows the capability to bring only the amp itself to smaller gigs, jams, and recording sessions, while being able to take along that Flextone Cab to larger venues (Flextone II Plus with Cab is about 6db louder — or more than twice as loud for those of you who left your sliderule at home — than the Flextone II by itself. Stack the Plus and Cab for extra low end response or separate the two for a wide stereo image (not to mention the fact that your other band members will be able to hear you a lot better and be much

members will be able to hear you a lot better and be much more likely to notice your amazingly incredible playing.

For those of you looking for a head only (as in the amp without any speakers), you can easily rule the world with the stadium-ready, 300-Watt, 40pound Stereo **Flextone HD** head (\$1199.99 list). It's just the thing for when absolutely deafening isn't quite enough! The HD includes a series / parallel switchable effects loop, plus groovy built-in

panel light so you see every control on a darkened stage.

While we're on the subject of Line 6, I also want to mention that the company just released their latest version of the best-selling POD. It's called, aptly enough, POD 2.0 (\$449.99 list). If you've been frustrated trying to get great guitar tones running direct, either live or in the studio, and you want a wide variety of classic and modern guitar tones with convenient effects built in, then you want a POD 2.0.

Line 6's revolutionary A.I.R.
(Acoustically Integrated Recording) Modeling accurately captures the tone and feel of speaker cabi

nets, microphones, and even studio room characteristics for an amazing recorded sound on everything from the most prestigious pro setup to a multitrack cassette. It sounds like a great amp miked by a great engineer in a great studio.

All POD family products feature award winning Line 6 Amp Models that emulate an all-star collection of legendary amplifiers. There are 36 user memory locations so you can create your own customized collection of killer sounds. Organize them to match your set list, your session needs, or any doggone thing you want. After all, geez, it's your POD! There are stereo Balanced or Unbalanced +4/-10 TRS outputs, so you can plug it into anything from your home stereo to a really expensive mixing board. A separate stereo headphone output will keep your neighbors (or your spouse, for that matter) from staging a counterattack when you're writing that first big hit in your apartment in the middle of

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no menus, no parameter screens, no cheat sheets needed to remember functions — just grab a control and dial it up. It's as plain as the . . . uhh, knob on your amp.

grab-and-go"

operation: There's

All Flextone II XL and Plus combo amps feature Live/Studio Mode switching/Balanced XLR Outs. It's an amp! No, it's a direct box! Wait. You're both right. In live mode, it's a great sounding guitar amp with the bonus of balanced mic level XLR outs to feed the mixing board. In studio mode, you get the advantage of all the ground breaking A.I.R. technology of the award winning Line 6 POD through those same balanced outs running at pro +4dBu levels.

From studio to stage, bedroom to ballroom, and from the garage to the Grammy's - your Flextone II will let you rehearse, record and gig without any second thoughts about getting your sound, no matter what.

Flextone II (60w mono / 1x12" / \$899.99 list). The

MANLEY LABS: Neo-Classic All-Tube Gear

As you long-time customers know, we are always on the lookout for interesting products. Sometimes these come from new startup companies that you've never heard of before, while other times it might be an established line that we discover has some pretty nifty items to offer. In this instance, we're going to take a look at some offerings from a very intriguing company called **Manley Laboratories, Inc.**

One look at the photo that appears on this page and you can guess that this isn't your normal, everyday manufacturer (the ones with the straight-on product shots . . . yawn). So what's the story? Well, in recent years Manley has expanded and thrived under EveAnna Manleys leadership (that's her in the photo with

the big stack of Manley gear). They now occupy an 11,000 sq. ft. building, which houses its own machine shop, printed circuit board manufacturing, audio transformer winding, engraving and silk-screening facilities. All custom design, R&D, assembly, testing, and quality control processes are performed right at the Manley factory, located just 35 miles east of picturesque Los Angeles.

The company takes a purist approach to everything they build; refining, executing, and expanding upon Manley's legacy of vacuum tube design philosophies, which have been proven over many years of real-world experience, using high quality modern components, many of which are fabricated in-house (most other small companies — and some large ones will outsource much of this work). This attention to detail delivers the rich, present, and natural sound that vacuum tube designs are renowned for. Beyond this, Manley stresses reliability, real technical support and a company attitude that professionals can depend on.

Currently, the company offers so many products that it would be impossible

to do more than quickly touch on a few of them, so don't expect any of the products to be described completely here — we'll be leaving the details to your Sweetwater Sales Engineer.

It looks awesome, but what is it? It's the **Manley Voxbox** (\$4000 list), poised right at the top of that big stack of gear. Primarily, it is a mic preamp and voice processor, which in itself is not a novel idea, but the company felt the time had come to pull out all the stops and make a truly professional high-end statement. One that covered the needs of the project songwriters and big-time major studios alike. One whose all-tube signal path could bring every single instrument and overdub to life. One that, plain and simple, sounded unquestionably better than the rest, provided flexibility, simplicity, and well thought-out ergonomics — full of features, timeless style and robust build quality.

While Manley was designing the Voxbox, they couldn't help but notice how well it worked on other instruments besides voice. There are some great settings for drums, bass, guitar, and keys and the two separate sections can be used together or independently. Stereo using two Voxboxes? They couldn't resist planning for that as well, so there are Stereo Links for both the compressor and the De-Ess / Limiter sections, special compression settings and super-sweet EQ frequencies for your mix or premastering. So don't just use it for voice.

The preamplifier is a clone of a highly regarded and popular mic pre: the Manley 40 dB Microphone Preamplifier. The mic input transformer is of their own design, wound in-house in the

Manley Labs factory. High current 48V Phantom power is switchable from the front panel. The Gain switch is actually a clever variable feedback control that changes not only the gain, but the slew rate and flavor of the circuit. With it you can choose how laid back and mellow or how up-front and aggressive you want it to get. Headroom is a strong point in this circuit:+31dBu capable. This is 5 to 10dB better than almost all other pro gear.

The new compressor design is the result of blending the control ideas in their best selling Variable MU Compressor Limiter with the opto-isolator approach of the Manley Electro-Optical Limiter. They figured out how to compress the signal before it hit the tubes with no detrimental effect on distortion or

frequency response. This way, it

can prevent mic-pre clipping and eliminate whole stages of electronics. This cuts the typical path of mic to tape in half! As for EQ, they extended it to 33 frequencies in three bands with six new frequencies from 20 Hz to 150 Hz, and six more in the highs from 6.4 KHz to 20 KHz.

The Voxbox also includes a de-esser and peak limiter based on their own proprietary design with an added passive LC network to handle the de-essing — four carefully chosen notch frequencies from 3KHz to 12KHz. The fifth position gives you a limiter which totally mimics the famous LA-2A. This means you can both compress pre-EQ then limit here post-EQ. Another cool feature is the ability to insert this de-esser silently and smoothly as the music plays, using it as needed.

The Manley Massive Passive Stereo Tube EQ (\$4800 list) is a two channel, four band equalizer, with additional high pass and low pass filters. "Passive" refers to the tone shaping part of this clever new EQ design which doesn't use any active circuitry. Only metal film resistors, film capacitors and handwound inductors sculpt the sound. This processor uses simple passive components and exploits their natural qualities rather than forcing a complex circuit to meet an arbitrary clinical or scientific goal.

The Massive Passive is intended both for the most radical EQ sometimes needed for tracking, as well as the most subtle shadings for vocals and mastering. It is designed to be a fundamentally different EQ but with the best strengths of choice con-

sole EQs, both parametrics and graphics. The difference is that this EQ allows twice as much EQ with half the coloration. It allows massive HF boosts without sibilance problems and unbelievable fatness without mud.

