

GUITARS! SWEETWATER HAS THEM!

Exclusive! See Page 3



MUSIC TECHNOLOGY DIRECT!

FALL 1997 ISSUE

KORG 168RC DIGITAL MIXER

INCREDIBLE PERFORMANCE FOR JUST \$999!



Your first reaction when reading the headline is probably: "That's impossible! A digital mixer for under a grand?" It's not a misprint, folks. Right now — but only while supplies last — Sweetwater can ship the **Korg 168RC Digital Mixer** right to your door at the absolutely astonishing price of **only \$999!** You read about this incredible studio tool in the Winter 1997 issue of *Sweet Notes*, and like everyone else you thought, "Hey, this is very cool!" Imagine: full automation, pro quality internal effects processing and 16 channels of ADAT digital inputs included as standard equipment. Wow! Who the heck *wouldn't* want one of these incredible machines?

Unfortunately the list price of \$3200 may have been just a bit too steep for you. But now, for a limited time, and for about the same price as a typical high quality analog board, you can have this 16-channel mixer with 24 inputs, 8-bus architecture, four Aux buses, 24-bit internal signal path, two discrete stereo digital effects processors, 3-band EQ with parametric mid-band and much more . . . **for just \$999!**

Okay, how can we do that? Simple: We bought every single one of these mixers that Korg had in its inventory at a mind-boggling price and we're passing the savings on to you. How can you pass up a deal like this? Answer's simple: *You can't!*

Want automation in your studio? Of course you do. The 168RC features sophisticated internal snapshot automation along with full, real-time automation via any MIDI sequencer. 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.

The unit looks deceptively simple, with a clean functional design and easy-to-identify knobs, faders and buttons. On the back, the 168RC has a total of 24 inputs

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DIGIDESIGN UNVEILS 24-BIT PRO TOOLS|24 SYSTEM

If you're in the market for a high end digital multitrack recording system, we invite you to compare the raw performance, superior fidelity and extraordinary user interface of the new **Digidesign Pro Tools|24 System** (\$7995 list price for the Core System) to any other product on the market — tape or disk-based — at any price. None are quieter, more pristine and honest to the

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INSIDE THIS ISSUE:

MACKIE MONITORS

Equip your own studio with a pair of incredible **Mackie HR824 Active Monitors** — speakers that one major industry magazine recently called "accurate, awesome and affordable." — SEE PAGE 2



ENSONIQ KEYBOARDS

Want a cutting-edge instrument with all the sonic muscle of today's hottest synths combined with the superior feel of a weighted keyboard? Take a close look at the **Ensoniq E-Prime** with 64-note polyphony and real piano feel. Or check out the cool **ASR-10** Sampling Keyboard. — SEE PAGE 2



EVENT SHIPS NEW AUDIO CARDS

Computer-based hard disk recording is gaining in popularity — and power — thanks to three superb new digital audio cards from our friends at **Event Electronics**. — SEE PAGE 7

AES CONVENTION REPORT

The Audio Engineering Society held its 103rd Convention and Exhibit Show in New York City and Sweetwater was there showing the latest and greatest in music technology. — SEE PAGE 8

PLUS: Klark-Teknik Electronics, TASCAM DA-98, Guitars, Opcode Studio 64 XTC Sync Processor, Oram Octasonic, RPG Acoustics, Tech Notes, Soundware Scene . . . **AND MUCH MORE!**

MACKIE HR824 ACTIVE MONITORS

Considering the phenomenal success of every product **Mackie Designs** has introduced, it's a bit of a surprise that the company took so long before manufacturing other products besides mixers. Still, when the Mackie people build something, you can bet they want to get it absolutely perfect. So when the company announced it was going to produce a set of active monitors, everyone in the industry sat up and took notice . . . and for good reason.

Like everyone else, you probably saw the double page spreads in all the major publications announcing these speakers. All the pre-release industry buzz was enough to guarantee that the initial production runs of Mackie's **HR824 Active Monitors** (\$749 list each) were in extremely short supply. Musicians around the world lined up to buy a set before ever hearing them — they knew this was going to be a winner . . . and they weren't wrong.

Fact is, here at Sweetwater we had a huge waiting list for HR824s, which was frustrating for everyone. But the good news is that production is finally catching up with the overwhelming demand, and we are starting to get adequate supplies of this wonderful speaker.

If you've never experienced the awesome audio that active monitors deliver, get set for a revelation. Because such systems are designed from the ground up, all the subtleties of cabinet design, equalization, power handling and crossover frequencies can be taken into account, meaning that every component works in harmony with every other component. The power amps match the drivers which match the exact size of the cabinets. What's more, active systems like the HR824 allow you to adjust the speaker to exactly match your listening environment.

Let's start with the amplifiers. The HR Series (which stands for High Resolution) monitors feature dual power amplifiers: 100 watts (with 150 watt bursts) for the high frequencies and 150 watts (with 200 watt bursts) for the lows. Both amplifiers make use of Mackie's high speed, latch-proof Fast Recovery design which features extremely low negative feedback. The bass amp is directly coupled in a servo loop to the 8.75 inch mineral-filled polypropylene low frequency driver. It constantly monitors the LF unit's motion parameters and applies appropriate control and damping. An oversized magnet structure and extra long voice coil lets the woofer achieve over 16 millimeters of cone excursion, so bass notes start and stop instantly without any overhang, distortion or "tubbiness." Instead of relying on ports or slots, the woofer is acoustically coupled to two aluminum mass-loaded 6.5-inch passive drivers, meaning you get bass response that is the equal of 12-inch drivers with flat frequency response to a throbbing 42Hz!

The high resolution metal alloy dome speaker handles the critical high frequencies above 2kHz. It has a flat response up to 20kHz, delivering pristine, uncolored treble output that reproduces exactly your source material. In addition, thanks to Mackie's proprietary exponential high frequency wave guide, you get a gigantic "sweet spot," meaning everyone in the control room hears the same incredible sound. The HR824's wave guide maximizes dispersion, time aligns the acoustic center of the HF driver to the LF transducer's center and avoids enclosure diffraction.

Since we're talking about enclosures, this might be a good time to mention that the HR824's front board is one-inch



thick with radiused edges to further eliminate diffraction. What's more, during final assembly, each and every HR824 is individually hand trimmed to plus/minus 1.5dB from 42Hz to 20kHz. And every monitor comes certified with its own serialized, guaranteed frequency response printout!

Because every control room (and listening environment) is different — they come in all sizes and shapes and cubic

volumes — every HR824 has a three position Low Frequency Acoustic Space control. This maintains flat bass response, regardless of whether you place the monitors away from walls (whole space), against the wall (half space) or in room corners (quarter space). A low frequency roll-off switch at 80Hz allows you to emulate small home stereo speakers or popular studio monitors — a nice touch.

In the October 1997 *Electronic Musician* ("Power Stations" article), Stephen Webber wrote: "The imaging and high frequency dispersion is brilliant: I was amazed at how far off axis I could scoot my chair and still hear what was going on in both channels." Who can argue with that?

By now, you're probably wishing you had a pair of HR824s in your own studio. Hey, who wouldn't? And since we now have them in stock in our giant new warehouse, we've got a great price for you on these amazingly accurate monitors. All you have to do is pick up the phone and give us a call at (219) 432-8176. Just tell your Sweetwater Sales Engineer that you're ready to own a set of Mackie High Resolution monitors. They'll understand — heck, most of them are planning to add these speakers to their own studios.

As they say on TV: "Operators are standing by!"

ENSONIQ'S E-PRIME AND ASR-SERIES KEYBOARDS



Go ahead. Sit down at an **Ensoniq E-Prime** and you'll feel like you're in front of your favorite acoustic piano. The newly-designed flying-action key mechanism simulates the weight and throw of a real piano hammer for amazingly lifelike performance. This is a key ingredient missing from most sampled pianos: that special tactile sensation involved in actually coaxing a real piano to life. You can also customize the feel of E-Prime to match your own playing style, selecting from 14 velocity curves and 4 pressure settings. Its 76-key range is big enough for most piano pieces and provides larger zones for split keyboard setups. There are three sampled pianos onboard: a pop-oriented Bosendorfer, a rich 9-foot Baldwin grand and a warm, inviting Yamaha, all programmed to provide everything from a sparkling "cut-through-the-mix" piano to a lush grand that's ideal for any concert hall.

