

AMERICA'S FASTEST-GROWING MUSIC RETAILER

**WINTER 1997** 



# THE KORG 168RC MIXER The world's most affordable digital mixer

By Clay Stahlka/Sweetwater Sales Engineer

If I told you that you could add a sophisticated, fully-digital mixing console to your studio, complete with automation, internal effects processing and 16 channels of ADAT digital inputs and outputs as standard equipment, for a list price of \$3200, I'll bet you'd ask "What's the catch?" Well, there's nothing but value here! And I gotta tell you it blew my socks right off, too!

I recently had the opportunity to spend several wonderful days with the new **Korg SoundLink 168RC** digital mixing console recently and here's what I discovered: This mixer has a lot of power and functionality packed into a really easy-to-use (and understand) package. Because it has a unique modular design, multiple units can be combined to create any size mixer that will meet your needs. Sounds like science fiction, eh?

Let's take a moment to look at the design and philosophy of this piece. It's a 16-channel mixer with 24-inputs, 8-bus architecture with four auxiliary buses (two

internal and two external). It possesses a 24-bit internal digital signal path for extraordinary signal integrity and bandwidth. Internally, the 168RC boasts two discrete stereo digital effects processors, 12 channels of 3-band EQ with parametric mid-band. It has internal snap-shot automation and full, real-time automation via a MIDI sequencer. Additionally, each and every parameter of the 168RC can be saved to user preset locations and archived or loaded via MIDI. Physically it has 12 ultra-smooth faders, a dual 12-segment LED meter to augment the large 240x64 graphical display and a control room monitor section plus separate headphone control.

I got the very first unit to arrive at Sweetwater and had never seen or touched a 168RC before. Upon my initial inspection, the unit appeared simple and clean with a minimum number of easy to identify knobs, faders and buttons, as well as a rather large LCD display screen. On the back, the unit has a total of 24 inputs

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# **INSIDE THIS ISSUE:**

### **NEW E-MU SAMPLERS**

From the company that pioneered the affordable digital sampler comes two brand new machines that redefine the state of modern sampling technology: the 128-voice **E4X** and 64-voice **e-6400**. You're gonna want one!

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### WORLD CLASS EFFECTS

It's not just another multi-effects processor—it's from **Lexicon**, the people who literally rewrote the book on studio quality reverbs. Take an in-depth look at the company's new **MPX-1** 

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### **AKG MICROPHONES**

You know **AKG** produces some of the best-sounding mics in the world. Now hear a first-hand report on their best-selling mics from a studio owner that's used them all. — SEE PAGE 4

### **KURZWEIL'S PC88**

With a great-feeling, weighted keyboard plus built-in Kurzweil quality sounds, the **PC88 Master Controller** practically sells itself. But now, Sweetwater has PC88s at an unbelievable price!

— SEE PAGE 7

### **ATTENTION GUITARISTS**

Sweetwater is now stocking the incredible **Godin LGX-SA** with Synth Access. Get a first-hand report from an enthusiastic new owner in our "Tech Notes" column.

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PLUS: Sony PCM2600 DAT Recorder, KAT Percussion Controllers, New SPL Processors, Soundware Scene CD ROM Report, Beyerdynamic Microphones, All About Leasing and much more!

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# WATER OFFERS THE BEST PRICES, SELECTION, TECHNICAL SUPPORT AND SERVICE! WHY SHOP ANYWHERE ELSE?

Unless you've been off vacationing in another galaxy, you know that E-mu Samplers have literally defined "state-of-the-art" since their introduction over a dozen years ago. E-mu's Emulator 3 was the world's first true stereo sampler (other machines used phase-locked mono samples back S1000/1100 and Roland S-700 series libraries from CD ROMs. Both the Turbo model and the E4X ship with analog and digital ins and outs.

Exclusive to all E-mu samplers is E-mu's incredible SoundSprint technology which allows you to play any sound set saved on your internal or ex-

ternal SCSI drive inunit to "load it up." one gig (or more)



Space prevents us from giving you any more details about these instruments, but all-in-all, these new E-mu machines are impressive tools that will find their way into thousands of stu-

music folks!

Modular Synthesis (DMS) which allows you to patch control sources to synthesis parameters

and combine all this with E-mu's tremendous

Z-plane filters, dual LFOs and 32 sample layers.

for a full E4X Turbo, you'll be glad to know that

E-mu's E4X sampler (\$3695 list) can be upgraded at any time to full E4X Turbo specifica-

tions. In the meantime, you have 64-note po-

lyphony, 4 MB of RAM and a 540 meg hard drive

stocked with killer sounds. Hey, that's more than

enough power to start making some serious

which is very similar to the E4X, but without the

digital ins and outs or the onboard effects pro-

cessors (which you most likely own anyway).

Finally, there's the **E-mu e-6400** (\$2795 list)

If you can't quite come up with the bucks



The E-mu E4X Turbo is clearly the most powerful, easy-to-use sampler on the market!

then — and some still use this process today). Current cutting-edge E-mu samplers are, of course, light years ahead of what was available in the early 1980s. In fact, a fully-loaded 16-bit **E-mu Emula**tor E4X Turbo can be expanded up to 128 megs of sample RAM — more than one thousand times the sample memory the original Emulator One came equipped with!

With this history, you can bet that the latest generation of E-mu samplers are the best in the business at what they do. But the E-mu engineers also recently added some pretty heavy-duty synthesis capabilities, which we'll get to in a few minutes. First, let's take a look at the three rackmount E-mu samplers.

The flagship of the E-mu line is the E4X Turbo (\$4895 list). E-mu states quite clearly that the cornerstone of their technology is providing the user with high polyphony — in the case of the E4X Turbo, that's an incredible 128 voices. This is important for two reasons. One is the support that high polyphony provides for layering sound elements. Layering or stacking sounds is a natural, intuitive approach to sound design. As long as there's polyphony to spare, extra layers can be molded into sounds to make them richer and more complex. Another factor is sequencing, which typically places high demands on voice availability. 128 note polyphony means less chance of notes getting stolen in the middle of a complex piece.

Of course, besides plenty of polyphony, the E4X Turbo features E-mu's user friendly interface that makes operation a snap. Automated tasks like looping, normalizing, truncation and sample placement make the entire sampling process easily accessible to almost anyone.

The E4X includes 1000 sample and preset locations and the ability to upgrade to 128 megs of sample RAM (that's 12 minutes of stereo sampling at 44.1kHz). Your off-the-shelf E4X Turbo ships with 16 megs of RAM, plus a one gigabyte hard drive loaded with over 400 megs of killer E-mu sounds. Also take note of the fact that the E4X Turbo (like the other E-mu samplers) will read E-mu, Akai

This is particularly important during critical session work when you need to find exactly the right sound without wasting huge amounts of time!

The E4X also continues the long tradition of E-mu's professional-sounding audio quality thanks to 18-bit DACs and internal 24-bit precision which eliminates aliasing and clock noise by maintaining a constant sample rate. The E4X Turbo even comes standard with an 18-bit dual stereo effects processor built right in, allowing you to add reverb, chorus, flange, delay

and other effects without any signal degradation.

The E-mu designers also topped off their creation with a sophisticated feature called Digital

dios — maybe even yours. So call your Sweet-

The e-6400 can be upgraded to a full 128 notes of polyphony and 128 Meg of RAM

water sales engineer for all the details and, of course, your special pricing on the E-mu sampler that best fits your needs and budget!

### KAT PERCUSSION CONTROLLERS ARE BACK!

The KAT line of MIDI Percussion is back (thanks to the folks at E-mu Systems, Inc.) and ready to make your music groove, swing, slam or just plain rock and roll.

Whether you play drums or other percussion in the studio or on stage (or just like to hit things with sticks), KAT controllers bring new levels of expression to the percussive arts with their unsurpassed FSR technology and gum rubber playing surfaces. The flexible and powerful software gives you creative freedom unmatched by any other controller on the market. And everything from the layout of the pads to the intuitive user interface makes the transition from acoustic to electronic easy.

The near-legendary drumKAT (\$1179 list) allows unparalleled MIDI control in a compact, playable package. The software is full-featured, allowing you to do everything from stacking up to 8 notes on each of the 10 pads, to creating chords or full melody lines. Realistic hi-hat control lets you play closed, open and everywhere in-between. An excellent companion to any of E-mu's great samplers.