If you're just looking for a superior quality mic preamp, the Manley All-Tube Microphone Preamplifiers are available in both two-channel (\$2400 list) or single channel (\$1600 list) versions and are primarily intended for use with modern condenser mics. Tube complements are common to both models: One military five-star 6072A is hand-selected for lowest noise, and one 6414 for each high-current output stage. Each unit is painstakingly hand wired using silver solder and audiophile-grade componentry. Double shielded custom-built power transformers and custom-built high capacity reservoir capacitors demonstrate Manley's modern power supply design approach. 40 to 50 dBs of qain are selectable in precise 2.5dB steps by varying

the amount of overall negative feedback on the Gain switch. This is a very interesting feature, allowing you to change the slew rate (speed), placement and tonal balance of the sound from mellow tube warmth and richness, through to faster, punchier and more aggressive timbres.

The front panel 1/4" Direct Input jack makes these preamplifiers serve double duty as a pure

tube line stage for instruments such as bass, drum machines, and keyboards when you need to get your music through some tubes before hitting a sterile digital recorder. Total gain in this mode becomes 20dB less than indicated on the Gain switch. Both transformer-coupled balanced and direct (via humongous metalized film MultiCaps) capacitor-coupled unbalanced outputs are provided giving you the choice of audiophile-purist or big iron sounds. Perennial shoot-out winners, Manley's single-ended preamp designs have become favorites among top engineers and home recordists alike looking for "that rich sound with tight bass and a top end that goes on forever." This is sound that begs to go direct to tape or hard drive!

The Manley Variable Mu Limiter / Compressor Amplifier (\$4000 list) has actually been their best selling product for several years now. Although the Variable Mu is not a clone of one, the Fairchild 670 series used a similar limiting principle and those who are familiar with that wonderful piece know how special the sound is. In fact, Manley is the only company in the world currently manufacturing a true Variable Mu limiter. (BTW, "mu" is tube-speak for gain or amplification factor.) How's it work? The unique 5670 variable mu dual triode is at the center of the peak-reducing and compression action constantly being re-biased by the vacuum tube rectified side-chain control voltages which cause this tube to smoothly change its gain.

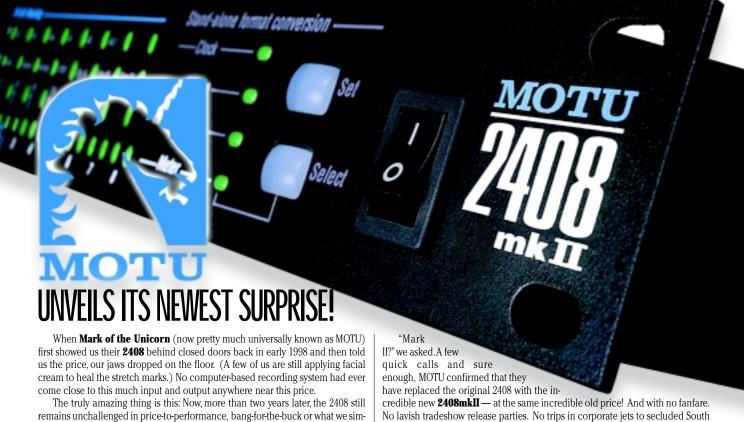
The Compress mode is soft-knee 1.5:1 ratio while the sharper knee Limit mode starts at 4:1 and moves to a more dramatic ratio of 20:1 when limiting over 12dB. Interestingly, the knee actually softens as more limiting is used. Distortion can be

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"Love the inSync newsletter, the product catalog, etc., etc., and the great staff and friendly service... it seems too, I have finally found a place that has integrity in what they tell you about gear and when it will arrive, etc." — Dan Helmintoller

"Thanks for taking care of everything, (my Sales Engineer) did an exceptional job and handled everything like a professional." — Keith Justice

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nology hall-of-famers. And that's a truly remarkable position to hold in an area of music technology that has been absolutely exploding. The birth of an entire product line. In fact, MOTU has been doing some "exploding" of their own this past year. They've extended the 2408 into an entire

ply call "outstanding value" here at Sweetwater. The 2408 is still one of our most

popular products, surpassing even the success of the ADAT and other music tech-

line of recording systems to fit just about every budget and operating scenario. starting with the 1224, with its stunning balanced 24-bit analog I/O and AES/EBU. Then they added the 24i with 24 balanced 24-bit analog inputs in a single rack space (yikes!)— it's the perfect system for you if you're interested in consolidating your entire studio onto your computer desktop. Just get all your audio into the computer and then record, edit, mix, process and master it in the "virtual studio" on your computer screen.

MOTU then followed up with the 308, the "all digital I/O" that provides 8

channels each of S/PDIF, TOSLink (optical S/PDIF), and AES/EBU. Finally, we've been told that MOTU will soon ship the most ambitious, high-end system yet: the **1296**. (More on this exciting development later in this article.)

As you can see, MOTU has not been content to sit on their laurels and the phenomenal success of the 2408. Instead, they've been busting their — ahem! — "you-know-whats" to release five new systems in the span of about 18 months. If you're recording audio with a computer — Mac or PC — at least one of these new MOTU systems is most likely to fit your needs like a glove — at a fantastic price.

The "stealth update" we'll never forget. Amidst all of these fast and furious product releases, MOTU then pulled one of the most memorable "stealth" updates we've ever encountered in our long, illustrious history here at Sweetwater. A short while ago, yet another massive shipment of 2408s arrived at our bustling warehouse, but we soon noticed that the labels on the boxes were a wee bit different: They all had the familiar 2408 logo, but there was this small, inconspicuous "mkII" at the end. Hmmm ...

No lavish tradeshow release parties. No trips in corporate jets to secluded South Pacific Islands (oh darn). The new 2408mkIIs just quietly appeared on our loading dock. Ho hum, just another great technological advance at no extra charge.

More features for the same price! So you want to know: Why is the new 2408mkII even better? First of all, it has all of the original 2408's great features, including three banks of ADAT optical, three banks of TASCAM TDIF, 8 channels of analog, S/PDIF, 24-bit recording capability, sample-accurate sync, the ability to

> expand, industry wide compatibility, etcetera.etcetera.

> But the 2408mkII has an updated analog section. The A/D and D/A converters have all been upgraded from clean 20-bit to super clean, incredibly detailed 24-bit converters for full 24-bit analog recording. MOTU says that they were able to pull this off and still maintain the same price point because of significant price-to-performance advancements in converter technology in the short period of time since the 2408's original release. The signal-to-noise ratio of the 2408mkII's analog ins and outs is now an astound-

ing 105dB — more than good enough for album-quality, broadcast-ready audio.

boost per channel via software.

MOTU also added another small, but crucial feature: The headphone volume knob on the front panel now also controls the 2408mkII's quarter-inch main outputs on the rear panel. In our view, this is the final feature that allows you to build a completely "mixerless" studio. Just connect your main studio monitors to the

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U'S NEWEST SURPRISE MANLEY LA

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main outs of the 2408mkII and you still have a volume knob to grab quickly when the phone rings. Connect all the rest of your gear to the other ins and outs and do all your mixing in Digital Performer or AudioDesk. Very slick!

Sneak Preview: The MOTU 1296. We're already reserving space in a future issue of Sweet Notes to give you a thorough run-down of MOTU's "Next Big Thing," the 1296 System. But we're so excited about it, we just had to give you a quick peek here. The 1296 is MOTU's foray into 24-bit / 96 kHz audio recording. It's a two-rack space interface clearly designed for the demanding high-end professional. Even if you're one of those hardened skeptics who scoffs at the idea of doing multitrack recording at 96K,

the 1296 is just as appealing at 44.1 or 48 kHz.