If you need more than pianos, E-Prime (\$1995 list) has 308 sounds for every style of music with a broad range of authentic instruments, as well as modern synthesized sounds. Also included are 128 General MIDI sounds and 10 GM/GS drum kits. Keyboard enthusiasts will appreciate the variety of organ, electric piano, synth and pad sounds. A full complement of string, reed, woodwind, and brass instruments will enhance any classical or pop arrangements. A wide variety of drum, bass, and guitar sounds provide high-energy dance or smoky jazz rhythm sections. For the wildly adventurous (raise your hands), there are exotic world/ethnic instruments and other unique sounds.

E-Prime also has the same advanced yet easy-to-use sequencing features that have made all the Ensoniq keyboards famous, with user-friendly recording and editing tools that help you develop your musical ideas into fully orchestrated songs. You'll probably never run out of voices, either, since the E-Prime sports 64-note polyphony. All these features ensure a lifetime of music making pleasure.

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

WE ACCEPT EVERY MAJOR CREDIT CARD! We make it easy to get the gear you need! Call us at **(219) 432-8176**



GUITARS!

When I heard the earth-shaking announcement that Sweetwater Sound was going to be selling guitars, I volunteered immediately to write the article. After all, I'd been nagging Chuck (sort of constantly) to make guitars and basses available to the hundreds of thousands of guitar players who desperately needed a reliable source for their beloved axes. Knowing Chuck, he wasn't about to make that huge commitment until he was *absolutely positive* that he could not only get all the very best brands, but at prices that Sweetwater customers have grown to know and love.

Now I'm honored to let all my guitar playing friends around the world know that the wait is over! From flame-top Les Pauls to shred metal Jacksons to fat, funky G&L basses, *Sweetwater has your next axe right here at unbelievable prices!* Even as we go to press, the final details are being formalized, but I can tell you that Sweetwater will be carrying every desirable guitar, bass, amp and effects unit available. We're talking about the best instruments from the biggest names.

If you need an acoustic guitar, you can choose an instrument from the C.F. Martin Company. This company has been crafting fine guitars for over 150 years, and produce some of the most in-demand acoustics on earth. Right up there in quality are the gorgeous acoustics built here in the USA by Gibson. If your needs (and budget) are slightly more modest (but your need for tone isn't), you might select an instrument built by Washburn or Epiphone or one of the cutting-edge acoustic-electrics from Canadian guitar manufacturer, Godin.

When you're ready to get electrified, the selection gets even greater. You might spring for one of the absolutely stunning instruments built in Nashville, Tennessee by industry legend, Gibson Guitars (makers of the classic Les Paul, ES-335, SG, Flying V and others). Or you might possibly consider an awesome

axe (like an ASAT or Legacy) hand-built in Fullerton, California from the company that Leo Fender co-founded in 1980, G&L. Beauty combines with performance in the "new vintage" instruments from Paul Reed Smith: Stunning hand-carved maple "10-Tops" and bird inlays — wow!

Then there are the killer electrics being built by Jackson Guitars, the company that introduced the world to the so-called "Superstrat" in the 1980s. From Godin come some great new electrics like the LG-X SA ("synth access").

Another company gaining a solid reputation for electric guitar quality and value is Washburn with several models to choose from, as well as the fine Epiphone products that look and sound like a Gibson, but at truly affordable prices.

If you absolutely promise to keep a secret, I can also tell you that there are some other premium guitar lines from top (and I mean "top") manufacturers that Sweetwater will be carrying. But because of certain legal restrictions that only lawyers understand, I can't name names. If you scan the list above and know your guitars, you can probably put two and two together. Go ahead, it's easy.

Need a bass guitar or two? How about one of the superb instruments built by Tobias, G&L

or Epiphone? You also might need an amp to go with that guitar, and Sweetwater will be offering the legendary tone machines from Marshall and Vox, as well as new digital amps from Roland, Line 6 and Johnson. Plus there might just be one or two others we can't mention here (wink, wink). Sweetwater will also be carrying the finest effects units from manufacturers like Roland/Boss, Digitech, ART, Eventide, TC Electronic and . . . whoa, my space is just about gone. So pick up the phone right now and give your Sales Engineer a call for up-to-the-minute information and incredible Sweetwater pricing on your next acoustic or electric guitar, amp or effects unit.

— Jim Miller



KLARK-TEKNIK

SIGNAL PROCESSING BY DEFINITION

Back when records were popular (was that back in the stone age?), there was no such thing as digital recording — except in theory — and even analog technology hadn't evolved to today's level. So when it came to signal processing, good equipment was, well . . . good enough. No so these days. Even many analog recordings can reveal the inadequacy of certain equipment used in the audio chain. And with digital recordings — particularly now that 20-bit and 24-bit recorders are becoming available — sonic accuracy is an absolute must. This is no time for second best.

When it comes to signal processing that's engineered for the digital age, the studio professionals of today have many choices. And here at Sweetwater, we believe there's no such thing as too many choices. Allow us to introduce you to one of the newest additions to our stellar line of processing gear, the outstanding **Klark-Teknik** line. Sporting such features as metal shafted pots for extended life and durability and three year warranties (five years on some EQ products), this is ex-



Digital delays from Klark-Teknik

actly the type of equipment needed when flawless sonics are required. These are no "do-everything" effects boxes; they are among the best studio tools available at any price.

There are actually so many items in the full Klark-Teknik line that there's just no way we could ever tell you about all of them. Essentially, there are eight types of processors available: graphic equalizers, parametric equalizers, dynamics processors, an audio spectrum analyzer, two digital delays, active direct box, active crossover and loudspeaker processors.

Equalizers start with the **DN330** Single Channel EQ (\$820 list) and go from there up to the **DN3600** Dual Channel 1/3 Octave Programmable Graphic EQ (\$3300 list) with optional Remote. There are also parametric units including the **DN405**, **DN410** and **DN4000** starting at \$924 retail. For digital delay needs, there are two models to choose from, the **DN7103** (\$1980 retail) and the Dual Input, Four Output 2.7 Second **DN7204** (\$2460). If you need to get control over dynamics, Klark-Teknik offers three in the **500 Series** starting at \$1144). Add the **LBB100** Active Direct Box (\$196), **DN800** Active Crossover (\$2028) and **DN8000** Loudspeaker Processor, plus the astonishingly versatile **DN6000** Real Time Audio Spectrum Analyzer (\$4420) and you can see that Klark-Teknik has built products that every pro studio needs.

Since space restrictions prevent us from telling you everything you need to know about this outstanding line of signal processors, we'd like to suggest that you call your Sweetwater Sales Engineer right now for accurate, detailed information and our special pricing on these exceptional Klark-Teknik products.

24-BIT PRO TOOLS/24 SYSTEM

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Pro Tools/24. And certainly none of them offer a better price-to-performance value.

Pro Tools/24 provides digital recording, editing, and mixing with true 24-bit audio performance and up to 24 discrete tracks per audio card, plus 24 tracks of I/O capability with your Core System. Add powerful real-time DSP effects, advanced automation, integration with MIDI and digital video, plus support for a host of TDM and AudioSuite Plug-Ins and you've got the makings of a true, world class recording suite.

You begin with a "Core System" which includes a **d24 audio card**. This is a PCI-bus card which connects to your choice of Digidesign Audio Interfaces, either the **888/24 I/O** (\$3495 list) or **882 I/O** (\$995 list). Next there's the **DSP Farm** card, which is used for Pro Tools' real-time mixing and signal processing features. You also get a selection of incredibly useful TDM Plug-Ins, bundled at no extra charge, including multi-band parametric EQ, dynamics (compressor, gate, peak limiter, and more), delay, and others. Finally, you also get Digi's award-winning **Pro Tools** software.