At the top, the malletKAT, trapKAT in the center, DK10 and drumKAT in front

The **DK10** (\$549 list) is as easy to use as it is easy on your wallet, yet you'll find it's completely upgradable to drumKAT power should your needs ever change. The natural gum rubber surface gives this unit excellent playability while maintaining full dynamic control.

The trapKAT (\$1299 list) was developed in response — Continued on page 8

WE ACCEPT ALL MAJOR CREDIT CARDS! Or charge it to your Sweetwater Technology Card! Call for details: (219) 432-8176

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# NATER PRODUCT PROF

# N MPX1: NO COMPROMISE REVERB & EFFECTS

Here's a reasonable benchmark for any multi effects processor: Can it run separate reverb, chorus and delay effects — each in true stereo (that is, with independent left/right processing), in any order and without any compromise in the overall sound quality — all at the same time? Surprisingly, many other multi effects units just can't meet this basic requirement.

Enter the **Lexicon MPX1**, an effects processor that not only meets this benchmark, but has power left over to run additional effects. Yeah, you think, but at what price? Be prepared to be amazed, the MPX1 carries a suggested retail price of just \$1299. Do we have your interest now?

See, the MPX1 employs dual complementary processing architecture that is, it has two completely independent DSP processors. And Lexicon's proprietary Lexichip is dedicated to delivering world class stereo reverb and ambience algorithms. A separate, fast-math DSP processor is used to create all the other studio quality effects. Meaning the very best stereo reverberation and ambience algorithms are available all the time, and there's plenty of horsepower left for true, "no compromise" pitch shifting, EQ or modulation effects.

Actually, the basic effects blocks in the MPX1 are accessible at all times via dedicated, back-lit buttons on the front panel. The individual effects in the MPX1 have all of the features you'd expect from a dedicated processor: Each effect block is totally independent with its own mix, level and bypass controls. The audio path through each effect



The Lexicon MPX1 literally redefines the state-of-the-art in digital multi effects processors

is in lush, true stereo (no summing!). The ordering and routing of the six effects blocks is also completely independent within each program.

It seems a little silly to talk about sound quality when you can't actually hear anything (at least until the interactive version of Sweet Notes goes online), but everyone knows that the product designers at Lexicon aren't about to let something out the door that doesn't meet their lofty standards for sonic excellence, and the MPX1 is no exception. What you hear in programs with hip names as "MPX Blue," "480PrimeFlange,"

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### SONY PCM 2600 DAT RECORDER FEATURES SUPER BIT MAPPING

Okay ... Super Bit Mapping. What the heck is it and why should you want it? Super Bit Mapping (SBM) is a process designed to get the equivalent of 20-bit performance from a 16-bit format like DAT or CD. How does it work? Well, SBM is an intelligent filter process that takes advantage of the human ear's non-linear frequency response. Since our ears are less sensitive to higher and lower frequencies, the process uses noise-shaping to distribute digital quantization noise in the areas of frequency response where the ear is much less likely to perceive it.



Sony's PCM2600 gives you 20-bit performance from a 16-bit recorder.

So what does this do for recordings made on a DAT machine like the PCM2600 from Sony? Simple, it raises the bit detail and increases the potential auditory dynamic range of music. And it's not a subtle effect, either; it's clearly audible to anyone with a reasonably good set of ears. It's been described as bringing a sense of warmth and true musicality to digital recordings — something we all want, right?

The only DAT machines with SBM are from Sony (these are the people who developed the process, anyway). Like the PCM2600 pictured above. It comes with balanced XLR analog ins and outs, a pro quality AES/EBU digital interface, three sampling rates from 36kHz to 48kHz and a heck of a lot more we haven't got room to tell you about.

We can tell you that this amazing recorder comes with a "sticker price" of \$1875, but you won't be paying anything close to that because Sweetwater is pricing these machines to move (we like you and we want you to have Super Bit Mapping on your recordings). So call your Sweetwater sales engineer for further info and pricing right now!

### **MIDI MOUSE ANNOUNCES LAST MINUTE** SWEETWATER EXCLUSIVES!

Just hours before going to press (see, this is why editors have gray hair) Sweetwater made a special purchase of some very cool items from major manufacturers and is offering them at incredible savings!

**ROLAND AP-700:** This is an 18-band, fully digital stereo parametric equalizer plus integral 31-band graphic EQ with digital and analog ins and outs! It also features an anti-feedback processor, so it's is actually three amazing products in one. It WAS very expensive at a list price of \$2595, but now it's VERY affordable! Your special Sweetwater price is only \$995.

**ROLAND SN550:** This is a fully digital noise elimination system that employs exclusive DSP circuitry to remove all types of noise without "breathing" or changing the tonality of the overall sound. This is achieved with two separate noise reduction circuits that handle



Buzz and hum is a thing of the past thanks to the SN550's superior Noise Cancel circuitry

noise and hum independently. The Noise Cancel section employs a unique multi-band downward expanding system for exceptional noise elimination while preserving sound quality, enabling AC line hum or buzz from CRT displays and dimmers to be removed, a capability never before offered. Unlike encode/decode systems, the SN-550's single-ended design can perform noise cancellation in real time, making it ideal for pro sound reinforcement and studios. The retail price WAS \$2295 — Our incredible price just \$795!

ROLAND DM80: Not long ago, at prices up to \$20,000, the DM-80 was way out of reach for the average musician, but thanks to our special purchase, this Digital Multitrack Hard Disk Recording System is now selling for under \$4,000. Space prohibits our telling you all about this incredible system, so call your Sweetwater sales engineer immediately.

MARK OF THE UNICORN MIXER 7S: We have just a very few of these awesome, factory upgraded 7-channel MIDI-controllable (via your Mac or PC) mixers left. Originally priced at \$659, it can be yours for just \$299 — a savings of 55%!

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# G MICS: A USER'S PERSPECTI

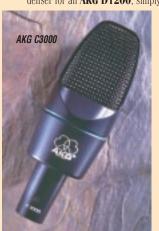
When the editor announced that there would be an article in this issue of Sweet Notes on AKG micro**phones.** I immediately volunteered to write it. Why? Because I've been using AKG mics for quite a while now, day in, day out, year after year. Yes, you can learn a lot

about a product by reading the specs and looking at frequency response graphs or polar pattern graphics, but when it comes right down to it, tiny variations in specs often amount to big differences in sound quality. And in my experience, getting first-hand information has always proven valuable. So I'll share mine with you.

Let me start at the beginning. Back in the 1970s, when I was composing music onto my four track Teac 3340. I had two mics, a Shure SM58 (left over from my days in my old band)

and a Sony electret condenser mic that the dealer threw in along with the Teac recorder. Back then I seemed to have a lot of time and I darn near wore those mics out recording day after day, mostly with fairly acceptable results (I eventually did wear the Teac out and it was retired in the early 1980s).

When I began my career as a sound designer at about the same time, I traded another musician my Sony condenser for an AKG D1200, simply for the reason that I



knew AKG was a "premium" mic. That and the SM58 did most of my early work with 12-bit samplers, but when I was ready to move up to 16-bit machines, I knew I needed a higher quality mic, and considering the ruggedness and performance of the D1200, I decided on another AKG product, in this case a set of AKG C1000Ss. If you go and listen to samples in the Stra-

tus Sounds library (released by Sweetwater, among others), you'll be hearing these particular AKG mics in the majority of the recordings.

I still have a number of beautiful recordings in my DAT library waiting to be digitized that were made using only the C1000s. I also did some live location recordings for musicians back in California, and the C1000s always produced a finished product that pleased the performers. At a list price of just \$524, this is one great performer. It features both cardioid and hypercardioid operation and an effective 50Hz-20kHz frequency range. There's a compartment inside the mic that holds a ninevolt battery, so you can take this mic out into the field and not worry about having access to phantom power via a console. I can't even begin to tell you how much punishment these mics took over the years, yet they never once failed to deliver flawless performance.