As you might already have figured out, the "96" in the name "1296" stands for 96kHz recording. The "12" stands for 12 channels



each of balanced 24-bit analog input and output on XLR connectors. MOTU equipped the 1296's isolated analog I/O circuit board with the latest generation state-of-the-art 24-bit "enhanced multi-bit" 128x oversampling 96 kHz A/D and D/A converters. The Aweighted dynamic range is an astounding 117 dB for the 12 inputs and 116 dB for the 12 outputs. the audio workstation software included with every MOTU core system. And the 1296's ASIO and Wave drivers ensure full compatibility with any ASIO/Wave compatible audio software that supports 96kHz recording.

Add 96kHz recording to your MOTU system. But here's perhaps the coolest and most significant feature of the 1296: It plugs right in to MOTU's current systems. If you own a 2408, for example, you can connect a 1296 interface directly to one of the three AudioWire sockets on the PCI-324 card. Unlike some other manufacturers, MOTU has given us the opportunity to go 96K without trading in or retiring even one cent of our initial MOTU investment!

Even if you're still just thinking about going 96kHz, you don't have to buy the 1296 right now. You can purchase a 2408mkII, 1224, 24i or 308 today and make the jump to 96kHz later on when the time is right for you. It's always nice to go with a system that gives you a sense of flexibility and peace of mind, rather than buying into a closed system that has no expansion — or sticks you with a costly upgrade path. And MOTU interfaces are tried and true, bullet-proof solutions. We've sold countless systems to people just like you. So call your Sweetwater Sales Engineer now to discuss how the 1296 system (or any other MOTU product) will probably fit your specific needs.

 Continued from Page 8 creatively used by turning up the Input and turning down the Outputs while using very little or no compression. The audio signal passes only through superclean high-current vacuum tube line amplifiers and internal gain adjust is factory preset for 10 dB. The Bypass controls disable the limiting circuitry, leaving only the line amplifiers. Each channel can be run separately or switched to "stereo-link," enabling an innovative channel balance control for exact image centering. The meters can be switched to read output or gain-reduction.

Working on an entirely different principle, Manley's popular Electro-Optical Limiter (\$2500 list) has its own special uses and sound colors, too. The principle of operation is based around using a rectified sample of the audio to shine an LED (Light Emitting Diode) onto an LDR (Light Dependent Resistor). The photo-resistor in combination with a fixed resistor simply act as a changing voltage divider to attenuate the signal. A similar principle was found in the older Teletronix LA-2A, LA-3, and LA-4 units which used a slower electro-luminescent panel-light on a conventional LDR encased in a light-tight enclosure. The Manley unit uses modern Vactrol technology (but with a trick!) for exact sample-to-sample similarity and no high frequency loss.

The Manley Gold Reference Multi-Pattern Mic (\$8000 list) is, according to the company (and they should know), one of the finest microphones that money can buy in the pursuit of truly accurate musical recordings. The Gold Reference Series employs their own design of large capsules which are executed to precise tolerances made possible by modern micro-milling machinery. The capsule rings and back-plates are milled from solid brass and are mounted on Teflon insulator rings. The 3 micron gold diaphragm film comes from Germany and is tensioned using proprietary techniques which ensures capsule-to-capsule constancy, combined with the speed, "air" and superb ultra-high frequency response you dream about. The polar pattern control is continuously variable between the Omni, Cardioid, and Figure 8 positions. The company chose a very open weave stainless-steel grille for the capsule window for zero-loss acoustical transmission.

For those who want a mono version of this mic, but wonder if they are sacrificing quality, you should know that the stereo version of the Gold Reference microphone is identical in every respect to the Mono Gold (\$5500 list), but with two complete systems installed in one case with the upper capsule being fixed and the lower capsule being continuously rotatable through 90° for X-Y Blumlein-Style coincident pair recording technique. The **Reference Cardioid Microphone** (\$3000 list) shares the same electronic attributes as the Gold Reference Series, but has a fixed cardioid-only capsule with a thicker gauge (6 micron) gold sputtered diaphragm. With the similar film thickness and construction, similar high frequency resonance (a little edge), similar proximity effect and pretty good immunity from pops and sibilance problems, the Reference Cardioid more closely recalls how many of the vintage European tube mics (such as the beloved U47) sounded like when they were new. It's rich tonal balance and liquid character is consistently admired for instruments such as guitars, drum overheads, saxophone and especially vocals.

If you find yourself leaning on your compressors and boosting the 5 to 10kHz range at the mixer to score just a little bit more testosterone with your present microphone, then the Reference Cardioid just might be the mic you're looking for. If you seem to be constantly boosting 12 to 18kHz and trying to get a clean, intimate sound, then probably the Reference Gold would be your safest bet. One thing's for sure, at these prices, you know these babies will perform superbly!

There are many other innovative products available from Manley Labs, but as usual, we're out of space. So call your Sweetwater Sales Engineer for additional information and special pricing on the entire range of products from this impressive company!

E-MU SOUND MODULES

— Continued from Page 3

expect, the Xtreme Lead-1 will accept any of the upgrades available for either the Virtuoso 2000 or the B-3 module, so you'll always have access to fresh, new sounds!

The new Mo'Phatt Urban Dance Synth (\$895 list) takes over where E-MU's legendary Planet Phatt left off. Mo'Phatt has it all: 32 MB of fresh new urban sounds, SuperBEATs Mode, up to 16 syncable arpeggiators and a powerful processor to deliver all of your grooves and loops with the tightest timing possible. And you can modify / warp your sounds into anything imaginable using Mo'Phatt's advanced synthesis architecture and effects processor. Need more sounds? E-MU knows you do. You can expand your soundset with the many expansion ROMs available for the other E-MU modules, or you can create your own custom ROMs using E-MU's E4 Ultra samplers. Mo'Phatt has got it all - mo'sounds, mo'beats, mo'ways to get down.

Other features include 64-voice polyphony (expandable to 128 with the Turbo upgrade), 12 assignable real-time front panel controls, 12th order filters, dual outputs (expandable to six plus S/PDIF), a 24-bit dual stereo effects processor, one additional internal ROM expansion slot (expandable to three) and 16 MIDI channels (expandable to 32).

Want to know more about any of these great E-MU modules? Then pick up the phone and call your Sweetwater Sales Engineer right now for additional information, features, specs and special low pricing on the expandable modules from the people who started it all!

LINE 6 PRODUCTS

- Continued from Page 7 the night. As a bonus, you also get a built-in chromatic tuner, because playing out of tune just isn't cool. An Amp / Direct switch allows POD to be optimized for different applications: Select Direct when running POD directly into a mixer or recorder. Select Amp when using POD as a tone-shaping front end for another amp. There's also Line 6's ToneTransfer Web Library, which is constantly expanding. The sounds you collect transfer seamlessly between POD, POD Pro, and Flextone II series amps, so wherever you go, all your sounds can make the trip. As if all this wasn't enough, Line 6 also includes a CD which contains **Emagic's SoundDiver** software (for PC or Mac — a \$199 value) for expanded feature access via MIDI. You can get at additional effects parameters, do strange things with the wah functions and lots of other fun stuff.

There's also a new **POD Pro** rackmount package (\$799.99 list) with all the connectivity today's demanding recording professionals need, like 24-Bit AES/EBU and S/PDIF digital outs, as well as dual-mode analog XLR connectors.