To run Pro Tools/24, you'll also need at least one Audio Interface and one or more Digidesign-qualified disk drives for storing your audio data. You'll need a computer, of course — a Digidesign-qualified Macintosh or Mac OS-compatible. Track count, digital processing, and I/O are all completely expandable. If you need higher track count and/or more

than 24 channels of I/O, the Pro Tools/24 Core System can be expanded simply by adding an additional **Pro Tools/24 Expansion Kit** (which includes the d24 and DSP Farm cards at \$4495 list). You can add more DSP Farms to increase the number of simultaneously active TDM Plug-Ins. By adding more audio interfaces, you can have up to 72 channels of discrete input/output channels.

If you want all the mixing and editing power of the Pro Tools/24 System, and 16 to 48 tracks of 16-bit audio meets your needs (hey, that's CD-quality), then **Pro Tools III** is probably right for you, particularly since Digidesign has lowered the list price to a surprisingly affordable \$4995. Just

like Pro Tools/24, a Pro Tools III core system also includes a DSP Farm, a selection of bundled TDM Plug-Ins, and of course, the same critically acclaimed Pro Tools software.

If you happen to own a **NuBus Mac** and want Pro Tools quality, *call us immediately!* We have a few factory-refurbished **Pro Tools III NuBus Systems** remaining with full factory warranty at a price you won't believe (yes, it's that low!)

Before you spend your hard-earned dollars on any digital system, talk to your friendly Sales Engineer about Pro Tools/24. Whatever your needs, whatever your budget, call us at Sweetwater for the Pro Tools system that's right for you. [Editor's note: Certain manufacturer's restrictions apply to Pro Tools — ask your Sales Engineer for details]



Pro Tools/24 with Mackie HUI Human Interface

ORAM OCTASONIC: MULTI-MIC MARVEL

If you work with multiple microphones and need a mic preamp that delivers absolutely unrivaled audio quality, then you should probably take a serious look at the **Oram Octasonic** (\$1795 list). I personally worked with this terrific-sounding 8-channel mic preamp recently, and I can tell you from first-hand experience that this is *the* premier multi-mic preamp for situations where a full console is impractical (or maybe even impossible).

I happened to be recording a Latin jazz group recently with tons of percussion, keyboard, bass and a three-piece brass section, and there was no way all these people could fit into my studio. Fortunately they practiced in a small warehouse, so I brought over all my mics, an ADAT and one single rackspace Octasonic. Knowing this unit has exactly the same precision mic preamps as the top-of-the-line Oram BEQ24 console, I was absolutely confident that it could handle the extreme SPLs produced when close-miking these instruments. In fact, the Octasonic has designated channels 7 and 8 as "hot channels," meaning they provide an additional 12dB of attenuation to deliver an input headroom of +34dBu. That would pretty much

toast most other mic preamps, but even the other channels can handle super-hot levels of up to +22dBu. In my case I was taking a direct out from the keyboardist's mixer, as well as a line out from the bass player's amp. The Octasonic handled it all beautifully, without the slightest hint of distortion.

Each of the Octasonic's eight channels features +48V



Oram's affordable Octasonic sports eight true studio quality mic preamps

phantom power and a balanced output. Oram will also be releasing a neat little module called an **Octamix** which, when used in tandem with the Octasonic, becomes a stereo output, 8-channel mixer that's perfect for live sound, broadcast and theater work. It would have also been perfect for my

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FACTORY AUTHORIZED! WE FIX YOUR GEAR RIGHT AND ON TIME WITH NO EXCUSES!

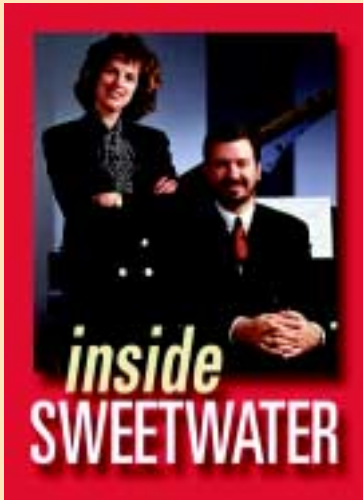
By Chuck and Brenda Surack
Owners, Sweetwater Sound

Sometimes it must feel like you're reading the same "Inside Sweetwater" column over and over again. In each issue we tell you there are a lot of exciting things in the works.

Well one of the most exciting has just taken place and it is *really* big news, particularly to all you hundreds of thousands of guitar players out there. Effective right now, Sweetwater will be selling a full range of acoustic and electric guitars!

Not just *any* guitars, mind you, but the very best in the business. Names like **Gibson**, **Paul Reed Smith**, **Martin**, **G&L**, **Jackson**, **Washburn**, **Epiphone** and even **Tobias** basses! Of course we'll still be offering the outstanding line of guitars from **Godin**. There are even a few other lines that, because of various (and complex) agreements with specific manufacturers, we just can't mention, but if you look at that list and see who is missing, you can probably guess who they are.

If you want guitar amps, we have them. Included are the outstanding classic **Marshall** and **Vox** amps, as well as cutting-edge digital amps like the Johnson Millennium and AxSys 212. Again, there are some amps we'll be carrying that we just can't list here. Many details are being finalized just



as we are going to press, but for more on this late-breaking story, you'll want to check out page 3 of this issue or log onto our web site (www.sweetwater.com/guitars). If you need more immediate gratification, just call your Sweetwater Sales Engineer for all the up-to-the-minute information.

Speaking of big events, we're all still catching our collective breaths around here after returning from New York City where Sweetwater was an exhibitor at the 103rd Audio Engineering Society (better known as AES) Convention. Though we have exhibited in regional

shows and at many educational events around the country, this marks the first time Sweetwater has had a major presence at an event as big as AES. We're happy to report that the show was a huge success for us — as well as three very lucky attendees, each of whom won a new **Oram Octasonic 8-Channel Microphone Preamp!**

The Convention also presented us with a fantastic opportunity to meet audio professionals from around the world, many of whom are longtime Sweetwater customers. You'll want to be sure and check out our full AES Show report on page 8 of this issue.

More late breaking news: Sweetwater Sound has just renewed its contracts with Indiana University. This is part of a three year project to place hundreds of MIDI stations into the new all-digital music library, the largest installation of its kind in the country! We will now be replacing all their **Kurzweil K2000s** and **K2500s** with new machines. That in turn will allow us to take the original instruments back, thoroughly test them, upgrade them with the latest operating systems, then offer them at unheard-of savings to our customers. If you've been thinking about adding a Kurzweil synth to your setup (or want to upgrade your K2000 to a K2500), there will never, *ever* be a better time than right now. You'll get all the power of Kurzweil's V.A.S.T. synthesis at a price that may never be this low again. Call your Sales Engineer for more information.

We were tremendously honored recently when the top music trade publication, *Music Inc.*, featured Sweetwater Sound as its cover story in the October 1997 issue. We are actually doubly honored considering the fact that the magazine awarded us our second REX Award this past summer for retailing excellence. The main focus of the article was on our corporate philosophy, which we describe as being "direct-marketing, long distance, but very customer-support-oriented." In fact, the article states "when manufacturers . . . talk about the expertise of the 14-person service department, when they say that the company's level of sales training (8 hours a week, average) is 'unheard of in this industry,' it seems that the Indiana-based company really does represent a completely different animal. . . a breed onto itself." Gosh, we couldn't have put that better ourselves.

The article goes on to discuss our sales people, Soundware Facility and Web site, acknowledging our average of almost 2 million hits monthly. The entire article is available on our Web site at www.sweetwater.com/insidesus/music-inc. So thanks *Music Inc.* and thanks to all our loyal customers who have made Sweetwater *the* industry success story of the decade!



Q: How come after I create and save a VIP in Samplitude, it doesn't show up as a Table Of Contents within Point CDAudio?

A: **Samplitude** is Hohner Media's audio recording editing program, and **Point CDAudio** is Point's CD burning program. These are bundled as **Red Roaster**. Samplitude allows you to record and edit audio, and it's also equipped with automatic and manual CD mastering software that creates a "Table Of Contents" which can then be imported into Point's CDAudio. A problem between these two programs has to do with file names.