Fast forward a few years. A customer (who shall remain nameless, but he knows who he is) called to say how impressed he was with my samples and asked that I do some "custom" work for him. Offhandedly, he asked

which mics I was using, and when I told him C1000s, he was amazed and asked how much better my samples might be if I were using, say, an AKG 414. My answer was something like, "probably better." The next day a FedEx delivery arrived at my door with a brand new AKG 414B-ULS inside (\$1249 list in case you're wondering). Naturally, I was floored. Even more importantly, I was ecstatic when I began using it. The frequency response is near ruler flat from 20Hz-20kHz, it has four polar patterns, a two-position bass rolloff switch and built-in -10 and -20dB pads.

This meant I had to buy a second 414 — hey, everyone should have this problem — from Sweetwater, of course and

they were thorough enough to look through their entire stock and find the one 414 that

most closely matched mine so that I'd effectively have a matched pair.

AKG C1000S

About a year later, my studio load increased and I had to buy an additional mic. Unable to afford yet another 414, my Sweetwater sales engineer suggested an AKG C3000, a model which had just been released. At \$749 (retail, of course) it was reasonably priced and had features and performance that came quite close to that of the 414. In fact, I never once made a recording with this mic where I wished I'd had one more 414 yes, the mic is that good, plus its



Not too long ago, I got an assignment from an audio

magazine to review some new mics. One was the AKG 414B/TLII (\$1675 list). This mic was specifically designed to faithfully capture the legendary sound of the original AKG C12 (which, if you can find one, will set you

back more than a few bucks). Frankly, being an AKG fan already. I had nothing but praise for this mic. It's transformerless, so you get super powerful distortion-free low end reproduction, plus that much sought-after vintage sound. To my ears it may not be quite as accurate as the 414B-ULS (there's an acoustically-induced frequency response rise between 3kHz and about 5kHz), but it sure has a beautiful open sound that I immediately found to be pleasing to my ears.

One day I hope to own an AKG C12VR Tube mi-

crophone (don't we all?), though admittedly, givem its \$4540 list price, I'll have to sell a lot of samples first. But I've heard this mic on some recordings done in the Sweetwater studios and all I can say is . . . "spectacular!"

Most recently, some friends of mine that I'd helped with an album project needed some dependable mics for club work. I immediately suggested the new AKG Emo**tion** series (prices start at \$120 list for the model D770). and I'm happy to report that they're absolutely thrilled at the sound they get from these mics (they purchased the model D880s). More importantly, they don't have to treat them with kid gloves. They've taken a fair beating the last few months or so and keep coming back for more.

So before you choose any mic, take a close look at AKG's full line. Call your Sweetwater sales engineer and together the two of you can decide if one of these fine microphones will meet your specific needs.

— Jim Miller



You hear a lot these days about leasing (you can't turn on the TV without seeing ads for leasing cars), and you wonder if maybe that's the way to go to pick up the equipment you need for your studio. But you have questions. It's only natural, and in response to the many inquiries we get each day from customers regarding our leasing plans, we decided to include some information in this issue that might help.

The first question is simple: how do I qualify? According to Tony Strickler, Director of Finance here at Sweetwater, there are just two basic criteria for qualification, "A business checking account that's been open for two years or more

and clean credit history. If you have both of these, qualification is usually a breeze, and in most cases we can get you qualified in about 48 hours with just a little cooperation from your bank. We don't even need to see any tax returns.

But what are the benefits of leasing as opposed to getting a personal or business loan from the bank or putting your purchase on a credit card? Says Tony, "Leasing frees up your cash flow because, in most cases, a lease does not count against your personal credit. Only the monthly payment shows up on your credit report, not the entire amount of the lease. Therefore you can use your cash or existing credit for other pressing items like advertising, overhead costs and inventory.'

On a lease program, you get 100% financing with no down payment (though first and last month's payment is usually required), plus you're also building up a new credit line. Tony continues by adding, "There are typically some important tax benefits available when you lease, though it's up to your accountant or tax professional to determine what's right for you."

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### By Chuck and Brenda Surack Owners, Sweetwater Sound

Seems like it was just a few months ago that we were getting used to the idea that it was 1996 already . . . and now look, here it is, another brand new year! Wow!

Well, we certainly hope that each and every one of you had a most wonderful holiday season. And of course, if any of us here at Sweetwater was able to make the holiday even brighter by taking care of your needs dur-

ing this busy time of the year, well, we're sincerely honored that we had the opportunity to help.

But as we all head into this bright new year, there's so much happening around here that it makes us a bit dizzy. Our brand new multi-level warehouse is well underway and will probably be ready to move into in the early spring — barring any really bad weather, that is. But right now things are proceeding smoothly and we'll be showing you some pictures in our next issue, just to give you an idea as to the scope of this facility which will actually be

bigger than our entire existing multi-story building as it now stands. It's pretty mind-boggling, but it will finally give us not only the storage space to stock thousands more products today, but it will also allow for plenty of future expansion.

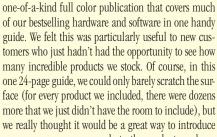
Since each year Sweetwater is growing at an unprecedented rate, we felt it was well worth the time and investment to be prepared for all the growth that lies ahead. Not only have we already added many new lines and dozens of new and exciting products, but we are constantly negotiating with all the major manufacturers to make sure that each and every one of you will have access to the very latest breakthrough technology at affordable prices. And there's the added bonus of having access to our superb technical support department

to make sure all the equipment in your studio works perfectly with everything else.

There's a lot of really exciting news that we look forward to bringing you in the months to come, so be sure to keep your eyes on these pages!

By the way, did you get your copy

of our special **Hot Picks Product Guide**? Due to the overwhelming demand from thousands of customers over the last year or so, we put together this very special



people to the products and services we offer.

If you haven't received a copy and want one, or if you know of someone that might like a copy, give us a call, write or send e-mail to "sales@sweetwater.com" and we'll send out a copy immediately. What's more, we'll be updating this guide on our Web Site (www.sweetwater.com/pgpdf.html) on a continuing basis, so you'll keep up-to-date on all our many special product announcements.

And speaking of our Web Site, we are now receiving close to *one* 

million bits a month from musicians world wide. That's a staggering number. Other dealers have been quick to send out press releases announcing that they have had a total of two million hits so far — heck, we do that in about three months!

Now there's a very good reason why we're so far ahead of the competition. See, Sweetwater was the very first music retailer to maintain a full time presence on the World Wide Web. We're in the technology business, and we knew that the Internet was the wave of the future, so we dedicated an enormous amount of resources and manpower to building the biggest, baddest, most comprehensive music related Web Site on the entire planet (and maybe elsewhere, for all we know). At present, we have almost 1500 pages of information online for musicians to access at "www.sweetwater.com" and that number is growing daily. If you haven't checked it out yet, you're in for a real treat!

Another extra special Sweetwater service, and the first of its kind from any retailer, is our "Trading Post," which is exactly what the name implies: you can sell or trade equipment you no longer use with other musicians world wide. Hey, that mic you bought three years ago and put aside when you got your new AKG will be perfect for someone just getting started putting together a home studio, so you might as well get it in his or her hands instead of just letting it collect dust. The new owner will be very happy and you just might make a few bucks off the deal (or you can trade for something they have that you want). Check out next issue for more information or access our Trading Post at "www. sweetwater.com/tradingpost/".

Well, we're out of space as usual, so here's hoping 1997 will be a very happy and healthy year for you and your whole family! See you next issue.



**Q:** I just purchased a new **Pro Tools III System** and I am not quite sure how much memory I should allocate to Pro Tools and how much to DAE. I have heard that if the amount of allocated memory is not correctly set it can really affect system performance. What are your recommendations?

**A:** Up to a point, more is always better. **Digide-sign** recommends that for **Pro Tools 3.2** you have a minimum of 16MB of RAM in your computer (and you will probably need more than this for real world situations). Pro Tools 4 will up this requirement to 32MB of RAM total.

As far as the applications are concerned, a good starting point for the Pro Tools application is between 8 and 10 megs. This would work for commercial spots and short songs. If you are doing really long sessions you need to increase it to 12-15 megs. DAE (Digidesign Audio Engine) is a bit more difficult. The amount of RAM you need to allocate to DAE is directly related to the number of plug-ins you have installed. A core system with no additional plug-ins should be set between 7 and 9 megs. You should increase the memory allocation by 1 meg for every plug-in you have installed. Some complex plug-ins such as **Focusrite's D2** and **TC Electronics' TC Tools** actually recommend that you increase the DAE by 2 megs per plug-in.