One thing I want to say before I'm out of space is that the folks at Line 6 are always looking for new ways to deliver the sounds that today's guitar and bass players want and need. This is not a company that's happy to turn out a great product and then take the rest of the year off. Nope, they are constantly looking for new and better ways to get you the tone you need at a price you can actually afford. So call your Sweetwater Sales Engineer today for information and special pricing on the Flextone Series, POD 2.0 and POD Pro, plus all the other great Line 6 products like their ultra-cool Stomp Box Modelers! — Jim Miller



It used to be easy to tell the difference between professional keyboards and those that were meant for "at home" entertainment. The pro gear sounded great, but the player had to do all the work to actually make any music, while the portable keyboard had funny little Bossa Nova rhythms and thin sound playing through tiny speakers.

But that was yesterday. Today, the line between pro and personal keyboards has blurred to the point that it's darn near impossible sometimes to tell the difference. Standing at the top of an impressive array of **Yamaha** production and performance-oriented keyboards is the new **PSR9000** (\$3495 list). Sporting an incredible feature set that we'll get to in a minute, the PSR9000 is a versatile arranging workstation for the professional musician, an ideal live performance instrument, or the perfect keyboard for anyone who, well, just loves to sing and play.

The PSR9000 has a combination of professional features that don't exist on any other keyboard on the planet, making it the perfect choice for performing musicians or professionals to use as a writing tool. However, even with all this sophisticated music-making power, its user interface and auto-arranger functions are still perfect for beginners or hobbyists. Like its predecessor, the PSR8000, the PSR9000 is a 61-key, portable keyboard complete with microphone input, a digital mixer, vocal harmonizer, built-in audio system, and professional features like aftertouch, pitch bend and mod wheels. Designed for users at every level, the unit can be connected directly to a computer without requiring a MIDI interface, and offers full GM (and Yamaha XG) compatibility, along with sophisticated auto accompaniment features. A dedicated onboard 16-track sequencer is standard, with two record modes (Quick and Multitrack) and a huge recording capacity of 38,000 notes. In addition, the PSR9000 is fully compatible with all the software available for the PSR8000.

The stunning sound quality is some of the best ever produced by Yamaha. Sporting a full 126 notes of polyphony, the PSR9000 is also loaded with 32 MB of incredible voices that reproduce all the timbres and nuances of just about any acoustic or amplified instrument you care to name. Innovative live drum sounds contain six layers of samples which crossfade based on velocity. What's more, they have been recorded in full stereo, resulting in detail and realism that's absolutely stunning.

Though it has a full complement of "bells and whistles," a lot of attention has been paid to ease of use. The PSR9000 contains a large music database, and all interfaces have been simplified through the direct access function, one-touch settings, and on-screen guidance — a virtual necessity for any performing musician who needs to change settings quickly. In addition, a PS-2 PC keyboard input allows you to enter alphanumeric data, taking the PSR9000 to a new level of user-friendliness.

How's this for innovation: A video output allows the PSR9000 to display lyrics from a MIDI song file through a projector or directly into any television monitor. This is an attractive feature for churches that display lyrics, or for home users as a karaoke device. The list of professional features continues with 16-bit sampling capabilities, an optional hard drive (up to 8 gigabytes!), expandable RAM (up to 65 MB), MIDI in/out for external tone generators, and a SCSI port which can connect to an external storage device like a Zip drive. Four individual outputs, 12 blocks of DSP effects (including a truly convincing dual rotary speaker simulation that will blow you away), an onboard sequencer and automated mixer are ideal for recording professionals. The PSR9000 even contains a Flash ROM operating system, which enables software upgrades to be loaded from disk or directly from the Web.

Let's talk about the auto accompaniment — and we're not talking about those rinky-

dink polkas and sambas that were a trademark of yesterday's portables. We're talking about everything from tight jazz to loose blues and beyond — and yes, there are still polkas and marches available, but they actually sound like real musicians playing in a real band, not the old cardboard cutout stuff. In fact, no matter what kind of music you enjoy, the PSR9000 has the perfect accompaniment onboard. Over 100 styles are provided, and all of them have been arranged by living, breathing professional musicians. Each style has its own unique four Main Variations, three Intros, three Endings, four Fill-ins and one Break Fill. Four "One-Touch Settings," any of which can be freely customized, are provided for each style.

The answer to every vocalist's dream, the PSR9000's exclusive Vocal Harmony function perfectly harmonizes your voice, adding breathtaking enhancement to your singing. Have a backup chorus provide more depth and emotion to your next ballad. Expand your vocal range with the unique Gender function (yes ladies, now you can sound like Barry White!). In addition to the digital reverbs and choruses, an abundance of dedicated vocal effects are provided, including 84 types of insert effects, noise gate, compressor and 3-band EQ. Innovations continue with a fully redesigned sound system. A pair of built-in two-way speaker offer incredibly rich, natural sound reproduction. Each speaker is actually mounted inside a wooden cabinet with a large bass port, and is powered by a 56-watt amplifier. Let's face it: Most people don't own stereo systems that are this good!

If you want to know more about the sleek, powerful (and darn good looking) PSR9000, just call your Sweetwater Sales Engineer. They'll be glad to fill in any blanks I might have missed and give you a surprisingly low Sweetwater price that's guaranteed to make you smile. So call now and ask about the astounding new Yamaha PSR9000.

— J.S.W.



Recording direct to CD is now just as easy as recording direct to tape! Destined to become the "must-have" stand-alone recorder for any professional recording facility, the state-of-the-art Yamaha CDR1000 (\$1799 list) is capable of recording on both CDR and CDRW. Other features include a sample rate converter and word clock input. Perhaps best of all, the CDR1000 includes a world-renowned Apogee Electronics UV22 Super CD Encoder, which allows 16-bit encoding of sources originally recorded at higher bit rates, even 24-bit, without additional equipment. This process is used in major recording studios all over the world, and means your 16-bit CD can sound as full and detailed as 20 or 24-bit recordings. The CDR1000's flexible recording and editing features ensure a professional take every time, while the wordclock input allows the CDR1000 to be professionally connected into the digital studio. And of course, the sound quality is superb. Call your Sales Engineer right now for complete details and your special low Sweetwater price.

I'm going to take a slightly different approach in my column this month. In previous issues of *Sweet Notes*, you've hopefully gained a real insight as to what our goals are and what makes us tick as a company. You've read about all kinds of service-oriented topics and the things that help define what we like to call "The Sweetwater Difference."

The primary face of this difference / added value / superior service / etc. is, of course, the sales staff (I will once again admit that I'm a wee bit biased, because these are my people, after all). But in reality, these are the folks who you work with most closely at Sweetwater, from initial consultation to final shipment of your order.

When I first arrived, we had a relatively small sales staff numbering less than 20 Sales

Engineers. However, we already had a great reputation for knowledge and service and a strong training ethic. In the nearly four years since I joined the company, we've grown dramatically. We should have more than three times the sales volume this year and we have also grown as a sales staff during this time frame. To say the least, this has been a very challenging task for us, in that we are looking for the cream of the crop in the entire industry. In previous issues I've described the kind of person a Sales Engineer here is and the expectations that we (and you, our valued customers) have for them in terms of business professionalism and product knowledge.

Most of you have seen our employment ads and probably understand that the majority of Sales Engineers are "imports" (there are only so

many audio/MIDI experts available for us to hire in Fort Wayne). Some of our competitors have even tried to start rumors about us having a high turnover rate because of all the employment ads we run. Nothing could be farther from the truth. Unlike many of our competitors — some of whom have stated in public documents that they have 200% turnover — we enjoy one of the lowest turnover rates for salespeople in the industry. Why is this?