When naming a file in Samplitude, it is possible to use more than 8 characters, however Point CDAudio can't read more than 8 characters (a DOS limitation), so any VIP saved from Samplitude with more than 8 characters won't show up in CDAudio as a TOC. CD audio will simply report that there is no TOC. Just make sure to save using less than 8 characters within Samplitude.

Q: I need to send digital information from my ADAT's lightpipe output to an S/PDIF digital in. How do I do this?

A: We probably average 3-5 calls and e-mails a week from ADAT users looking to pick up an Alesis AI-1 digital format converter. Unfortunately, AI-1's are extremely hard to come by, having been discontinued for some time. To get from ADAT lightpipe to S/PDIF, one inSync reader offers the following solution: **Korg's 168RC** digital mixer. The 168RC has 8-channels of ADAT lightpipe I/O, and can send and return stereo S/PDIF signals. The really cool thing about this is that unlike an AI-1, the 168RC allows you to change levels, EQ, mix multiple channels, add effects and more while outputting to S/PDIF from lightpipe inputs. Not bad considering that, at the new Sweetwater price of only \$999, the 168RC is literally only a few dollars more than the AI-1 was!

Q: How do I approach the **Kurzweil 2500** Operating System Update? I have a Mac and the download and Kurzweil are DOS formats. What do I do?

A: Any Mac with a Superdrive floppy drive (pretty much every model since the Mac II) can read and write to DOS formatted disks. First, download the files to your Mac's hard drive. Then, copy the files from your Mac's drive to a floppy formatted in your Kurzweil. Insert the floppy into your Kurzweil, and you're ready to rock! This also works for transferring AIFF sample data and standard MIDI files. Note that the latest version of the K2500 OS is always available online on our ftp server at "<ftp://ftp.sweetwater.com/pub/k2000/yca/K25V252/>".

Q: Does the ADAT Interface work with **Pro Tools|24**?

A: No. Pro Tools|24 uses a 24-bit word data system. It is therefore incompatible with the 16 bit word in the ADAT interface.

TASCAM DA-98: SIGNIFICANT FEATURES AND ENHANCEMENTS

A few years ago, TASCAM introduced the world to its long-awaited modular digital multitrack, the DA-88 and it became a runaway best-seller, particularly among the thousands of post production houses around the world. With its Hi-8mm tape format, rugged dependability and full complement of synchronization options, this was no surprise to any of us

Another great function of the digital patchbay is the digital track copy feature that allows you to easily assemble multiple takes from various tracks into one virtual perfect performance — *entirely within the digital domain* (hey, we told you this was an awesome recorder).

With its new system parameters, it's only logical that the you get visual feedback compliments of a new, comprehensive LCD display. This easy-on-the-eyes display, when used in tandem with the unit's dedicated function/numeric keys, make navigating the operating system easier than ever.

Of course, what most post production houses are interested in is synchronization, and we are happy to report that sync is not only robust and rock-solid on the DA-98, but it's included as a stand-

ard feature! That's right: No pricey add-ons that seem to always come as a surprise just when you think you're ready to roll. The DA-98's sync capabilities include full support for MIDI Machine Control (MMC) and Sony P2 protocols. Plus, as an added benefit when integrating the DA-98 with other equipment, the unit also sports a 37-pin D-sub connector for establishing a parallel interface with an external device.

With all these amazing new features, the DA-98 doesn't forget where it comes from. Users will find full compatibility with both the DA-88 and the DA-38, so you can exchange tapes, interconnect any combination of machines and, as expected, expand the DA-98 by adding any of the optional accessories, such as the RC-848 remote controller, the MU-8824 24-channel meter bridge or the IF-88AE or IF-88SD digital interfaces (remember these numbers as there will be a test!).

We can't wait to tell you more about this superb machine. All you have to do is give us a call. Your Sweetwater Sales Engineer will be happy to give you all the details, specs and (of course) your exclusive low Sweetwater pricing.



Now arriving at Sweetwater: TASCAM's newest Modular Digital Multitrack, the DA-98

here at Sweetwater. So when TASCAM announced it was introducing a new, updated version of this phenomenal machine, then revealed its new feature set, we had only one response for the company: Get us as many of these things as you can!

Introducing the **TASCAM DA-98** (\$5999 list). Just what's so special about this recorder? Got a few minutes? First of all, this is the first digital multitrack with confidence monitoring capability, meaning you can verify the integrity of the material you print to tape during the actual mastering process. This virtually eliminates the possibility of encountering mistakes "after the fact." You'll also find the DA-98's Input Monitoring switches to be a very useful addition for critical listening requirements (and aren't they all?). Positioned right under each track's record select switch, they allow convenient checking of Source/Tape levels.

The DA-98 also has a cool new electronic patchbay feature, so you can route any input to any track at the touch of a button. Now you can leave a mic preamp permanently attached to (as an example) input one, yet route that signal to any track you want. You can just imagine what a time-saver this is.

WHAT'S HOT!

EVENT PCI AUDIO CARDS ARRIVE AT SWEETWATER

The first shipments of **Event Electronics'** much-anticipated PCI audio cards have begun arriving here at Sweetwater, and not a moment too soon. We announced these landmark devices this past summer and the demand has been growing ever since. What sets these audio cards apart from the rest of the pack is their proprietary 20-bit A/D converters and true "plug and play" user interface (translation: no steep learning curve).

The top-of-the-line offering is the rackmountable **Layla by Echo** (\$999 list) which includes such features as eight balanced analog ins and ten balanced outs (all simultaneously accessible), a 24-bit digital I/O, super clean 24-bit signal path, massive onboard DSP, wordclock (for sync and expansion) MIDI and much more.



If your budget is slightly lower, consider **Gina by Echo** at a list price of just \$499. You get two analog ins and eight outs, digital I/O and 24-bit DSP plus all the audio quality of Layla without the rackmount interface.

If you don't need the digital ins and outs, for just \$349 list, you can equip your computer with the **Darla by Echo** board with two analog ins and eight outs, onboard DSP and a breakout box with RCA connectors.

All three systems are compatible with audio recording and editing software that can talk to the Windows 95 WAV device driver, so you don't have to give up your favorite software. There's even custom software bundled with each card for those who are just getting started with hard disk recording. Call now for special pricing!

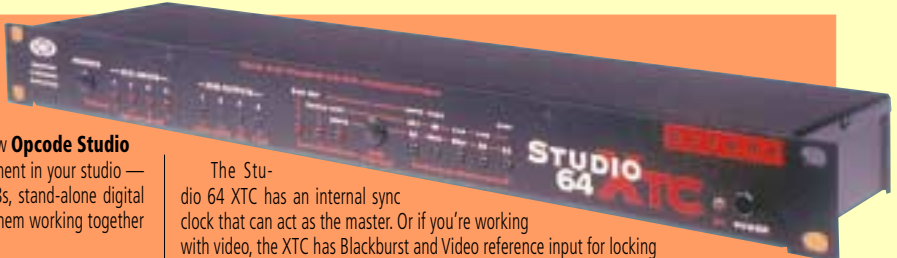
OPCODE'S STUDIO 64 XTC

You know the frustration if you have even a moderately complex studio setup: All the pieces just don't want to work together. Enter the new **Opcode Studio 64 XTC** (\$319.95 list). It will take all the uncooperative pieces of equipment in your studio — your computer, various MIDI keyboards and modules, ADATs and DA-88s, stand-alone digital and analog multitracks and even professional video decks — and have them working together in perfect harmony, exactly as nature intended.

With simultaneous wordclock and superclock out, the Studio 64 XTC makes it easy to lock your hard disk digital audio tracks to digital tape with perfect single sample accuracy. This solves what were once difficult (and expensive) problems like syncing DA-88/SY-88 with Pro Tools audio tracks, as well as other wordclock-capable digital recorders like the Akai DR-4, E-mu Darwin and even some DAT decks. The Studio XTC can easily control an ADAT through MIDI Machine Control (MMC) without any other external boxes or cards. The XTC can even generate wordlock from incoming SMPTE to sync computer digital audio to analog tape tracks flawlessly.