Total DAE allocation = 16 megs. Total RAM used for Digi = 28 megs, and this doesn't even count your system software!

How to change the memory allocation of an application: 1) Locate the *unopened* application you wish to change and click on the application icon *one* time only. This will highlight the application (If the application opens, you have *double clicked* on it and you will now need to QUIT the application). 2) Go to the file menu and select GET INFO (You can also use the key combination of "Command I" for this as well).
3) Click on the box next to "Preferred size". 4) Type in the value you wish to allocate to that application.
5) Close the info box.

It's that simple. RAM is so much less expensive these days than it was just a few years ago that it makes sense to put a large amount in *any* computer. Most big applications will run faster if they have more RAM allocated to them. People who use Photoshop for a living often have *over 300 megs* of RAM in their machines! 64 meg is usually plenty to run all but the biggest Pro Tools systems.

**Q:** I just bought a new **Kurzweil K2500** from Sweetwater and I want to know how I determine what options I have installed in my machine.

A: There are several options available for the K2500 and more are on the way. Here is a break-

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Everyone loves a great "success story," and we've got a terrific one for you. Sound Performance Lab (or SPL for short) was formed about ten years ago as a typical "garage company" with a heck of a lot of enthusiasm, but very little money (sound familiar?). The idea behind the company was that sound and performance should (logically enough) always be the key ingredients, and if the "accepted wisdom" principles and audiometry that went into the designing of these amazing processors is way beyond the scope of this brief article, but here are just a few of the exceptional products that SPL produces (and Sweetwater now carries):

This writer's personal favorite is the SPL Tube Vitalizer (\$3399 list), the top model in the company's soon-to-be

famous Vitalizer line. Everyone knows that tube technology produces a sound that's very sweet to the human ear, something that's missing from modern digital recording technology. The Tube Vitalizer employs a combination of real tubes, LC filters, IC technology, multiband compression and other

exclusive SPL magic ingredients and is designed for use in

Stereo Vitalizer with balanced ins and outs for a hundred bucks more. Both give you the ability to add spatial enhancement and detail that until now were only available using specialized software and a dedicated computer. Trust me, this Vitalizer technology is way beyond description. It is truly something you have to hear to believe. Far from being just hype, this equipment actually delivers the goods! Adding any of SPL's Vitalizer line to your studio setup will result in an immediate improvement in your sound — it has in mine.

Vitalizer with 1/4" jacks at \$599 list, and the model 9320

Other mind-boggling products created by the SPL design team include the aptly named **Charisma** (\$1999 list) an 8-channel true tube processor designed to improve the



England's Sound On Sound magazine recently raved about this processor, saying "So far, the Tube Vitalizer is the most effective 'make everything sound better box' I've heard to date . . .

in the industry needed to be questioned when designing a product, then they were prepared to do just that.

The SPL folks were all working in studios themselves at the time and realized that many of the tools they really needed to get the job done were either not available, or were just too darned expensive. So they decided to build equipment themselves that would transcend the limitations of current technology, removing the creative barriers that stood in the way of producing that much sought-after "perfect sound."

The products they began building weren't your average "crank-em-out" processors they were beautifully-designed audio tools that soon began to get noticed by many of the industry's best known producers and engineers, people who recognized that these new boxes gave them new ways of working with sound.

Obviously, a discussion of all the complex psycho-acoustic pro recording, mastering and cutting applications. Sound processing is split into two sections: the proprietary Vitalizer circuitry and compression on the left, and the tube section on the right which can double as an ultra high quality, low noise mic preamp. If you need the ultimate in

warmth combined with detail, the Tube Vitalizer may be exactly what you're looking for. Recordings, both old and new, will exhibit a clarity and sweetness that may have been impossible until now. The stereo field actually becomes wider while your mixes become tighter.

Of course, not everyone has the need or budget for an item of such incredible overall performance. Not to worry, SPL has a full line of processors that give you access to the amazing Vitalizer circuitry, starting with the model **9319 Stereo** 

"The Vitalizer can be labeled as the Best Buy (in psychoacoustic processors)" — Keyboard power, punch and dynamics of your recordings, as well as the subjective loudness of the material being processed.

The **Optimizer** (\$1699) features four fully parametric equalizers specially designed for musically creative and corrective shaping of vocals, instruments (it's great on guitar) and complex stereo material. SPL's **Spectralizer** (\$3700) is the first digital harmonics processor designed to re-synthesize second and third order harmonics, improving the clarity and transparency of any signal in the digital domain.

I don't have room to tell you about all the other cool processors (darn), but your Sweetwater sales engineer can do that for me. All it takes is a call from you to get complete details and your very special pricing on the entire SPL line.

- Michael Rief





As happens so often, we have so much information to give you in each issue of Sweet Notes that it becomes impossible to cram everything into the 12 pages we have available.

so we have to resort to such desperate measures as this "In Brief" section. So here's some important, late-breaking news . . .

### **LOWER PRICES ON DIGITAL MULTITRACKS**

If you've been planning on adding an Alesis ADAT XT or a TASCAM DA-38 to your studio, we have great news. Thanks to special purchases we've made (and 'cause we care about our customers), we are now offering new lower pricing on both these digital marvels. You know the drill by now, we can't print prices on certain products, but we can tell you that you will not find a lower price on an Alesis ADAT anywhere in the country! If it's a DA-38 you want (and who could blame you?), we have them in stock for an absolutely incredible factory authorized price of just \$2299 until March 31. Call us immediately!

Maybe you already own an ADAT but have

# IN BRIDE

been thinking of trading up to an XT. Think no more — act! We have special trade-up plans in place that make it easier than ever to put an ADAT XT in your studio.

### **SWEETWATER ANNOUNCES EXCLUSIVE**

Sweetwater has just arranged to be the exclusive North American (US, Canada and Mexico) Distributor for **Oram Products!** Now available only from Sweetwater are Oram's great sounding analog mixing boards. These are serious serious mixers and perfect matches for ADATS and DA38s, DA88s, etc. We have 8-Bus and 24-Bus versions available, as well as Oram's excellent mic preamp workstations, mastering EQs, and more. Full details with photos in our next issue!

### **NEW K2000 TRADE-IN PLAN UNVEILED**

You own a K2000, but you've been looking long and hard at a new K2500 or a K2VX, right? Pick up the phone and call us! We have a special upgrade plan in place just for people like you. You'll be surprised at how painless we can make trading up. Hey, we want you

to have the best tools to make music, so call now! **ULTIMATE GUITARS BREAKS RECORDS** 

The new Ultimate Guitars CD ROM for Kurzweil instruments has been selling so quickly

that it's broken all our existing records for CD ROM sales, and for good reason. There's over 400 megabytes of astounding new and vintage quitars included in this amazing col-



lection. It can be yours now for just \$329. See "Soundware Scene" in this issue for more information or call your sales engineer today!

NEED MORE INFORMATION? ACCESS OUR WEB SITE: "WWW.SWEETWATER.COM"

**Winter 1997** Sweet Notes

# **Kurzweil's PC88 Controller:** THE BEST JUST GOT BETTER

Every serious keyboard player dreams of having a great-feeling 88-note controller at their fingertips (literally!). Those extra octaves allow your hands to race up and down the keyboard without ever having to stop and hit a transpose button (we all know what a pain that is). Then there's the smooth feel of a truly responsive, weighted action keyboard, something you can't get from a typical synth keyboard. For those players Kurzweil Music Systems designed the PC88 Performance Controller.

But typical of a Kurzweil product, the engineering team wasn't content to make this another "me-too" MIDI controller, so they decided to build in a set of superb, Kurzweil-quality sounds. Check out the PC88's Performance section: Its 64 presets include Kurzweil's latest, critically-acclaimed Grand Piano samples, plus other classic sounds like Rhodes electric pianos, new Clavinet and harpsichord, rock and jazz

organs, bass, acoustic guitar, vibes, orchestral strings and more. That's 64 super factory preset sounds a working musician really can't do without (plus room for another 100 of your own).

Now it's not only the most powerful MIDI controller, but thanks to a special buy, Sweetwater is offering the PC88 at an unheard-of low price!

and all with full 32-note polyphony. This is one killer controller!