It's because, first and foremost, we are very selective in hiring Sales Engineers. Of the thousands of resumes, e-mail inquiries and phone calls we receive, only a handful make it through the several "cuts" to become Sweetwater employees. Here's how the process works: First, we review the resumes for depth of experience and employment potential in this environment (what kind of gear the potential employee is familiar with, employment history, written communication skills, educational background, etc.). Next, if the prospective employee looks good on paper, we schedule a phone interview. Kristine Haas, our Director of Human Resources (or, as we call her inside the company, the "Director of Bringing in Really Cool People") calls them and takes them through a brief phone interview. At this time, she also answers any questions they might have about the job and the hiring process overall. This initial phone interview gives us a better feel for how well the prospect can handle himself or herself verbally over the phone (this is critical since the vast majority of our business is done over the phone).

If all goes well here and Kristine sees real potential, we schedule a face-to-face interview and bring the prospective Sales Engineer to our facility in Fort Wayne (to the best of my knowledge, we are the only music retailer that will fly Sales Engineer candidates to our location for an interview). Here, they interview with Kristine and me and are given an inside view as to how the company works, including core philosophies, selling methods, expectations, etc. The fact is that it's important for us to be very open with how we operate so that our interviewee can make an informed decision.

We also give the prospect several aptitude tests including a technical exam to gauge real product and application knowledge. It's important to note that this isn't a "pass/fail" kind of test — it simply validates real knowledge and lets us know where additional training is needed before we can roll the individual out as a Sales Engineer. Finally, we make sure our interviewee has the opportunity to observe our Sales Engineers in action so he/she can get an even better feel for what the job is like.

Throughout the interview process, we encourage the prospective employee to ask questions they might have about the company. The interview is, after all, a two-way process: We're asking folks to uproot families, sell houses, move away from friends and other family members and start a very demanding job. I take it as my personal responsibility to make sure that it is the right decision for both parties. I would never want to disrupt somebody's life and throw them into a sink or swim situation. By the time I get to the point of making an offer for employment, I am very confident that we have a good match and that the prospective employee has the tools to succeed in our environment.

When a new Sales Engineer arrives, we invest a lot of time and effort training them before turning them loose on our customers. They will go through a very thorough two-week training session with our Technical Training Coordinator (who also plans the curriculum for Sweetwater University) learning all about our systems and how to best use the tools they have at hand here to better serve our customers.

What can a Sales Engineer anticipate here at Sweetwater? Put simply, high expectations. I personally believe that we have the best trained, most knowledgeable and most professional sales staff in the entire industry. In my previous positions with manufacturers (most recently, as the Director of Sales for the United States and Mexico for AKG Acous-

tics, Inc.), I had the opportunity to work with all of the major retail players in our industry. Based on this experience, I made the move to Sweetwater because I believe it's the most customer oriented and forward-thinking company in our industry and has a sales staff without peer (wow, I am so biased . . . but I warned you!).

Our Sales Engineers are the best in the business, but they work hard for this recognition and success. Each of them has passed a Technical Exam and gone through extensive training before even being allowed to work with customers as a Sales Engineer. They've spent at least three months working with and learning from our senior people. During this period, they are paid a "guarantee" that is commensurate with their experience and allows

them to focus on learning how to do the job right instead of trying to sell gear so they can put food on the table. We want professionals here, not desperate, overly aggressive and slick salespeople. Our reputation and success if built on a foundation of repeat business and long-term customer relationships.

I won't pull any punches: Being a Sales Engineer at Sweetwater is hard and demanding work. We don't want the warm bodies other retailers hire. No clerks need apply. We want quality, goal oriented people who understand that we are offering them the opportunity for a career, not just a job or a "day gig." They have to be able to think quickly on their feet and be passionate about customer service. They have to be able to work in an extremely fast paced environment and bring a

positive attitude and high level of enthusiasm to work every day. They have to be gear-heads and technology geeks.

You might wonder why I've made this my subject in this issue's column. It's because a majority of our Sales Engineers were once customers (me too). They came here because they really understood what we're all about and wanted to join a winning team where they could do work they were proud of every day. If you've ever considered a job change and want to be well compensated for your integrity, work ethic, and product knowledge, we'd love to hear from you.

I could write for pages about the Sweetwater environment. I've never been around such an extraordinary group of people. I marvel every day at all of the talented and motivated folks who work here. It's a gas for me to work with so many like-minded, yet diverse people. The crew here hangs out together outside work, as well. We play volleyball on the sand court behind our facility every Saturday in the summer. We play basketball on the court in our parking lot every Wednesday night. There are lots of bands and recording projects going on at any given time (imagine a company with over 200 employees, most of whom play one or more instruments really well and own all kinds of gear!).

I've also never worked in a company that does so much for its employees. A quick example is a company trip we're taking to Cedar Point (a major amusement park in Ohio). We are taking employees and their families to the park, paying the entrance fees and having lunch there. It's a great opportunity for all of us to spend some time together and get to know each other's families while further strengthening our team orientation.

Finally, our Sales Staff is arguably the best compensated in the industry. Sadly, in our industry, the typical salesperson makes high teens to maybe just under \$30,000 for their work, regardless of how smart and good they are. This is why the quality of the typical music store salesperson is so poor; it's hard to make a living just selling gear in most places. I've learned that in life you generally get exactly what you pay for.

We bring in really good people and give them the best tools. If you give good people the tools they need to succeed and allow them to do their job without gobs of rules and restrictions, amazing things can happen. Again, our expectations for them are very high and they work very hard every day. Success doesn't come without effort and dedication.

If you are a talented and motivated individual with exceptional people skills, have a great work ethic and think you have what it takes to be a Sales Engineer at this level, we'd love to hear from you! The opportunities here are amazing. Do you want to work in an environment where excellence is the standard? Do you actually want to have fun at work instead of dreading the everyday grind? Do you want to make a great living, buy a house, drive a nice car, and own cool gear? Do you want to work with a group of people who share the same passion for the people, the process and the technology involved in making music? If so, Sweetwater could be exactly the place you've been searching for your whole life! I've found that doing work you love and believe in is the key to success and happiness.

Please call Kristine Haas at (800) 222-4700, ext. 1050. Tell her you're calling because of the article in Sweet Notes. I hope to see some of you become part of the Sweetwater Difference and join our team soon! Rock and Roll! Jeff Radke is Vice-President of Sales

"Price, selection, support, speed . . . all of you are great."

— Lawrence Greene

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

— Richard Ford

cakevvalk Are you ready for the big league?

Cakewalk just upped the ante for professional musicians with **Pro Suite** (\$829 list), a power-

ful PC-based music workstation that combines multitrack audio and MIDI with a full-featured digital sampler residing right on your hard drive. And that's not all. Pro Suite is loaded with some truly unmatched new features like an onboard drum machine that lets you create and edit loops in real time, physical modeling for making unbelievable reverb effects, and StudioWare for custom panel control of all your outboard gear.

İmagine: All your MİDİ gear centrallı controlled by one music workstation! Oh, and did we mention Pro Suite can export audio to Internet delivery formats like MP3, RealSystem G2 and Windows Media? It can.

At the heart of it all is Cakewalk's flagship multitrack music software, **Pro Audio 9**. Designed from the ground up exclusively for the Windows platform, Pro Audio 9 offers such rocksolid stability and seamless integration of digital audio MIDI, it has become the #1 selling music

software for Windows in the U.S. One reason for its success is the "views" menu, a powerful navigation system that functions and feels like it was designed by musicians, not programmers. In fact, views are a great way to get to know Pro Audio 9 without reading the manual. Easily accessible from small desktop icons, views include piano roll, MIDI events, staff notation, audio editing, lyrics, mix console, tempo, video and more. There's even a new multitrack piano roll that lets you edit MIDI notes, draw volume changes and edit controller data for multiple tracks simultaneously.

Pro Audio 9 handles more tracks than you'll probably ever use — 256 to be exact. That's 256 combined digital audio and MIDI, and 256 real-time effects. Wow, anyone recording a symphony with individual mics on each instrument?