The Studio 64 XTC has an internal sync clock that can act as the master. Or if you're working with video, the XTC has Blackburst and Video reference input for locking to Blackburst/House sync. You can even add standard Sony 9-pin video transport control (available soon) so that video decks will integrate into your setup seamlessly. On top of all this, the XTC is also a 64-channel, 4x6 MIDI interface with sophisticated MIDI patchbay and processing functions for any Mac or PC. For the PC or Mac MIDI sequencer user, the XTC provides full MMC control and perfect synchronization of ADATs with no additional hardware needed.

But if you think the XTC's fantastic features, flexibility and functionality are impressive, just wait until you get our special low Sweetwater pricing. Call us now for more information.



KURZWEIL *Digital Pianos*



The stunningly-crafted Kurzweil Mark 152

From the moment you sit down in front of a **Kurzweil Mark Series Digital Piano**, you'll be impressed. Not only by the look of the instrument, with its hand-crafted genuine wood cabinet, and not just by the authentic feel of the 88-note weighted keyboard, but by the sheer quality of the instrument.

From Kurzweil's critically-acclaimed sampled sounds to the clear, powerful, custom-designed sound system that is a unique and integral part of every Mark Series piano, these keyboards are

the ultimate combination of art and technology. They have been designed for the home or school, for the stage or place of worship, with prices that are surprisingly affordable. Unlike some other electronic pianos that have flimsy, plastic keys, each and every Kurzweil digital keyboard features 88 notes with full weighted action for outstanding playability and true grand piano feel.

The **Mark 5** and **Mark 5W** are the most affordable instruments in the Mark Series family, yet they still offer an exciting array of features like Kurzweil's world famous grand piano sound (plus 22 other instruments), as well as a choice of contemporary black console (Mark 5) or real wood finishes (5W). The **Mark 10** and **Mark 10W** are the mid-priced members of the Mark Series. Available in a wide selection of finely-crafted real wood cabinets (10W only), they offer superb sonics plus 127 sounds, auto-accompaniment, General MIDI capabilities, a sequencer and effects section. The **Mark 110** has all the features of the Mark 10 built into a small, hand-crafted grand piano cabinet. It is perfect for those desiring the look of an acoustic piano but with limited space.

The **Mark 12** is one of the newest Kurzweil Digital Pianos. It starts with all of the features found in the Mark 10 and adds more sounds (325 to be

exact), more editable auto-accompaniment styles (64), a powerful 16-track sequencer, large display and SRS "3D Stereo Sound" reproduction. For those searching for the pinnacle of elegance in the Mark Series, we introduce the beautiful **Mark 152**. Housed in an authentic Young Chang Baby Grand cabinet, this superb instrument has all the features of the Mark 12, plus the kind of quality craftsmanship you'll be proud to display in your home.

For over a decade, Kurzweil's keyboards have been used by many of the world's finest musicians, like Stevie Wonder, Oscar Peterson, Ray Charles, and others. With a Mark Series keyboard, you're never limited to just the sound of a grand piano; you also have access to dozens of lifelike sounds, from organs and electric pianos to all the instruments of a symphony orchestra plus a superb selection of drum and percussion instruments and high quality built-in effects for lifelike concert hall sound. You also get other remarkable features like built-in auto-accompaniment patterns that were actually programmed by real live musicians to sound like real live musicians, a Recorder/Sequencer that can store up to eight full songs and Kurzweil's unique Edu-Games, which are designed to help players develop basic musical skills (check with your Sales Engineer for the specific features on each Mark Series instrument).

Every Kurzweil Digital Piano includes a premium audio system designed in cooperation with Boston Acoustics, resulting in a level of audio clarity and realism never heard before in a digital piano. Of course, Mark Series digital pianos will never go out of tune; there are no strings to stretch, no warped soundboards to worry about, no expensive piano tuners to call. You can actually tune the entire keyboard to any other instrument or transpose to play in any key with the touch of a button.

Every Kurzweil also has full MIDI capabilities, meaning you can connect them to a computer, recording system or additional sound modules or use MIDI to access hundreds of software programs that teach you to play, add new songs (via the built-in disk drives) or even notate and print your own music.

If you're looking for Kurzweil quality in a remarkably affordable package, look no further than the **RG-Series Digital Pianos**. Pure Sound. Pure Pleasure. Pure Inspiration. The RG-100 offers the outstanding realism of Kurzweil's legendary grand pianos, plus dynamic electric piano, lush string section and powerful pipe organ. There are even more great sounds and features in the enhanced RG-200 model, like a built-in recorder/sequencer, 32-note polyphony, MIDI, digital multi-effects, and a high-quality sound system, all in a sleek, modern cabinet. Also available is the **Hybrid Piano KHP101**, a marvelous combination of acoustic and electronic instruments with wood cabinet, 88 real wooden keys, real felt-covered hammers and that incredible Kurzweil sound.

All these instruments are truly the perfect alternative to pianos, because everyone in the family will enjoy playing them — even the kids... and you know what a hassle it used to be to get kids to sit down in front of a piano and play. Now they'll love it because they can make real music the very first time they touch the keys. Learning to play any instrument well takes time. And if you're going to spend time learning, you might as well have fun doing it, right? (Special note to parents: all Kurzweil Digital Pianos have headphone jacks which disconnects the internal speakers, so anyone can play with total privacy any time of the day or night without disturbing others).

So whatever your needs, whatever your budget, Kurzweil has an instrument that's exactly right for you. Call your Sweetwater Sales Engineer immediately to find out just how affordable — and how much fun — owning a Kurzweil digital keyboard can be!



The Mark 12 features a choice of real wood finishes

Korg Gets Interactive with the i1 Workstation

With a full 88-note keyboard and such outstanding new features as a built-in stereo speaker system, 32 newly-programmed Styles and expanded user memory, the **Korg i1** takes professional capabilities out of the studio and right into your living room! A dynamic digital effects section combines with 14 megabytes of PCM samples (which includes a beautiful grand piano) plus 128 other meticulously programmed sounds and a full GM drum kit for extraordinary realism. There's also a ten song, 40,000 note sequencer section that lets you play what you feel. We have one i1 available for delivery right now at a super price, so call your Sales Engineer for additional information today.



The Korg i1: a whole new concept in music production

NEED IT TOMORROW? We can ship via FedEx for next day delivery! **(219) 432-8176**

This year's **AES Convention and Exhibit Show**, which took place in New York City on September 26th – 29th, was again a rousing success, presenting more than 350 exhibitors, hundreds of technical papers and seminars, and a whole lot more in just four days. Naturally, Sweetwater was there in a really big way. We had a huge booth literally crammed with cool new equipment, most notably a full selection of **Oram** consoles and rack gear (including the premier showing of the incredible new **Series 48** digitally controlled analog console which you'll be hearing a lot more about in the near future), as well as a **Digidesign Pro Tools24** system, an **Ensoniq Paris** system, **Roland's V-Drums**, **Event's Gina** and tons more!

We also featured special appearances by TEC award nominee **John Oram** and RPG CEO **Dr. Peter D'Antonio**, had a live hook-up to our



corn (eVerb for MOTU Audio System), **Opcode** (Direct-X and Premiere format **Vocode** vocoder and **Vinylizer** "turntable sonics" simulator), **DUY** (four plug-ins in MOTU Audio System format), and **Sonic Foundry** (Direct-X version of their Noise plug-in). **Arboretum Systems' Ray Gun** is a \$99 noise remover in Premiere format.

Several microphones of interest to project studio owners were presented at the show this year: **Neumann's TLM103** (\$995) combines the capsule from the legendary U87 with transformerless electronics, while **AKG's Solid Tube** mic offers the warm fat sound of tubes combined with clean modern electronics. **Beyerdynamic** didn't have their upcoming Digital Microphone (yes, we said digital!) on display, but they told us that it is in the warehouses waiting on patent approvals to start shipping.

Mixers are always a big deal at AES, and this year was no different! **Oram's** new **digitally controlled 48-**

bus console turned a LOT of heads with an amazing new take on architecture (a dedicated CPU for each channel!) and automation. The new board features Oram's legendary analog sonics, an easy learning curve, and lots of cool flashing lights (your clients will love it!).