But there's more: the PC88's MIDI Controller section is designed for fast, intuitive access, with full MIDI functionality. It can transmit on four MIDI channels simultaneously, is 16-part multi-timbral, and offers four completely independent zones which can overlap. Each zone has access to all controllers: pitch and mod wheels, four pedal controllers, two footswitches, four sliders, three switches and keyboard mono pressure. There's even an arpeggiator that can be synced to MIDI. And we haven't even mentioned the built-in multi-effects unit yet! We could go on and on . .

But here's the part you're going to really love: Sweetwater has made a special purchase of PC88s from the factory and is offering them to you at spectacularly low **prices** — in fact, the prices are so low we can't even print them (that's not a cop-out folks, we do have to honor all our agreements with manufacturers). We need to mention that all these units have minor (in some cases almost unnoticeable) cosmetic blemishes, but every one comes with a full factory warranty, and once you get to playing the nicest weighted action in the business, you won't even notice.

We also have the PC88mx available at similar incredibly low prices. This is basically a PC88 with a full General MIDI set added, 200 more programs and a full 64voices of polyphony. So what are you waiting for? Give us a call now — you won't believe how little it will cost you to add a PC88 to your stage or studio setup. And oh yes, you should probably hurry — at these prices, these units won't last long!

### **LEXICON MPX1 EFFECTS PROCESSOR**

— Continued from page 3

"Vintage Trem" and "AutoWahChorus" is nothing short of fantastic! The reverbs are incredibly smooth with absolutely no graininess at the tail-end (a place where inferior 'verbs really show their true colors). The Chorus effect is fat and literally immerses you in lushness. Delay effects are crisp and detailed. The Flange effects sweep through the soundfield with a mind-blowing "swoosh" that's nothing short of spectacular. And this is just the start. Also available within the effects blocks are Phaser, Rotary Cabinet, Comb filter, Auto Wah, Overdrive, a seemingly infinite number of EQ options, plus other effects you just have to hear to appreciate (like Looper, Ducker, Orbits, Centrifuge and Aerosol).

Sporting a pair of 1/4" TRS phone jacks plus balanced XLR connectors for inputs and outputs, switchable +4dB balanced/-10dB unbalanced operation, a 20-bit D/A and 18-bit A/D converter, frequency response of 20Hz to 20kHz plus/minus an insignificant 1dB, a dynamic range of 95dB (minimum) and a signal-to-noise ratio of 90dB (minimum), we're talking serious sonic performance here.

Hey, the bottom line is that it's from Lexicon, it has the features and specs you're looking for and it sounds like . . . well, like a Lexicon should! So call your Sweetwater sales engineer immediately to find out your incredibly affordable price and other important information on the MPX1 right now! Or just order one now — you're gonna love it!

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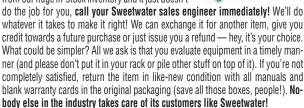
We accept VISA, MASTERCARD, AMERICAN EXPRESS and DISCOVER cards, or you can charge your order directly to your SWEETWATER **TECHNOLOGY CARD** (if you don't have one, we'll be happy to mail or fax you an application). We also accept money orders, bank drafts, personal checks (must clear before shipping) and C.O.D. orders. You may even be PRE-APPROVED FOR AN INSTANT LINE OF CREDIT ACCOUNT UP TO \$50,000! (Amount may vary depending upon individual credit history — call us for complete details)

### SWEETWATER HAS IT ALL:

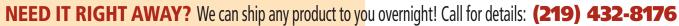
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The fine print reads: Refunds, credit and exchanges are for product value only and do not include shipping costs. The item must exhibit no cosmetic damage or signs of wear. Equipment must be in manufacturer's original carton with manuals, warranty cards, disks, etc. Ship items in a sturdy box and secure with heavy duty tape. Special orders are excluded.



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# Sweetwater's New Education Task Force

If you're an educator in the field of music, all too often you hear that money is tight and that budgets are shrinking. You hate hearing that, and so do we. Sweetwater's commitment to supporting music educators and teachers never ends, because we believe

strongly that exposure to the arts is critical for today's young people. That's why we've established our own in-house Education Task Force to make absolutely certain that you have access to valuable resources that can enhance and augment your efforts in music education, and we plan to take an active role wherever we can to help educators implement any and all music programs that involve current technology.

Music is everywhere today, and it's truly a universal language that transcends most cultural barriers, and more importantly, the newest technology is truly exciting to students, making it more likely that they will want to learn about music and then stick with it. We know from personal experience exactly how this exposure can enrich everyone's lives.

So what does all this mean to you, a music educator with a mission to teach America's youth about the pleasures of playing and creating music? Educational instruction involving the use of current high-tech music hardware and software offers unique possibilities for music education. Adoption of this technology, along with a clever and well-planned curriculum will give faculty members the tools to educate their students in almost all the musical disciplines: keyboard performance, electronic music synthesis, the physics of sound, composition and many more.

Of course, the tools you need to achieve these goals are of utmost importance, so you want to be sure that you not only get the right equipment, but that you have a support staff available to make sure it all runs perfectly together and answer all your questions. With the resources that we have at our disposal here at Sweetwater, we are capable of designing a MIDI studio or keyboard lab from small, single station setups to huge, multi-station

keyboard labs. We'll work with you, within your budget, to help you achieve outstanding results almost immediately.

Just a few of our credits include the Merrillville Community School District (Indiana), where we installed both a multi-



Students at Indiana University today have access to complete MIDI stations

station MIDI keyboard and computer lab, as well as a complete digital audio recording studio for use by both high school and junior high school students.

At Indiana University (see photo above), we've completed Phase One of what will be a three year project to place 360 (yes, that's three hundred and sixty!) MIDI stations into the brand new all-digital music library on the main IU campus in Bloomington. Each station consists of a personal computer (either Mac or IBM/PC) with a selection of Mark of the Unicorn and Coda software, as well as a Kurzweil K2000 or K2500 sampling synthesizer. Once completed, this will be the largest installation of its kind in the world and will help to define the direction of similar educational installations in the years to come.

Other institutions we've worked with include the University of Colorado, New York University, Seattle Pacific, University of Texas in Austin and the University of Cincinnati to name a few.

We believe Sweetwater Sound should be your first choice should

you (or your school) plan to add any of the following to your music program: portable electronic keyboards or synthesizers, personal computers for use with music applications, a single station MIDI system for music composition and arranging, a multiple station MIDI lab to teach piano theory and composition, or digital recording workstations and multitrack studios.

Sweetwater will be exhibiting at the following shows (among others) this year: Ohio Music Educators (Toledo, Jan.30–Feb.1), Texas Music Educators Association (San Antonio, Feb.13–15), Eastern Regional MENC Conference (Baltimore, Feb.27–Mar.1), and Southern Regional MENC Conference (Nashville, Mar, 25–28). We hope to see you there (call us for additional information about any of these conferences or access information on our Web Site at "www.sweetwater.com/shows/"). Together we can make sure that music remains a vital part of the country's educational curriculum. So don't hesitate to give us a call — we're here to help.

### **LEASING**

— Continued from page 4

The credit application is quick and easy to complete. We can fax you one today or you can fill one out online at "www.sweetwater.com/credit/". It only takes a few minutes and you'll be notified of your approval status quickly. Yes, it's really that simple. Once you're approved, you can make your first purchase of up to the full leasing limit immediately (in some cases, up to \$50,000), or start with as little as \$1000. Subsequent purchases need only be \$500. And we handle all the bookkeeping from this end — all you have to do is decide what you want and we'll take care of the rest. As usual, no hassles.

Imagine: now you can add an 8-track digital multitrack recorder to your studio for less than \$84 per month! Or how about a brand new Kurzweil K2500 for about \$105 a month? Sounds great, doesn't it? The best news may be that at the end of the lease period, the equipment is yours to keep! Just tell us what equipment you're interested in and we can give you an instant quote on your low monthly cost for leasing. If you need more information or if you'd like us to fax you a copy of our application, just pick up the phone. For many customers, leasing just makes good sense, and you might be one of them!

