



# Sweetwater® SweetNotes®

June/July 2007 Issue | Vol. 75

(800) 222-4700 • www.sweetwater.com

Making music happen for over 27 years!

## INSIDE THIS ISSUE:

TAPCO Thump .....	1
Sennheiser Takes The Stage .....	1,2
Shure In-ear Monitors .....	2
Audio-Technica AT2010 .....	3
Gator G-Tour Cases .....	3
Peavey Powers Up .....	3,4
JBL PRX Series .....	4
Alesis ControlPad .....	5,11
Digidesign Structure .....	5
Stompbox Roundup .....	6
Mackie Monitors Take Two! .....	7
TASCAM MP-GT1 .....	7
A Designs EM Cards .....	8
Customer Studio: Zircon Skye Prod ...	9
Inside Sweetwater .....	10
DigiTech Vocalist Live 2 .....	10
Mojave MA-100 .....	11
Inside the Sweetwater Difference .....	12
Sweetwater Welcomes Sound Devices! ..	13
TechNotes .....	14
Submersible Music DrumCore 2.5 ...	14
Studio Notebook .....	15
Yamaha Motif XS .....	15
and more!	

# LIVE SOUND *Extravaganza*

Summer is here! For many musicians, sound companies, and live sound engineers, the warmest season means tours, outdoor gigs, and festivals — and it means you need to get your live sound rig in tip-top shape! Fortunately, the massive Sweetwater warehouse is completely stocked with everything you need to make your performance run smoothly and sound its best. What follows in these pages are articles on some of the hottest new products on the market: amps, speaker cabinets and subs, microphones, in-ear monitors — and don't forget cases to protect your gear as you move it from gig to gig! We've got everything you need to crank it up in the summer sun!

## TAPCO Thump

Far and away more concerts take place in the summer than any other season, and those concerts would be hard to hear without a good pair of speakers — like TAPCO's **Thump**, for instance.

The Thump boasts a 2-way powered design with 15-inch woofer for plenty of lows, a 1-inch compression driver for the highs, and

for your gig, it can be placed on its side for use as a monitor wedge. Its wide frequency response enables it to act as a monitor for individual instruments such as keyboards, to monitor vocals, or even monitor your entire band through the Thump, including drums. An onboard 3-band EQ enables you to beef up the bottom or add sizzle to the top from right on the speaker.

This lightweight yet extremely durable speaker is priced to fall into anyone's budget range. With its sound quality and powerful punch, the Thump should be high on the list for anyone that's looking to bolster their live sound rig at a reasonable price.

## Sennheiser Takes The Stage

The Sennheiser name is synonymous with quality microphones. For 60 years, this family-owned business has been producing some of the world's most popular mics for stage and studio. Now they've put all that experience and expertise into a vocal microphone that's reliable, sounds great, and is amazingly affordable. The **e 835** dynamic mic excels at capturing live vocals naturally and clearly, and it's made to stand up to gig after gig.



audio-technica.

AT2010

Sennheiser e 835

SENNHEISER

TAPCO Thump

TAPCO



— continued on page 2

JBL PRX 515



# LIVE SOUND Extravaganza

— continued from page 1

What makes a great vocal stage mic? First, you want a pickup pattern that captures the sound in front and shrugs off noise from the sides and rear. The e 835 has a cardioid polar pattern that fits the bill. Another must is durability and low handling noise. What good is a vocal mic when the singer has to leave it on the stand because it amplifies every bump, brush, and vocal pop? This mic has a shockmounted capsule that gives it very low sensitivity to handling noise, and its metal mesh windscreens is very good at filtering out plosives. The e 835's metal body is rugged enough for any stage, so you can take it on the road with confidence. Of course, all these features would be pointless if this mic didn't sound terrific. Its frequency response is optimized for vocals, and balanced for both great sound reproduction and feedback rejection. The e 835 also costs much less than you'd expect, making it an attractive addition to your live mic case.

## Shure In-ear Monitors

Monitoring in live situations has always been complicated. Between satisfying the artists' needs and ensuring that the monitors aren't interfering with the stage sound (or even worse, causing feedback), there was never much fun to be had if you were the engineer in charge of managing the monitoring situation. The advent of in-ear monitoring has helped in many respects, both with built-in mixing components putting the artists in charge of their individual mixes, and drastically reducing the amount of volume on stage.

The most affordable in-ear system offered by Shure, the **P2RE2**, provides the benefits of in-ear monitoring without a lot of initial cost. The P2R bodypack is a unique hybrid design that allows it to function as either a wired or wireless receiver, or both simultaneously. The P2RE2 ships with a pair of E2 earphones that block out external sound for unobstructed monitoring. The **P2TRE2** adds a transmitter to the system. The beauty of the hybrid system is it allows you to expand the system as your needs or your budget grows.

Shure's **P4MTRE3** is an even more complete monitoring solution, and provides a slew of professional features while still managing to keep the cost down. Included in the P4MTRE3 system is a P4M four-channel mixer that allows performers to adjust their own mixes with level and pan controls, a wireless transmitter and receiver, and a pair of E3 sound-isolating headphones. The **P4TRE3** offers all the same components minus the line mixer.

The **P6TRE1** is widely regarded as the industry-standard for in-ear monitoring. Included in this system is a P6T transmitter with an automatic limiter (a feature that performers will love, as it ensures their ears won't be subjected to a sudden volume spike), a pair of E1 earbuds, and a body pack.

All of these systems are great solutions for doing away with wedge-style monitoring, and all the pitfalls that come along with it. As more and more performers discover the benefits of in-ear systems, there is a very definite foreseeable future where all monitoring will be handled with in-ear systems. The decrease of stage volume results in cleaner sound as there's less bleed on-stage, and in-ear monitors provide a super-clear picture that can be tailored to meet an individual's needs. Shure mics are live sound staples, and these in-ear systems are on-pace to become standards as well.