Mackie was showing their soon-to-be-released **Digital 8-bus**, as well as their **HUI** (Human User Interface) for Pro Tools. **Panasonic/Ramsa** introduced their **DA7** digital mixer (32 inputs, 8 buses, 24-bit operation, under \$5,000!). **TASCAM** showed their also soon-to-be-released **TM-D8000** Digital Mixer (under \$10,000 as promised!). **Digidesign** had their **Pro Control Surface** for Pro Tools on display. They say it should ship early next year.

Ensoniq was giving extensive demos on their hot new **Paris** system, which it says should ship very soon now. **TASCAM** was showing a new modular hard disk recorder developed in conjunction with **Timeline**, the **MMR-8**. The 8-channel unit can read files in Pro Tools, Waveframe, and OMF formats (more formats to come). We think you'll see a lot of these in workstation-based post houses.

Mark Of The Unicorn had **Digital Performer v2.11** at the show. This version already supports Pro Tools 24! It also ships with MOTU's cool new e-Verb reverb plug-in running under the new MAS (MOTU Audio System) format. In addition to Pro Tools/TDM, v2.11 supports Korg's 12121/O, Apple's Sound Manager (no additional hardware required) as well as Audiomediam II and III.

Event Electronics had the PC triplets on display. **Gina** and **Darla** are available now, **Layla** is expected in November. Event is shooting to have

Mac compatibility for all three early next year.

In signal processors, **Digitech** was showing their **S100** processor. Priced under \$200, it features true stereo processing, S-Disc algorithms and more in a single rackspace. **Sabine** unveiled their **Power Q**, which incorporates seven functions: Feedback exterminator, 12-band stereo parametric EQ, 31-band graphic EQ, real-time analyzer, compressor/limiter, digital delay and noise gating, all of which can operate concurrently in the digital domain.

TC Electronic applied the technology found in the company's successful G-Force processor to the new **Fireworx** studio multi-effects. 20-bit processing, 8 effects at once, AES, S/PDIF in/out, ADAT optical I/O, and new algorithms.



Welcome to the 103rd AES Convention and Exhibit Show

1,800-page Web site, and gave away three **Oram Octasonic** 8-channel microphone preamps. To say that we were busy is an understatement!

Sweetwater's e-zine **inSync** also set a new standard for timeliness by transmitting live reports and photos of the show to our Web site each day (Check out the results at www.sweetwater.com/reports/103rd-AES/). But, enough of that, let's get to the main reason for the show (and this report!) — the new gear!

Big news was the latest addition to the Digidesign family, **Pro Tools24**, which supports 24-bit audio, up to 32 tracks per card (with free software upgrade), and up to 72 tracks total. The new PT124 core will be listing for \$7995, and its companion 24-bit 888 digital interface will run \$3495. Pro Tools III will remain available, but Digidesign will be dropping its price.

Plug-ins were a hot item: TDM format releases included offerings from **Line 6 (Amp Farm)**, **Aphex (Aural Exciter)**, **Drawmer (Dynamics)**, **Lexicon (Lexiverb)**, **Focusrite (D3 compressor/limiter)**, **Mark Of The Unicorn (Pure DSP pitch shift/time compression)** and **Liquid Audio** (Internet delivery of Pro Tools audio).

In other plug-in formats: **Mark Of The Uni-**



The Sweetwater booth was jammed with the very latest equipment

In monitors, **Mackie's HR824s** were just about everywhere you looked, while **JBL** introduced their new **LSR32** 3-way mid-field monitors which feature a revolutionary triple coil design, along with a newly-designed cabinet. We had a chance to give them a listen in JBL's private suite, and we were quite impressed.

The editor is frantically passing me the "we're out of space sign," so that's it for this report. Needless to say, we've barely scratched the surface of the flood of new products introduced at the show. For more information, call your Sales Engineer, check out our Web site, and be sure to sign up to receive our daily inSync column, the most up-to-date source of information on new products on the face of the earth!

A SPECIAL "DO-IT-YOURSELF" ACOUSTIC CHALLENGE FROM SWEETWATER AND RPG

For the past 14 years, no other acoustical company has introduced more acoustic innovation or been involved in more state-of-the-art recording studio projects than **RPG Diffusor Systems**. And Sweetwater is extremely proud to offer this remarkable acoustic technology to its customers. We have a lot of detailed product information that you need to check out in the RPG home page on our web site (www.sweetwater.com/products/rpg). Our relationship with the company and its founder, Dr. Pe-

looked in most semi-pro and project studios. Acoustic interference is caused by interference between the direct sound and the early and late reflections in any room. This interference results in a variety of distortions, including room modes, speaker boundary interference, comb filtering and non-uniform diffusion.

You may have heard all these terms before and Dr. D'Antonio has written numerous articles on the subject, but we wanted to present this information

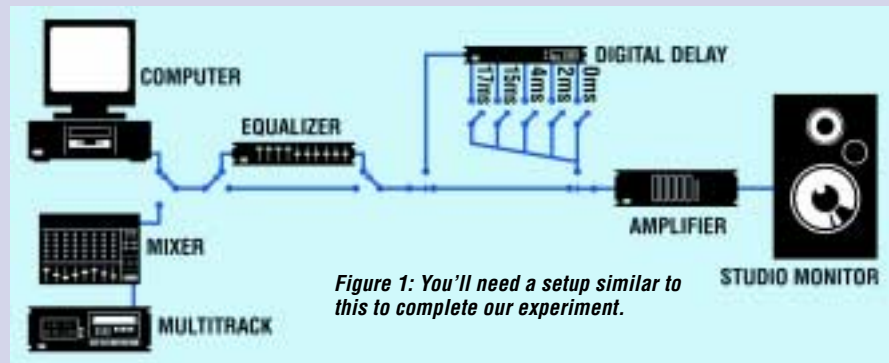


Figure 1: You'll need a setup similar to this to complete our experiment.

ter D'Antonio has convinced us that once musicians are made aware of the negative effects of poor acoustics on their recording projects, they will make the modest investment to upgrade the acoustics of their own studios.

True, acoustic treatments don't have the sizzle of a new synth and you don't get that heady rush when opening a box of diffusors, but here's the reality: There is no more cost-effective addition to any studio than room treatment packages. Thanks to RPG, such treatments no longer cost an arm and a leg. To drive home the point, we are preparing a set

of articles that will run over the course of the next several issues that illustrate why top audio professionals around the world pay so much attention to the sound of their control room.

The key issue here is transferability. If you never

want anyone outside your studio to hear your music, acoustics aren't an issue. But if you send a DAT or CD off to a friend, a record company, a mastering house, etc., each of these rooms are going to have a different acoustical signature and your music will sound different in each of them.

The Problem: We're all familiar with electronic distortion and the need to control it. However, the effects of acoustic distortion are too often over-

in our own unique way, so that each of you can experience the effects in your own studio. To help with this, Dr. D'Antonio has devised a series of equivalent circuits, using hardware that you probably already have in your studio, to simulate the effects of acoustic distortion.

The Experiment: In Figure 1 we show an equivalent circuit consisting of a source (DAW, ADAT/console, etc.), a graphic equalizer, a multitap delay, amp and speaker. This will be used to simulate a wide range of acoustic distortions in this and other subsequent articles. The circuit simulates the effects of room mode emphasis at specific frequencies. Room modes build up due to the multiple reflections between room boundaries. For this example, we will consider only axial modes, which occur between two opposing room boundaries. For simplicity, we'll use a room with a width, length and height equal to eight feet as an example. Axial modes will occur at multiples of the speed of sound (1,130 ft/sec) divided by twice the room dimension. So to simulate this electronically, we boost the EQ at 71, 142, 213, 284Hz, etc. Signal flow will be from the source through the equalizer to the amp and into the speaker.

Here's the challenge: We challenge you to mix a project in a room with an unknown acoustic signature and not hear a completely different mix in a room without that problem. Have an assistant help you by, without your knowledge, either switching in the equalizer or not. Then go ahead and mix a project. Now listen to the final mix with the equalizer in the opposite position than it was when you mixed. As soon as you hear the difference, we think you'll be calling your Sweetwater Sales Engineer for advice on all the RPG AcousticTools options available to you, like the **Bass Trap** and **Abflector**.