### KAT PERCUSSION

— Continued from page 2

to players' requests for FSR technology in a size and configuration that rivals an acoustic drum kit. With 24 playing surfaces in one highly portable rig, you'll wonder why the heck you've been hauling around all that acoustic stuff for so many years. The layout is totally drum kit-like and has a responsive surface that's easy to play on. And you'll definitely feel like playing once you connect the trapKAT to a General MIDI system and play along with the built-in grooves.

The **malletKAT** (\$229 list) and **malletKAT PRO WS** with integral sounds (\$3199 list) is the favorite mallet-based controller among educators and performers alike. It can be used in a standard three octave size or expanded out to a full five octaves. With the built-in sounds on the PRO WS, you get piano, vibes, xylophone, tubular bells and over 100 other instruments to cover any gig.

We have all these great KAT products available now. Call for additional information and your special pricing today!

## BEYERDYNAMIC CLASSIC MICS

The M 88 and M 500 microphones from Beyerdynamic are considered classics, and in more ways

than just their names. Each has remained unrivaled for pure sound quality and accuracy. And now you can be one of the priveledged few to own one of these superb mics in their limited edition form. This collection has been limited to 999 pieces each worldwide. Their design, weight and materials have been reproduced exactly to match the originals.

Each mic is packaged in a handsome mahogany case lined with black velveteen and inlaid with a silver plaque and solid clasp to safeguard your historic invest-

ment. Each mic features a chromium plated stainless steel basket with brass barrel specially coated in a combination of nickel and chrome, plus there's a unique engraved serial

number on each with Classic Limited Edition logo. You also get a certificate of authenticity.

The M 88 (\$499 list) is a dynamic moving coil mic with performance that clearly defines its classic status with unrivalled off-axis rejection for live sound applications, extended low and high end and high SPL capability. Its frequency response of 30-20,000Hz is perfectly flat and uncolored.

The M 500 (\$699 list) is a dynamic ribbon mic with the warmth, depth and clarity only available from a ribbon design. Its crystal clear top end and frequency response curve of 40-18,000 Hz results in a brilliance and definition that provides incredible presence. Both mics feature hypercardioid polar patterns for extremely high gain before feedback in live situations.

These mics may not be for everyone, but there's no denying their credentials. Call Sweetwater today for your special pricing on these classic mics and be one of the few to own a piece of audio history!

SWEETWATER PROTECTS YOU WITH THE INDUSTRY'S FIRST AND BEST NO HYPE/NO HASSLES 100% BEST VALUE GUARANTEE IF YOU'RE NOT HAPPY, WE'RE NOT HAPPY! Call us for complete details: (219) 432-8176

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# **UPS: NOT JUST A SHIPPING METHOD**

### By Kenny Bergle Sweetwater Sales Engineer

UPS is an acronym for Uninterruptable Power Supply. This is a unit that provides clean, constant power to your very expensive, very sensitive electronic devices. If you knew how much the power supply fluctuates from your local utility service it would scare you into a possible solar energy generator frenzy! Seriously, ask any qualified electronics person what the single most common cause of electronic failure is. They would most likely reply that it's inconsistent or "dirty" power. In fact, theoretically, if you had completely clean and constant level power, most of your electronic gear would never fail (at least not in your lifetime!). Computer people have known this for years, so most of the UPS units manufactured are sold in the computer arena.

We musicians and studio owners need to wake up to the fact that most of the instruments we use, from keyboards to multitracks, are either full-fledged or at least mini-computers! We must bear the responsibil-



UPS devices from APC: A small investment for your peace of mind.

ity of providing clean and constant power to the tools of our trade. It is a small investment to protect a much larger one! We can no longer just slap a two-prong adapter on a unit and plug it into the wall. This is me telling you that eventually (usually sooner than later) you will find out that the power coming out of your wall is not what the unit really requires to perform and continue performing for a long time. What UPS units do is provide a *constant source of clean power*.

There are many ways your local power company can play havoc with your gear. Some examples:

1) A Sag, also know as a brownout, is a short term decrease in voltage levels. This is the most common power problem and is typically caused by the startup power demands of many electrical devices in the vicinity. Sags are also the utility companies' means of coping with extraordinary power demands. In a procedure known as a "rolling brownout," the utility will systematically lower voltage levels in certain areas for hours or even days at a time. Hot days, when air conditioning usage is at its peak, will often prompt rolling brownouts. The final effect: a sag can "starve" a unit of the power it needs to function, causing unexpected system crashes and reducing the life span of components and electrical motors.

2) A Spike is an instantaneous, dramatic increase

in voltage. Akin to the force of a tidal wave, a spike can enter electronic equipment and damage or completely destroy components. Typically spikes are caused by a nearby lightning strike, but can also occur when utility power comes back on line after having been knocked out by a storm. **Effect:** potentially catastrophic damage to hardware and loss of data!

3) A Surge is a *short term increase* in voltage, usually lasting no more than 1/120th of a second. The cause: high-powered electrical motors such as air conditioners, and household appliances in the vicinity. When this equipment switches off, the extra voltage is dissipated through the power line. Effect: Stress on delicate components and premature failure.

4) **Noise**, more technically referred to as Electro-Magnetic Interference (EMI) and Radio Frequency Interference (RFI). Electrical noise disrupts the smooth sine wave your gear expects from utility power. Many factors and phenomena, including lightning, load switching, generators, radio transmitters and industrial equipment can cause noise, either intermittent or

chronic. **Effect:** Introduction of glitches and errors into audio and data paths.

5) **Blackouts**, a total loss of power. The cause is usually excessive demand on the power grid, lightning storms, ice on power lines, car accidents, backhoes, and on and on. **Effect:** Just randomly turn all your gear off at the same time while you are trying to record that next hit! You'll see . . .

Okay, I'll admit I am paranoid, and possibly overly so, but I have learned the hard way that I must protect my studio devices. I have had everything from intermittent distortion to total failure (having to replace a motherboard) because of power problems. When I finally learned of UPSs, I knew

that there was a crucial need for them in our industry!

With the goal of being a complete solution for all your studio needs, Sweetwater is proud to announce that we are now stocking the American Power Conversion (APC) line of UPS units. APC has won more awards for performance than all the other UPS manufacturers combined and are the clear leaders in UPS technology and power protection. The great thing is that the APC line protects against all the above problems in one unit. But there's an added benefit that's just as important: now you can even finish that Number One hit during a complete power blackout since the onboard battery can keep your gear running long after the lights go out! That's right — APC modules give you peace of mind plus an uninterruptable source of power when everyone else is looking for candles. It's affordable peace of mind, considering there are APC units starting at around \$300 retail.

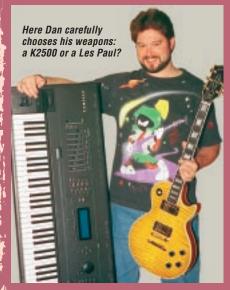
Look on our Web Site for detailed APC info ("www.sweetwater.com/apc/"). There are several levels of protection, depending on your needs, so call your Sweetwater Sales Engineer now to determine which is best to protect your gear, before you have to call our Service Department to fix it! It's not a question of if your electricity service will cause you problems, it's merely a question of when!

# SOUNDWARE SCENE

By Daniel Fisher, Chief Soundware Engineer

Happy New Year from the Soundware Development Facility! I'm now starting my third year here and it seems like we've been exploding with new products lately. The recent release of our **Ultimate Guitars CD-ROM** for the K2000/K2500 has already generated a surprising amount of mail, e-mail and phone calls from professional musicians who have been completely knocked out by this amazing collection of new and vintage guitars.

Ultimate Guitars contains over 100 files filled with more than 400 Megs of acoustic, electo-acoustic, clean electric and distorted guitars (plus basses, of course) all sampled to perfection by our own Jim Miller (Stratus Sounds). Jim not only writes our Tech Notes column, but he has also written tons of articles for *Electronic Musician* on the subject of sampling (there's one in the current issue, in fact). Jim personally played all the guitars on this CD ROM, and considering how long he's been playing the guitar (his band opened for Jimi Hendrix in the 1960s), you know he's come up with some absolutely killer sounds.



Most importantly, these incredibly well-recorded samples are not made from random guitars we just had lying around. Each guitar was selected for its reputation, rarity, tone quality and stylistic uses. These instruments would cost over \$60,500 to own, not including the thousands you'd need for all the vintage and hi-tech amps and effects which were used in the sampling process.