Okay, let's be realistic for a minute. You're under the gun to record and mix a fully produced song by Monday. First task: Lay down a killer groove. First choice? Cakewalk's new Session Drummer, a full-featured drum machine that lets you select or create a loop and modify it in real time. After checking its generous library of professionally recorded MIDI drum grooves, you find some great-sounding Latin and Hip-Hop you combine for a main beat You slow down a dance groove for the intro, modify a jazz loop for the bridge, make some chaos for the end and drag and drop it into a song arrangement window. Trial and error goes a long way here, and real-time editing helps you zero in on exactly the grooves you want. Once you hear it in the whole mix, a second edit is just as simple as the first.

The MIDI bass track goes down next, then vintage synths, funky percussion hits and some way-out sound effects. Next you record

lead and rhythm guitar, lead and background vocals (all in stereo, of course) and start experimenting with some of your soundcard's DSP effects, patching and aux bus controls, and SMPTE options. By providing advanced support for AudioX, the industry standard, Pro Audio 9 gives you simplified, direct control over all the latest features in audio hardware.

Time for editing: Setting and labeling markers for overdubs, song sections, and whatever else suits your fancy is not something you need to skimp on, since you've got 256 of them at your disposal. Pro Audio 9's powerful navigational tools include unlimited color and text labeling of audio and MIDI tracks, or sections of tracks. For example, you could assign a different color to each instrument if you're dragging a lot from track to track. Or each song section if you're moving parts between song sections. Or frequency range if you're trying to balance your mix. You get the idea — It's flexible enough to work however you choose.

Okay, you make some mistakes when playing and editing. Experiment without fear! Pro Audio 9 lets you undo as much or little as you want, so if you made a mistake an hour ago, you can scroll down and rewind your editing session to that or any other editing point in the session.

You think you've got style? Now you've got more: Introducing the industry's first Style Enhancer. This MIDI plug-in's advanced performance-modeling algorithms do far more than change the feel of a groove with velocity and timing. The Style Enhancer actually adds and subtracts MIDI

"(My Sales Engineer) is a personable salesman. Things he wasn't sure about, he would take the time to research and find the answers! I've been buying gear for 15 years and I've never come across that. (Other retailers) usually fake that they know what I'm asking and I get stuck with gear."

Marc Battaglia

events and notes to morph your song into a wild range of styles and genres. Like what you hear? Keep it, edit it-the creative time you save is all yours.

Pro Audio 9's audio section has been thoroughly revitalized for robust realtime playback, mixing and effects processing. A key part of the upgrade is Cakewalk's WavePipe technology, which optimizes the performance of Windows audio cards for extremely low latency. This means when you move an onscreen fader there's no annoying time delay, an essential for real-time editing of your effects and mix parameters.

Pro Audio 9 provides StudioWare panels for direct control over your synths, sound modules, drum machines and more. For example, you can play or record vocal or guitar tracks on a Roland VS-880 using a functional onscreen faceplate that looks just like — you guessed it — the VS-880. Same for the Line 6 Pod guitar effects unit, Roland GR-30, E-MU Orbit and a growing collection of old and new gear. You can even improve on the manufacturer's design by changing or rearranging the faceplate buttons and knobs to better serve your needs.

Pro Suite comes packaged with all of Cakewalk's renowned library of 32-bit, float-

ing-point audio effects: Audio FX 1, 2, and 3. It also seamlessly incorporates those of other manufacturers by supporting industry-standard DirectX audio and MFX MIDI plug-ins. So are you ready to mix that tune yet? Expanding the low-level vocal intro, compressing and chorusing your rhythm guitar and limiting your background vocals is a breeze with Audio FX1: Dynamics Processing. Just right-click on a track and audition the full range of dynamics effects using friendly graphical controls that are often easier to use than the outboard units. Remember that lead guitar riff you fixed? Listen to it now with FX2: Vintage Tape and Amp Simulation. Try amps like British Crunch and American Lead, or see if a single 12" best fits your mix, or maybe four 10" speakers with some presence and EQ. Still too digital? Simulate what it would sound like on an analog tape recorder at a tape speed of 7.5, 15 or 30 IPS; add warmth (saturation) and even hiss to taste.

Audio FX3: Soundstage Design for Custom Reverb is about to change the world of reverb forever. When you first open FX3. it looks like something out of Star Wars, with a 3D room simulator you easily manipulate and view from any angle. Raise the roof 50 feet, add high frequency damping, move the mic position, move the performer, change how the room absorbs sound. The only thing that can match the FX3's exciting new

reverb sounds is the cool way you get to zero in on them.

Pro Audio 9 comes with a full notation program ready to print out scores with up to 24 staves on a page, complete with lyrics, chord symbols, dynamics markings and more. Guitarists will love the new onboard guitar tuner and full-featured guitar tablature and notation. Print your songs in tab or record and edit them by clicking onscreen strings. For practicing or teaching, just load any MIDI file and watch the fingering and tablature together in real time. To learn new parts, just slow down the tempo.

Last, and certainly not least, Pro Suite users are sure to be impressed by its built-in NemeSys GigaSampler LE. Yes, it handles gigabyte samples. Yes, it's easy to use. And yes, it integrates with Pro Audio 9 for real-time sampler/synthesizer playback, a critical feature not provided by any competing synthesizer plug-in. No more racks of outboard equipment, long waits while samples load or strict limits on sample size. This full-featured sampler and editor loads huge samples in seconds, not minutes, and sounds better than most outboard units. At the heart of the GigaSampler revolution is the GSIF (GigaSampler Interface), the fastest PC audio hardware interface on the market. Other software-based synthesizers rely on loops and patterns because of latency problems. Not GigaSampler. It bypasses RAM and streams samples in real time directly from your hard drive. A single sample voice can be as large as 4.3 GB, while 48-voice polyphony and full looping capability are standard. Supported formats include .WAV, Giga, and Akai, the latter of which can be imported with all its performance parameters.

With Cakewalk's new Pro Suite, your PC becomes a complete Windows workstation for multitrack recording, real-time mixing with effects, and hard-disk sampling. All the top standards, including 24bit/96khz sampling, are included as standard features — there's no tiered offering to get you to spend extra money. With so many extras surrounding its flagship Pro Audio 9, Cakewalk's Pro Suite has clearly set the new standard for music on the PC. By now, you're probably ready to own Pro Suite, so call your Sales Engineer for additional information and (of course) your special low Sweetwater pricing!



BOSS BR-8 DIGITAL RECORDING STUDIO

— Continued from Page 2 buttons at the same time. The BR-8 will automatically assign both of these inputs to whatever open tracks are available—no routing, no buss assignments, no hassles. The available tracks light up, and you're ready to rock. Even better, it has effects set up for just this circumstance — a guitar and vocal multi which can add just the right guitar effects on the guitar track while creating excellent vocal effects on the vocal track.

Now that you have your guitar plugged in and have pressed the Input Select button, you're ready to record the first guitar part. The BR-8 has already assigned the guitar to Track One. Suppose you want to record a guitar solo, but want to hear what it would sound like with different effects. As already mentioned, the BR-8's built-in effects are top-notch. Many of the algorithms use Roland's sophisticated COSM (Composite Object Sound Modeling) technology to model and simulate some of the greatest guitar, acoustic guitar and bass amps in the world. It also gives you a slew of digital and analog effects for guitars and vocals. In short, everything you need to make a great-sounding digital recording. You can even set it up so that you can hear the effects while you record, but have the BR-8 print the track dry (i.e. with no effects), then add the effects later, changing COSM amps or really doing whatever you want with the track, and you still only have to record the part once. For that matter, you don't even have to play it once. With all those V-Tracks, you can record different solos, or different parts of solos, and assemble them into one complete part later, and then set up just the right effect sound for the completed part. This is too cool!