The Solutions: RPG has addressed low fre-

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By Daniel Fisher, Chief Soundware Engineer

Nothing feels quite as satisfying (to me, at least) as finishing off a large Soundware project. Last week marked the release of our newest **Power Translator for the K2000/K2500: Orchestral Percussion** (\$199 retail; Roland Orchestral Percussion CD-ROM sold separately). This was created in response to numerous requests from our professional composers, theater musicians and film score clients to provide them with orchestral percussion that offered the same dynamic response and real-time flexibility found in a real orchestra.

For those of you who are new to the Soundware Scene, our Power Translators are specially designed floppies that contain all of the data necessary to gather the professionally recorded samples from a specific Roland CD-ROM and convert them into extremely musical K2000/K2500 performance instruments which take full advantage of Kurzweil's amazing V.A.S.T. processing.

Imagine having a library full of Stereo and Mono Orchestral Bass Drums, Snare, Tympanies, Cymbals, Triangles, Blocks, and Gongs that all feature Rolls (both real-time and sampled). Now add Wind Chimes, Bell Trees, Mark Trees and a cabinet full of additional Per-



cussion Toys. Combine this with the smooth and responsive V.A.S.T. programming that Sweetwater is famous for and you've got our latest Orchestral Percussion Power Translator. Ask your Sweetwater Sales Engineer to tell you more about entire line of Power Translators including Solo Strings, Brass Sections, Orchestral Winds, and String Sections. When combined with the huge (and still-growing) Sweetwater Sound Library, you have access to every single instrument you need to create incredibly expressive music on your Kurzweil.

In other news, our **Ultimate Guitars CD-ROM** received another excellent review, this time in *Electronic Musician* (September 1997). We received 19 1/2 points out of a perfect 20 on their EM Meter, along with comments like: "The programming on this disk is absolutely top notch, and for good reason: it was done by Daniel Fisher, the Kurzweil VAST synthesis expert (*Editor's note: Don't blame Dan for this particular quote, I included it* — Say Dan, weren't you taking me to lunch today?)

... I had a blast with this CD-ROM. Having so many

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WE HAVE ALL THE HOTTEST PRODUCTS FROM ALL MAJOR MANUFACTURERS . . . IN STOCK!

KORG 168RC

— Continued from page 1

and 16 outputs, all laid out thoughtfully with the ADAT studio in mind (the 168RC's designers assumed it was going to interface with ADATs, but it also works great with **E-mu's Darwin** and the **Fostex CX-8**). Inputs consist of two 8-channel ADAT optical ports and eight balanced TRS jacks, of which four have insert points and two have low impedance mic preamps with phantom power. There are also a pair of unbalanced tape returns here. The outputs include ADAT optical ports, plus a S/PDIF coaxial out (a nice touch).

The master output pair and the monitor outs are on unbalanced 1/4" jacks which, at first glance may seem odd. But considering the fact that this is a *digital* mixer, and that up to this point all your mixing has been done in the digital domain, you're going to use the unit's digital outs to go directly to the digital ins of your DAT recorder or even a CD recorder, so it's almost like those jacks are there as a convenience (think of them as a free bonus). You also get a word clock input and output, as well as full MIDI in/out/through connections. ADAT users will also appreciate the fact that the 168RC can take the place of an Alesis AI-1 (see Q&A on page 5 for more).

Our own Clay Stahlka actually got his hands on the very first unit that arrived here at Sweetwater and reported:

"I powered the unit up, revealing a good-looking backlit LCD display, and here's where I began to see the immense power that this mixer possesses. The 168RC has no multiple menu system to get used to. Each front panel selector button takes you to a single page 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 quick and easy signal routing and recall. Although the graphic representation of knobs and faders can be controlled and automated via MIDI, there are eight honest-to-goodness knobs that you can grab to adjust any parameter on the screen. Listening to my completed, automated mix from my ADAT, I concluded the 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 in your studio."

Sounds good to us, but at just \$999, you know you'd better hurry and get yours while supplies last!



ORAM OCTASONIC

— Continued from page 4

needs if I had wanted to record the group direct to a DAT machine, for instance.

In my case, I wanted to go back to the studio with eight discrete tracks since we would be adding three more horn parts later (to double the horn lines) and at least three or four vocal tracks, all on a second ADAT. At that point we would mix down to stereo and burn a set of CDs.

Not only was the group totally impressed when we all gathered in my studio about a week later to lay down the additional tracks, but the leader even offered to trim my poodle for me — should I ever get one (see, he owns a "poodle parlor"). That's how good the recording was. The horns were electrifying, the bass had a fatness to it that shook the walls, the keyboard parts had a nice gloss to them and the percussion, well it kicked some serious butt! Sure, it helped that I was using some nice mics (AKG 414s and Earthworks OM1s), but it was the Octasonic that delivered the sonic transparency we all flipped over.

I cannot possibly rave enough about this unit. At its almost shockingly affordable price, it's one impressive box. If you are doing any kind of live work, you really need to take a close look at the Octasonic. Call your Sweetwater Sales Engineer now for your special pricing on this awesome preamp. He or she will be glad to tell you more, quote you specs, etc. If you want to learn more about any of the great Oram products, like any of the BEQ mixing consoles or any of the company's other modules, take a look on our Web site at www.sweetwater.com/products/oram.

— Michael Rief

ENSONIQ KEYBOARDS

— Continued from page 2

whether you play on stage, at church, or right in your living room. Call us for more information today.

If your needs are just a bit more sophisticated, or if you want to create your own personal sampled sounds, the **ASR-10 Advanced Sampling Keyboard** (\$2695 list) provides you with a complete digital production studio. These high-quality samplers integrate an effects processor, a MIDI sequencer, and a digital recorder, all in one easy-to-use instrument.

With the ASR-10, you can create stunning 16-bit samples in stereo or mono, with up to 16 MB of sample memory. Then, shape your sounds using the ASR's extensive voice architecture and editing features. The ASR also has the most powerful onboard effects processor ever included in a sampler: 62 effects algorithms (from the critically-acclaimed DP/4 processor) offer many creative possibilities.

There's also an onboard, full-featured sequencer. No mere "scratchpad," the ASR's 16-track sequencer provides real time and looped recording modes, 96 PPQ clock resolution, an auto-locate function, and many of the same advanced, yet user-friendly features that have made Ensoniq keyboards famous around the world!

Call us today for additional information or check out our Web site for details on the full Ensoniq line at www.sweetwater.com/products/ensoniq.

SOUNDWARE SCENE

— Continued from page 9

high quality, expressive guitar sounds at hand opens up a world of musical possibilities . . . the samples are clean and crisp, the programming is outstanding, the files are organized in an easy-to-understand fashion, and the documentation is excellent."

Guess they were impressed, eh? Hey, they even liked the *Ultimate Guitars Musician's Guide* which ships with each CD: "All in all, this is serious documentation that really enhances the product."

Well, as much as the Sweetwater Team enjoys a darn good review, it's our own customers' satisfaction that truly makes all our efforts worthwhile. Here are just some of the comments we've received online:

"I just wanted to congratulate you on the great review in *Keyboard Magazine*. I purchased the **Ultimate Guitar** and **Grand Piano** CD-ROMs last week and could have written those accolades myself. The great touch response of your programs is a major advantage when bringing life to my work. And they cut well in the mix without having to compensate with EQ and/or processing." — Steve

"I just received the **Power Translator String Sections** for my K2000, loaded some Programs and I am . . . there is no word for it. The sounds are simply the best I have ever heard. Please say thanks to whoever programmed those sounds!" — Alex

"I love the Young Chang Piano programs! They are the best I've ever played on a keyboard. I own a 6 foot Mason-Hamlin and my ears prefer the warmer tones . . . these files are *very* satisfying! . . . thanks again for the (excellent) support of your products." — Glenda

"I can't really tell you how I liked *all* the kits on the **Total Stereo Drums** CD-ROM, because after I loaded "Funk Kit," my friend Rob and I *had* to make music with it. The hi-hats are awesome, the rides are handy, and the snares cut through without being brash. This is now my default drum kit. At least, until I load and listen to the next kit . . . Great work!" — Bruce B.