The professional quality instruments found on this library are set apart from the many other third party guitar CDs by their playability and musical response, not to mention their superb programming. Some companies' "big haired" guitarist CDs and CD ROMs allow you to do little more than rearrange "their" guitar solos like a sliding-piece puzzle. Other CDs have nothing but strumming chords that may or may not be in your key and/or tempo.

I personally spent many long nights in the Sweetwater Soundware studio putting the finishing touches on these guitars using the magic of V.A.S.T., adding amazingly play

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### **SOUNDWARE SCENE**

— continued from page 9

able controllers to every file. You'll find slides, whammy effects, wah-wah, a unique "key bend" technique, brand new custom reverbs and other effects, plus a special "fret slide" which allows you to pitch bend up as if your fingers were actually sliding across several frets, just like a real guitarist would do when sliding up a whole step.

At the last minute, just to make sure we had just about every sound you'll ever need (and despite the fact we had over 300 megs worth of guitar and bass samples already). I flew down to Florida where Jim and I produced a set of classic, raw blues samples from a B.B. King "Lucille" and my personal favorite, the aptly named "ZZ Lead" on a Les Paul Signature model with four velocity levels of left hand fifths and five levels of right hand lead notes (including three full levels of harmonics!). Wow! Every time I play this one I get chills!

Of course, there's more to life than guitars (or so I've heard), so we're also excited to announce the release of two very special low priced CD ROMs: Finger Juice and Pocket B-3 for the K2000/K2500. Finger Juice contains over 125 Megs of Hip Hop production tools like BreakBeats. Live Loops, 808 and 909 Kits and Loops, many vintage Drum Machines, plus lots of Synth Basses and Woofer Food along with Breaks, Tape Stops, Hits and Slurs. There's even a bunch of funky Organs, Electric Pianos and Basses for your mix.

Up until now there's been a shortage of truly grungy, "grainy" dance music samples for the K2000/K2500, but for only \$99 you can now add that missing element to your own productions at a price that just can't be beat. We also have Finger Juice CDs available for E-mu samplers (ask your sales engineer).

Now if B-3 Organs are your thing, get ready for the grooviest product you can actually fit in your pocket. Our **Pocket B-3** CD-ROM for the K2000/K2500 has over 75 files of classic Hammond B-3 Drawbar settings which were recorded direct from the Leslie pre-amp. These files are an amazingly small 600K, yet they contain the straight B-3 sound plus the luscious Chorus/Vibrato sound and can simulate your choice of one or two Leslie Rotors. These tiny sizes mean that you can have many of your own favorite Drawbar settings always loaded during your gig or studio session and still have plenty of RAM for your other samples (like some guitars from our "Ultimate Guitars" - hint, hint). We've also included a number of B-3s recorded with a real Leslie that allow you to "morph" between Slow and Fast speeds. And the best part about the Pocket B-3 CD ROM is that with a price of just \$99, it won't take very much out of your pocket to own one.

Finally, I'd like to clue you into what has to be one of the hottest keyboard deals around: Sweetwater is offering an unbelievably low price on demo versions of the Kurzweil PC-88 Performance Controller. Before I started the Soundware Development Facility at Sweetwater, I was a Soundware Engineer at Kurzweil R&D. One of my projects was designing the GM set that ships with the PC-88mx, so I can tell you from an insider's point-of-view that this is one powerful, awesome-sounding keyboard that really feels great to the touch. Ask your Sweetwater Sales Engineer for your special price on this exceptional instrument or check out page 7 for more information.

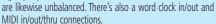
That's it for this issue, but I'll be back next time with some important news about several very cool new projects that are in the works even as I'm writing this!

### **KORG'S SOUNDLINK 168RC DIGITAL MIXER**

Continued from page one

and 16 outputs laid out very thoughtfully with the ADAT studio in mind. The inputs consist of two 8-channel ADAT optical ports and eight balanced TRS jacks, of which four have insert access

and two include low-Z mic preamps with phantom power. You'll also find a pair of unbalanced tape returns here. The outputs also have two ADAT optical ports plus a pair of S/ PDIF coaxial outs. The master output pair and the monitor outs are on unbalanced 1/4" jacks which is really okay, since I'd expect to be sending my main outs digitally for mastering anyway. The two aux sends



powered the unit up, revealing a good-looking backlit LCD display, and here's where I began to see the immense power that this deceptively simple mixer possesses. The 168RC has no multiple page menu system to get used to. Each front panel selector button takes you to a single page display containing all of the routing and setting information for each given section of the mixer. In most cases there are actually two choices of selector buttons for each mixer section. The first lays out the mixer (fully graphically, with representations of knobs and/or faders) while the second shows the corresponding routing table for guick and easy signal routing and recall. Although the graphical representation of knobs and faders can be controlled and automated via MIDI, there really are eight honest-to-goodness knobs that you can grab to adjust any parameter on the screen!

Now it was time to get the mixer set up for operation. I selected the input routing page and simply highlighted channel 1 and dialed in analog 1. Just that quickly, my mic was hot and sounded exceptionally clean and quiet. Needless to say, I had to go down the line and assign the proper ins and outs to the desired sources and destinations. This, however, took me a grand total of five minutes. Oh, and by the way, the manual was very straight-forward and to-the-point, quickly clearing up any uncertainty I might have had regarding the settings.

After I configured the entire console several times (just because I couldn't believe it was so fast and easy), I stored my configurations in several of the 100 user-definable preset locations (if you need more space, you can save and load via MIDI). I wanted to make several slight changes for mixdown so, using the quick copy/paste functions, I copied and edited the parameters and saved these presets. Hey, this was getting too easy! While I was automating my mix via MIDI, I discovered that these presets could be changed on-the-fly without any glitching!

To add equalization to any of the first 12 channels I just chose the EQ page and dialed in the High Shelving, Low Shelving, and Mid-Band Parametric EQ to my taste in real time. For channels 13-16 I found there was only High and Low Shelving EQ, again perfect for their use as returns. Here, I discovered I could save 30 presets of EQ settings for instant recall.

For my last task I decided I would tackle the dual stereo effects processors. The manual again was well documented for quick learning! I saw that the effects were set up as 32 different types with multiple, user-definable parameters. They include algorithms for halls, rooms, plates, etc., along with chorus, delay, pitch shifting, rotary speaker, dynamics processing, EQ, spectral enhancement and more. Once again, the 168RC offers 50 presets to store effects settings.

After I picked my jaw up off the floor, I researched the additional hardware options including rack mounting kit and A/D and D/A interfaces to convert the 168RC ADAT ports to analog ins/outs for those who want the power and flexibility of the Korg SoundLink but have more analog sources and destinations. A total of 24 analog ins and 24 analog outs would be

> possible. I also saw that multiple units can be cascaded together for a virtually unlimited number of channels, inputs and outputs, and that together multiple units will operate either independently or in master/slave configuration for total control from a single source or MIDI setup. Wow!

> Listening to my completed automated mix from my ADAT, I concluded that it was perhaps the most enjoyable learning curve I

had ever experienced. The Korg SoundLink 168RC is well designed, extremely flexible, user-friendly in a big way and bottom-line: it just sounds great! Why don't you call your Sweetwater sales engineer today and find out how easy it is to step



up to the next level in mixers for your studio!

Continued from page 5

down of how to determine what options you have:

**Software version:** simply turn the K2500 on, the software version is displayed on the bootup screen. If your machine is already on, you can do a Soft Reset and the bootup screen will come up and display the software version. You can do this by pressing three buttons in the keypad together: Press +/-, 0, and CLR all at the same time. The current K2500 system is version 2.31 and K2000 owners should have version 3.18 or 3.18J

**PRAM:** In Disk Mode there is a display of how much memory is left. You will see SAMPLE:xxxxxxxK and MEMORY:xxxK at the top of the screen. You should first Hard Reset your machine (note: this will clear all RAM) to clear the memory and if you have greater than 235K listed under MEMORY you have PRAM installed. K2000 owners with PRAM installed will have greater than 100K.