Since you don't have a complete song composed yet, you're going to start by simply laying down some ideas. This brings us to yet another unique feature on the BR-8: the Rhythm Guide. The Rhythm Guide is a (believe it or don't) built-in beat box with 80 different rhythms—everything from rock to reggae to house and much more. You can chain these rhythms together to use as a song, or just loop one of the rhythms to use as a guide while recording your parts, without having to use up a track for recorded drums. It's like a built-in click track that actually sounds like drums, has lots of different feels programmed in, and is a blast to play along with.

You might select a pattern called "Rock 10", which has the perfect feel. On the BR-8 is a button under the Rhythm Guide which is labeled, logically enough, ON/OFF. Press this, and it starts to flash, telling you it's armed and dangerous, and ready to go. Next to the On/Off button is another one labeled Pattern Temp (Don't you love single buttons for single purposes?). When you press this, a screen comes up in the display showing you the tempo, the time signature and the pattern name. Select your pattern, press the ON button, set the tempo and get set to rock.

Okay, now that you've recorded a basic rhythm guitar on Track One, you want to play it

back to hear what you've come up with. Here's yet another cool feature of the BR-8: You can set the Rhythm Guide to automatically start when you press PLAY, so your tracks are always synchronized with the Rhythm Guide even though you didn't really record its audio.

Now back to the subject of dry tracks. As we discussed, you recorded the basic track without effects (simply by setting the effects to Bypass ON). What you want to do now is hear the track played back and audition a variety of different effect sounds. This is easy, as the BOSS BR-8 is positively loaded with modeled guitar amps, bass amps, acoustic guitar amps and tons of insane effects — it's even got an expression pedal input so you can use wah or dive bomb effects while playing your guitar. There's a Bass Simulator, so you can use wah or dive bomb effects while playing your guitar. There's a Bass Simulator, so you can use wah or dive bomb offects while playing your guitar, as well as an Acoustic Guitar Simulator, so you don't have to mic your old acoustic. The BR-8 is called a Digital Recording Studio, and now you know why. Everything you would ever use in a "real" digital recording studio is right here in this box.

Here's another reason why the BR-8 is so cool. You can record five or six takes of a guitar solo onto the BR-8's Virtual Tracks (or V-Tracks), then slice and dice and come up with the ultimate solo — even one you could never have played in real life. Another dedicated button, this one labeled V-Track, gets you into the V-Track display. You can then select a specific V-Track via the Value dial. You can name the tracks if you want, or you can have the BR-8 do this for you.

After you've selected the track, you can start laying down a ripping solo; and then another one to a different V-Track, with a completely different set of effects and different name so you can remember which solo is which. Best of all, you can keep doing this over and over long into the night. Tomorrow, you might be meeting with your singer, bringing your BR-8 along to do the vocals — all you need are a mic, headphones and an electric socket. There are (naturally) plenty of vocal effects in the BR-8 — like an enhancer, a doubler, a de-esser, a compressor/limiter, and lots more — so the vocals will come out great. And just like your guitar solo, there are plenty of V-Tracks available, allowing you to keep different lead takes, or assemble one incredible final take if that's the way you decide to go.

Finally, you might just be wondering exactly what media the BR-8 uses to record your music. In fact, it features a built-in Zip100 drive which uses (the now incredibly cheap) 100MB Zip cartridges. These Zips are removable, so when you're finished with a project you can just pop in a new one.

Is there more? You bet, but space (as usual) doesn't allow me to give you a complete rundown of everything this awesome (and affordable) machine can do, so please call your Sweetwater Sales Engineer for the complete story and your incredibly low Sweetwater pricing. Hev. do it now and you can be making music tomorrow!

— Michael Rief with considerable help from BOSS Product Manager Peter Swiadon

ROLAND XV-88

— Continued from Page 2

absolutely stunning sound quality to again put the XV-Series in the running with high-end samplers. And navigating through Patches and bookmarking your favorites for instant recall is a breeze thanks to a Patch Finder button and new Favorite List function. Put simply, Roland's XV-Series synthesizers, combined with SRX-Series expansion boards, are the most powerful instruments in Roland's impressive history.

The new XV-Series also comes with enhanced Roland tonal architecture, and all XV-Series synths can play back two waveforms per Tone. Since a Patch can use up to four Tones, this makes for some incredible four-stage velocity switching or four-zone keyboard splits, each using a stereo waveform within a single Patch. A Lock Legato function even allows precise legato performance of the waveforms. So now, for the first time, even the most delicate expressions can be reproduced at the Patch level without running out of polyphony.

Oh, did I mention all the powerful DSP effects onboard, incorporating independent reverb, chorus, and studio quality multi-effects processors? The lush, ambient reverb algorithms are derived from Roland's top-of-the-line SRV-3030 24-bit Digital Reverb Processor (one of my favorite processors, as a matter of fact). The chorus section produces a rich, thick modulation perfect for fattening up leads and pads. The new M-FX section contains all of the JV-2080's EFX algorithms, plus popular V-Studio effects, RSS, and unique algorithms like 3-D Delay, Slicer, formant filter, Isolator, and a triplet-based Shuffle Delay. Most importantly, all of this massive DSP processing is heard through 24-bit D/A converters, ensuring crystal-clear sound reproduction.

The XV-88 is truly a "Future-Proof" Instrument:

Roland's support of expandable synthesis is evidenced by the wealth of SR-JV80-Series expansion boards currently available. With over 15 titles to choose from, no other synth expansion library even comes close. Keeping this in mind, Roland designed the new XV-88 to be compatible with both SR-JV80-Series and the next-generation SRX-Series wave expansion boards. The credit card-sized SRX-Series boards hold an amazing 64MB of wave data—four times that of the SR-JV80-Series boards. Designed with a critical focus on sound quality, the SRX boards provide instant access to its exceptional sounds without hassles or long loading time.

The first two titles in the SRX-Series are the SRX-01 Dynamic Drum Kits and SRX-02 Concert Piano, with many more SRX titles to follow. I'm particularly impressed with the SRX-02 Concert Piano Expander. While other manufacturers would probably have have tried to load up the 64MB of ROM with as many pianos as possible, Roland took the opposite approach: The SRX-02

dedicates its entire 64MB of wave memory to one purpose, which is reproducing the most exquisite stereosampled piano sound ever.

Still, it's not enough to be a great synth, so the XV-88 is also Roland's first synthesizer to feature an 88-note precision hammer-action keyboard with velocity and aftertouch sensitivity. Perfect for use as a master keyboard, the XV-88's hammer-action is identical to the acclaimed A-90EX Expandable Controller, invoking the feel of a fine acoustic piano.

Knowing all this (and we haven't even covered everything here — yes, there's lots more we don't have room for), wouldn't you want an XV-88 for yourself? I'll admit I do. Considering that a fully-loaded XV-88 could hold 512MB of waveform data, you would have an incredible amount of music-making potential at your fingertips. So call your Sweetwater Sales Engineer for all the facts, complete information, specs and, oh yes, your special low Sweetwater pricing. — **Bill Hoover**



— Continued from Page 5 "Sound Video and Game Controllers". Expand that header by clicking the "+" sign and you will see Sound Blaster Synth or Live or other sound card items. Within one of these items you will find a settings tab that may include a setting labeled "Allow LPT Interrupt Sharing". Make sure this is deselected and then restart your PC and do the Auto Setup that is shown in the installation setup procedure from the MOTU product. Sometimes the Sound Blaster card will not show this setting within the Sound Video and Game Controllers heading. Sometimes it will create a heading labeled "Creative Misc Drivers" and here you will again click the "+" sign and go into the proper-

ties of any sub-headings and find the "LPT Interrupt Sharing" setting.