"I have the **Stratus Exotic Instrument and Synths** CD-ROM. I won't waste bandwidth describing it except to say it is absolutely top notch and most extremely way cool." — Scott

"I've received and listened to your **Stratus/RSI Demo CD**, and it's terrific! Thanks to Sweetwater's efforts, the K2000 is probably the best supported synthesizer on the market." — TW

For more information and a list of all the currently available Sweetwater Sound Library CD-ROMs, be sure to check out our Web site at www.sweetwater.com/catalogs/k2/cd-rom. See you all next issue.

ACOUSTIC CHALLENGE

— Continued from page 9

quency modal problems in two ways. Their soon-to-be-released Room Optimizer software will actually locate the optimum positions for both the listener and the studio monitors to minimize modal distortion and speaker-boundary interference. They also offer high efficiency bass traps to attenuate modal frequencies.

We hope you go ahead and take this challenge, then call us and see just how inexpensive it can be to optimize your listening environment!

By Jim Miller

My column last issue stirred up a bit of a hornet's nest among some readers. In case you missed it, I criticized the big record companies for overcharging for compact discs. Unfortunately, some readers thought I was also putting down independent artists who have to charge more for their discs to even begin recovering their expenses.

Point One: Within a week of my writing that column, the national newspaper, *USA Today*, carried a feature story that essentially said the same thing, that the big guys are making big bucks every time they sell a CD. I stand behind my comments.

Point Two: I wholeheartedly support every single musician who has the spirit and tenacity to forge ahead and release his or her own album. To these brave souls I say charge whatever you want. You will get what the market will bear. Charge too much and nobody buys your CD. In any case, please be aware that my comments last issue were not directed at you. We all know that a small, independent artist or group will probably never recoup expenses, no matter what they charge for a CD or cassette. Still, I'm hoping that the Internet will provide a much better vehicle for marketing these self-produced, self-financed albums.

Imagine: Music from your new project could be available on the Net to anyone who owns a computer capable of playing back audio (and that's most of them these days). It won't be easy, but enterprising artists with the energy and savvy to succeed will probably have the opportunity to do so in the years ahead. There's no doubt about it, the marketplace is changing rapidly. My hope is that one day soon music lovers will be buying the albums they want to hear, not what the record industry chooses to heavily promote.

Until that day, I say let's all keep making music. It's the best feeling in the world to create a song that comes from your heart.

While I'm still on this particular subject, I want to thank all of you who sent me your albums. Some were excellent, some were (how can I put this nicely?) less than polished, but every single one of them proved that the act of making music is truly its own reward.

On to another subject before I find myself in even more trouble than I usually am. I recently received evaluation copies of the new **Pro Tools 4.0** software from **Digidesign** and **Mark of the Unicorn's Digital Performer 2.11** (which was featured in our last issue of *Sweet Notes*). I'll be discussing them in a minute, but first, at the risk of getting into additional hot water with some readers (something I'm pleased to say I'm really good at), I want to briefly discuss copy protection and authorization disks.

We all understand that hundreds of thousands of dollars (sometimes millions of dollars) go into the creation of these programs, meaning that the programmers and software publishers absolutely deserve to get paid for their hard work. Unfortunately, some musicians don't share that view, which is a shame since it causes manufacturers to continue using copy protection. However, as software gets more and more complex (and more powerful), simply copying it is no longer enough. You need technical support to make it run at peak performance, as well as documentation you can refer to later when you become a true power user.

I know I'd never want any software on my Mac

(particularly nothing that's as complex as Pro Tools or Digital Performer) that I couldn't get technical support for, and I don't know anyone who has the time and energy to photocopy somebody else's 650 page user's manual (just think about all those poor trees!).

If you have copied software onto your computer (or sampler) that you don't own, the ugly fact is you are breaking the law (though admittedly it's a rather unenforceable one). If you did so and then bought your own copy of the program or set of samples, you may feel justified because you are, in some small way, expanding a rather limited market. Of course nobody could duplicate any software without the consent of the person who actually owns the original program. That makes two guilty parties.

I'm sure software publishers would rather spend the money and waste everyone's time with copy protection, but until the mindset of every musician on the planet changes, it's something we all have to live with. For now, let's all do our part and make sure nobody ever copies any software we happen to own.

Okay, I'm way off my subject, I know. Let's talk about some very cool software. **Pro Tools 4.0** (\$795 list/upgrades available at special prices to owners of Pro Tools 3.2) is a "must-have" for people who want to do hard disk recording on their Macs (sound like anyone you know?). Admittedly, some people get a little confused because Pro Tools is both a hardware system, as well as a software package. The newest Pro Tools hardware is the **Pro Tools/24 system**, while Pro Tools (actually version 4.1) is the software that supports it. To make things just a bit more confusing, Pro Tools 4.0 will also work with other sound cards (including Digi's Audiomedia III), as well as under native code on PCI and NuBus Power Macs. If you're still confused, your Sweetwater Sales Engineer can answer your questions and get you pointed in the right direction.

I have an Audiomedia III card in my Mac, and it runs great with this new software. Those of you who have been using Digidesign software for any length of time (including Sound Designer) will love Pro Tools 4.0 since you can now record from two to 16 audio tracks. You'll find its user interface quite comfortable and the Audio Suite Plug-In architecture (which takes full advantage of the host processor's CPU speed) is

already being supported by all the major third party Plug-In manufacturers (upgrades are usually either free or at very affordable prices).

Pro Tools 4.0 has significantly faster screen redraws and vastly improved automation. I really liked the Pro Tools Dynamics plug-ins, in particular the Upward Expander, which worked flawlessly on the material I was processing. If hard disk recording is your thing and you own a Power Mac, you really need to check this software out. You know the drill by now:

Call your Sales Engineer for more information and your special pricing.

MOTU's latest and greatest is **Digital Performer 2.11** (\$795 list/\$295 for an upgrade) — which incidentally is also a *Macworld* World Class Award winner. This package is the logical step up for those who, like me, owned version 1.7. Of particular interest to me was the software's ability to send and receive samples from my K2500 (2.11 also works with the latest Akai, E-mu and Roland samplers), allowing me to use the various Digital Performer plug-ins (like the excellent pitch shifting) to process them. This is a truly awesome feature.

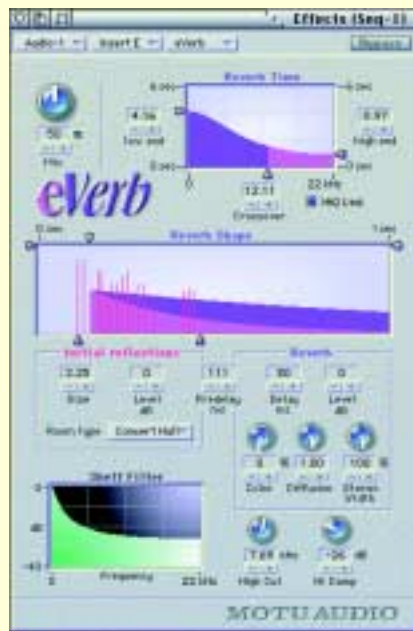
Using the PowerPC chip's 32-bit floating point calculations gives 2.11 owners a lot

of DSP power, so effects can actually be applied in real time to your tracks and they sound as good (or in some cases better) than 16-bit outboard modules. I really liked the sound of the **eVerb** plug-in (see screen shot above) which is included with every copy of Digital Performer 2.11. If you are doing sequencing along with hard disk recording, you absolutely have to check out this software. So contact your friendly, knowledgeable Sales Engineer for additional information and pricing.

Both of these packages are outstanding examples of the awesome power we have at our fingertips these days and depending upon your specific applications, you absolutely cannot go wrong with either of them. Learning how to get the most out of them is the real challenge, but it's a task all of us will enjoy tackling.

Arrghh! I can see the bottom of the page coming up way too fast, so I'd like to once again thank all those Sweetwater customers who sent me their CDs and cassettes, as well as all of you who took the time to write — even if you happened to disagree with me. I love hearing from you, so keep those cards, letters and e-mail coming!

TECH NOTES



Digital Performer 2.11's eVerb plug-in interface

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