**ROM 1** or Orchestral ROM will appear at 900. Simply go to PROGRAM mode and call up sound #900. If you see 900: "TotalCtr Orch1" you have ROM 1. If you see "NOT FOUND" then you do not have ROM1 and you should call your Sweetwater sales engineer and buy it immediately (note: this is a subliminal message that you will be unable to ignore)! This also applies to K2000 owners.

The same procedure applies to ROM 2 (Contemporary Block), except that programs will appear at #800. Finally, if you have **Piano ROM** installed, programs will appear at #770 (K2500s only). Sorry K2000 owners, the Piano Block is NOT available for your machine.

Sample Memory: In Disk Mode there is a display of how much memory is left. You will see SAMPLE:xxxxxxXK and MEMORY:xxxK at the top of the screen. You should first Hard Reset your machine (note: this will clear all RAM) to clear the memory. The amount of sample memory is now displayed beside SAMPLES. For example a 64 meg K2500 will display SAMPLE:65536K. Why does it read 65536K rather that 64000K you ask? Remember 1K = 1024 so if you multiply 1024 by 64 you get 65536 (thank goodness for calculators)!

Options that are not yet available: **DMTi** – ADAT/DA88 interface and the KDFX Multi- effects processor.

### By Jim Miller

If you've been reading this column for any length of time, you know that like many of you, I got my start as a musician by playing guitar. That was back in the 1960s when there was no such thing as a home studio or digital technology or computers or, well, pretty much anything that makes our lives so much better these days. You just bought a guitar you could afford, plugged it into an amp (usually a Fender) and played as loud as you possibly could — mostly to irritate the "old folks," but also because it was quite a rush!

Today we have all sorts of tools to help us make music: CD quality digital multitracks, incredibly affordable studio quality reverbs, microphones with phenomenal specs and keyboards that can pretty much sound like any instrument, just to name a few innovations you read about every month in these pages.

But with all this really amazing studio gear, some truly incredible advances in guitar technology may have gotten lost in the shuffle, so I'm devoting this month's column to reminding all you guitarists out there exactly what Sweetwater has available to make your personal musical adventure even more exciting.

**GUITARS.** Probably nothing is more important than the axe you play, and the instruments being produced by companies all around the world are at an all-time high in terms of overall quality. Back in the 1980s, you stood just as good a chance of ending up with a real lemon as you did of getting a fine instrument, even from the "big name" guitar manufacturers.

All that has changed of course, and though a really great guitar these days would never be considered cheap by any stretch of the imagination, you know that the instrument you're buying today will in all probability last you a lifetime.

A few years ago, Sweetwater quietly began selling guitars from **Godin**, a small Canadian company that was making superb instruments the old fashioned way: one at a time. The first guitar that Sweetwater began stocking was the **Multiac**, which came in both steel and nylon string configurations. What set these guitars apart (aside from the awesome quality construction) was that these instruments were designed to produce lifelike acoustic tones via sophisticated piezo pickups and an on-board active EQ system.

But there was more: they also came with a little 13-pin connector that gave Multiacs access to all the Roland GR-Series synthesizers, meaning that you could now have the best of both worlds: great acoustic tones without having to plug in a single microphone, and synth access via a guitar that was finally able to accurately trigger a synth without the delays and serious tracking inconsistencies of previous "guitar synths."

Guitarists, being a conservative group (this is not finger pointing — I speak from experience), were slow to warm to these instruments, but once they actually got their hands on one, felt for themselves the quality of the craftsmanship and heard the sound these things produced, well, they knew they had to have one. I know I personally did after playing a nylon-string Multiac while visiting Sweetwater almost two years ago.

On my last visit to Sweetwater this past October, my good buddy George Kabot (who is the resident Sweetwater Web Master and himself the proud owner of a Multiac steel string guitar) guided me into the labyrinthine depths of the huge Sweetwater warehouse to reveal the newest Godin guitars the company is now stocking, the magnificent **LGX-SA**. I'll admit that I had seen ads in *Guitar Player* magazine for these particu-



lar instruments and really wasn't all that impressed, and for good reason: these ads don't do the guitar justice. When George opened the case to reveal a shockingly beautiful, highly-figured maple top with stunning mahogany finish, I was floored. Holding it in my hands, feeling the tight construction, running my fingers over the ebony fingerboard . . . well, I had to have one! A top like this on a Gibson could run you over \$5,000!

Not only does this guitar offer great performance and beautiful woods, but it sounds incredible thanks to an innovative pickup system plus a built-in L.R. Baggs micro transducer in the bridge with active EQ for a truly convincing acoustic tone from a solid body guitar (it's true). Then there's a 13-pin connector for hooking this beauty up to my Roland VG-8 (more about that in a minute). I've included a photo of my new LGX-SA and I think you'll agree it's a great-looking guitar.



Sweetwater has more of these wonderful instruments in stock in a variety of finishes (mahogany, amber and a truly unique royal blue) with tightly flamed or highly figured curly maple tops. At \$1995 list, I strongly suggest that before you buy any other guitar, you talk to your Sweetwater sales engineer about the LGX-SA.

ROLAND VG-8. From previous "Tech Notes" columns you know how impressed I am with this box. For the last eight months or so I've been doing session work on a few albums with some local musicians and the only thing I take with me on these gigs anymore is the VG-8 and an old beat-up Strat copy with a Roland GK-2A pickup mounted on it (but I'll now be using my new Godin LGX-SA, of course).

This one unit gives me every classic guitar sound. I have yet to have someone suggest a sound at one of these sessions that I haven't been able to call up within seconds with the VG-8, particularly since I've installed the VG8S-1 Upgrade — now you can even create very

convincing acoustic tones thanks to this box's "hollow body" algorithm. Somebody says "I need a Tom Petty vibe" and I call up a Rickenbacker 12-string program. "Allman Brothers" — sure, no problem, Les Paul and a Marshall coming up. In a pinch, I've even used the VG-8 to lay down some pretty respectable bass tracks thanks to the unit's powerful pitch shifter.

Every time I attend a guitar show, the biggest crowds are invariably gathered around the VG-8; often there's a line of people waiting to try it out for themselves. Hint: there's no waiting in line at Sweetwater, though — they've got a Roland VG-8 right there, waiting to get delivered right to your door!

**AMPS.** There's been somewhat of a renaissance of sorts lately in the amp world. Musicians have really begun to understand that the amp has as much to do with their overall tone as their guitar does. Unfortunately, this fascination with amps (particularly tube amps) has led to a huge rise in the price of vintage Fender, Vox and Marshall amps, as well as skyrocketing prices on newer high end amps (go ahead, just *try* to buy a Trainwreck amp today). Fortunately help is on the way in the form of digital technology.

Now you might think that the word "digital" hardly belongs in the same paragraph with "tube amps," but thanks to the latest cutting-edge digital technology, you can get incredibly close to the sound of a real tube amp in a modern, reliable amplifier that won't cost as much as a small condo in Maui.

Case in point: If you're looking for the vintage look and feel (and sound) of a blonde '60s Bassman, but want the versatility of an amp that won't limit you to just one particular sound, take a look at the new **Roland Blues Cube** amps with "Tube Logic". These babies sound great and use much the same breakthrough technology that allowed Roland engineers to develop the VG-8. What's more, prices start at an incredibly low \$479 (list) for the 30-watt **BC30** with 12" speaker.

Also new is the **AxSys 212** from **Line 6** with its proprietary TubeTone Processing. While in Ft. Wayne this past October, George Kabot and I spent a whole evening putting this monster through its paces and both agreed its potential was nearly limitless (oh, George now owns one, by the way — smart move on his part). Aside from its ability to sound like a Marshall stack, Fender Twin, Mesa/Boogie, Soldano and more, this killer amp includes a full set of studio quality 24-bit digital effects. All for a list price just over a grand.

Of course Sweetwater also carries a full complement of awesome guitar effects processors and other cool gear to help make your guitar sound even better. I've personally been lobbying for Sweetwater to carry other guitars and amps (like Paul Reed Smiths, for example). If you have strong feelings on the subject yourself, send e-mail to "sales@sweetwater.com" and let them know you'd like to be buying your guitar gear from the same dealer where you buy all your other stage, studio and MIDI equipment: Sweetwater Sound!

So until next issue, friends, here's hoping your 1997 is off to a great start and that we all get signed to record for a major label real soon.

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