If these two things do not work, the next thing to do is determine again if you indeed have a general sound card and to shut the MIDI features off on that card. To do this, go to the Multimedia Icon in the Control Panel. Once you have opened Multimedia, go to the Devices tab (the last tab on the right), click the "+" sign next to MIDI Devices and locate the sound card, then go into the properties of that card and you should see "Do Not Use MIDI Features on This Card". Select that and again restart your PC for these settings to take effect. Once that is done, again go to the Auto Setup documented within the MOTU installation instructions.

With these three things, you should have no problem installing the device or getting it to be recognized thru Auto Setup.

Before I get onto any other topic, I have to say that after my comments in the last issue of *Sweet Notes* regarding PCs, I thought I'd be getting at least a few responses from owners of "Wintel" machines. But no, not a word. It has been quiet . . . maybe too quiet. Makes me nervous. Been staring over my shoulder a lot lately.

All kidding aside, I have to wonder that none of our readers (about 200,000 of them) took exception to what I wrote. Am I that persuasive? Do all of you really, secretly wish you had bought a Mac? Considering the amount of e-mail I normally get on other topics, this one should have lit at least a couple of fuses out there. Very strange . . .

Well, on to other subjects. I get an awful lot of e-mail on digital guitar amplifier modeling. It's powerful new technology, but there's a lot of information out there and sifting through it all can get confusing. Here are some of my thoughts and experiences.

Many of you know from my past articles that I have been using **Roland's VG-8** with the EX upgrade along with a **Godin LGX-SA** for my recording work for about four years now. When the VG-8 was released, it was truly a dream come true. While



"deface" it by mounting the GK-2A right between the rear pickup and the bridge.

What's more, the GK-2A came attached to a small plastic connector box that had to get fastened onto the front of your guitar. The result was that you had a functional, but very inelegant interface — really, to be honest, the whole thing spoiled the looks of your guitar. For that reason, Fender released a Strat that came complete with a GK-2A pickup and top mounted controls, while Godin's LGX-SA kept all the electronics hidden and used the piezos to drive the VG-8.

fact that you needed a Roland GK-2A divided pickup on your guitar to drive it. Which

meant that if you wanted to play your favorite Les Paul or G&L or whatever, you had to

Now Roland didn't get to be the giant company it is by sitting still. So when they went to design the successor to the VG-8, the new VG-88 (\$1295 list — hundreds less than the VG-8EX). The VG-88 still uses advanced COSM technology to model the most popular guitars, amps, speaker configurations and even mic placement, but here's the interesting part: You can actually access all the COSM amps, mic placements and killer effects with your existing guitar by simply plugging it into the 1/4-inch input jack. However (and this is a big however), despite rumors to the contrary, you cannot access the guitar and pickup modeling via this input, nor can you take advantage of the VG-88's alternate tunings and the ability to pan each string to a different position across the stereo field. I'm afraid that you'll still need a GK-2A or a Godin for that.

In any case, the VG-88 is still, to my knowledge, the only box out there that can turn a Strat into a "virtual" Les Paul (or a hollowbody jazz guitar, acoustic or a Rickenbacker 12-string and on and on). So here's my advice: Get yourself an inexpensive new (or beatup old) electric and do the GK-2A thing on that instrument. There are tons of great-playing guitars being built today that are remarkably inexpensive. A perfect example is the Godin Radiator, which retails at just \$449 and is a great instrument in its own right,

one you'll actually find yourself playing regardless of whether it has a GK-2A pickup on it or not. Moreover, if you shop around on the Net — on eBay or at the Sweetwater Trading Post (www.sweetwater.com/tradingpost/home.tpl) — you can find some great deals on used guitars.

Before I move on to some other guitar innovations, I should mention that the VG-88 has some exceptional new guitar and amp models, a stunning selection of "guitar meets synth" patches and some wonderful brass sounds. There's even a nifty new nylon string guitar patch. Add to that a built-in foot pedal (to access things like the excellent wah effect) and new insert effects

derived from the Boss cutting edge GT-Series of effects processors.

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As far as affordable modelers that can provide you with tons of amp and speaker cabinet models along with a wealth of digital effects, I don't think you can beat **Line 6's POD 2.0**, which is a small, kidney-shaped module that lets you record your guitar direct, while providing excellent digital models of — what else — real guitar amps, plus some outstanding effects. There's more information on this red hot unit on Page 7, but I just used one on a sampling project and I have to say I am quite impressed, particularly given the POD's affordable price. I actually ended up using a modeled sound because when I miked up the real amp POD was modeling and plugged in my Les Paul, I just couldn't get the beefiness I wanted without cranking up to ear shattering levels (which my neighbors really don't appreciate).

A couple if issues ago I talked about Line 6's **Stomp Box Modelers**. If you'll recall, I was hugely impressed. So it shouldn't have surprised me that the latest version of their POD is so mind-blowing. And all you original POD owners take note: You can easily upgrade to 2.0! (Call your Sales Engineer for details.) I love it when a manufacturer cares this much about its customers and doesn't leave them high and dry and forced to buy a new product to get the new features. Other manufacturers take note: I could name names, but I won't (and next time I won't let you off the hook so easy).

Meanwhile, if you're a gigging guitarist, up there on stage, night after night, shredding your fingers, you probably want to know about amplifiers that can do all the sophisticated digital modeling, and there sure are some terrific ones out there these days, starting with the full line of amps built

by the same people who make the POD: Line 6. Another company who has gotten an excellent reputation for their outstanding modeling amplifiers is **Digitech**, who offer up the **Johnson Millennium** line of amps. I have heard their 150-watt, 2x12 **JM150** Combo (though I haven't played one myself) and have to admit it sounded pretty darn sweet. You can get into one of the Johnson amps for just \$649 (list) for the **JT50** Combo.

Finally, I'd be remiss if I didn't mention the modeling amp that I personally use, which is the **Tech 21 Trademark 60**. It doesn't have all of the bells and whistles of some of the other amps, but I personally find it to be the perfect blend of old and new: There

are no presets — you have to dial up the sound you want on either of the two channels, which is more like the amps I grew up with. But if you want to know how good it sounds, well, I sold my Mesa Boogie after I used this amp for a few weeks.

The bottom line is that there are a lot of options available for great guitar tone. Yes, you can spend a small fortune on a real vinta

a small fortune on a real vintage amp or one of the new boutique models available from several companies. There's no argument from me, they do sound fabulous. But they are inherently limited in terms of tone. If all you play is blues or country, well they might do just fine. I have to play in a number of styles on most of my sessions, so it's great to have the luxury to be able to call

up a specific sound with the touch of a button or turn of a knob.

Sweetwater stocks just about every digital modeling device on the planet. Better still, they have these amps and modules at great Sweetwater prices and every one of them comes with that famous "no hype/no hassles" money back guarantee: If you're not happy, send it back, no questions asked (call your Sales Engineer for full details, please).

Whoa! I had planned on talking about guitars a bit this issue, but I see my space is all but gone, so I'll try to get into that next issue. See you then.





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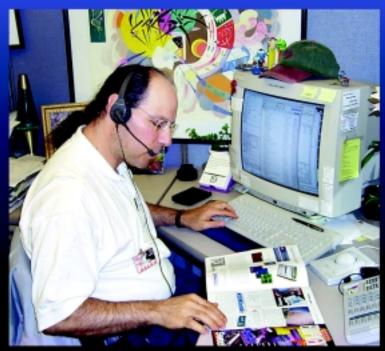
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