## from the editor



Mitch Gallagher

Editorial Director

mitch\_gallagher@sweetwater.com

I clearly recall my first live gig — and the PA system we scrambled to put together to sing through: three \$15 vocal mics from the local electronics chain store, a borrowed powered PA mixer, and incredibly huge speaker stacks with three 15-inch drivers and 1-inch horns. It made quite a visual statement, especially considering that we were playing in my grandfather's garage for a family picnic. No monitors — who needed monitors? Besides, the mics were omni; it's not like we could have used monitors anyway.

We did a lot of shows with that system. It may not have sounded all that great, and it was a pain to move it (shouldn't someone have thought to put handles on those enormous bass bins?), but man, did we have fun! We were *rock stars*!

Live sound has come a long way since then. Manufacturers have made giant leaps with regard to sound quality, portability, flexibility, and price. Today you can get speakers that would kill the huge stacks we used, but that take up a tiny fraction of the space. Power amplifiers are so much lighter and smaller, yet offer tons more clean power. Mixers have shrunk in size, but increased in capability and sound quality. Microphones are light years beyond what we used, with better sound, better feedback rejection, and much more durability. No matter what your price range or your needs, it's easy to assemble a sound system that will fit the bill.

That's what this special issue of *SweetNotes* is about. Our "Live Sound Extravaganza" will give you a taste of some of the latest and greatest live sound equipment on the market today. With the gear that's in this issue, there's no reason to sound less than great at your gigs. Well, the issue will help your PA sound great — the rest is up to you and your bandmates!

**Moving? Moved? Want more than one copy?** Call, fax, or email us your new address and don't miss an issue of *SweetNotes*!

## Audio-Technica AT2010

Imagine you've just cut an album at a state-of-the-art recording studio, using the finest equipment available to capture your performance. Chances are, a nice condenser microphone would be used on the vocals to get as much detail, nuance, and character as possible, right? Now imagine getting ready to take the stage and sing your big hit song from that album, and there on the mic stand is a run-of-the-mill dynamic mic — one that may very well have been picked out at random. Audio-Technica has a better solution, with a stage microphone that gives you studio sound designed to be used on the stage.

The **AT2010** puts a high-quality condenser mic into a rugged, reliable package that brings those high-fidelity "studio" vocal tones to the stage. The AT2010 gives you extremely accurate vocal reproduction, whether you're in an ensemble, doing a solo performance, speaking or singing in a house of worship, or just about any other live vocal application where articulate, clear vocals are a must. This condenser was specifically designed for the stage. Its cardioid pickup pattern provides great outside sound rejection, and its multi-stage grille design cuts down dramatically on those explosive "P" pops without affecting the mic's high-frequency capture. In addition, the AT2010 is engineered to handle high sound pressure levels, so you can concentrate on delivering your performance without worry of breakup or distortion. Now you can sound as good onstage as you do in the studio!

 audio-technica.

## Gator Cases

Taking your gear on the road is always a scary proposition. Whether it's a guitar, a keyboard, an amp, or a complete live sound or recording rig, any time you travel with your gear you run the risk of something catastrophic happening while you're in transit. Luckily, the folks at Gator Cases are always a step ahead, creating cases that keep our most prized possessions from arriving at their destination in less than perfect working order.

Gator's G-Tour cases run the gamut from mic cases to rack cases and all points in between, and are all built to ATA standards. The construction on the G-Tour series features sturdy plywood wrapped in a polypropylene exterior for extra durability. Aluminum valances protect the integrity of edges, a very important feature considering the edges are the glue that holds the whole thing together. The interior of these cases — depending on the application — consists of either sturdy rack rails to securely hold gear or a plush lining to prevent damage to the instrument's finish. Gator works hard to ensure that the outside of the case travels as well as what's inside the case. The handles are recessed and spring-loaded to prevent damage.

Once you get where you're going with your instrument or rig safely in tow, Gator has some other nifty features that make travel even easier. The bigger keyboard cases and the double electric guitar and bass cases all have recessed wheels built-in. This is a very cool feature — who wants to carry something when it can be rolled? The G-Tour pop-up mixer cases have ratcheting action for the ultimate in convenience.

Since summer is right around the corner, there's no doubt that many of you are heading out on the road, either as a performer or as a FOH engineer. Even if you're only going as far as the coffee house down the street or the bar across town, your gear needs to be protected when it travels. Gator G-Tour cases are built to withstand the most punishing tours, but are priced affordably enough that hobbyists and weekend warriors can afford to use what are some of the best cases out there. If you must travel with your gear, be sure it's well protected — get it in a Gator case!



Gator's G-Tour cases

## Peavey Powers Up

Peavey's been making quality power amps for decades, and as the company holds on to their tried and true designs, they've been busy making innovations as well. Hartley Peavey created Peavey Electronics four decades ago, and his ethos of providing quality equipment for the people still holds today. Whether it's an array of 4,000-watt **CS 4000** amps driving a stadium sound system, a versatile **CS 800X4** 4-channel amp working quietly and effectively to power several speakers at once, or the advanced, low-profile digital **DPC 1400X**, Peavey truly has a reliable power amp for any need.

In the 1970s, Peavey power amps came into their own when the CS 800 set the standard for reliability. The proliferation of Peavey power amps has since extended globally, and their workhorse reputation certainly precedes them. We here at Sweetwater certainly believe in them — our large conference hall's PA system is powered by CS series units, and they've never let us down!

The Peavey CS series includes amps ranging from the 500-watt-per-channel stereo **CS 1400** all the way up to the gut-thumping **CS 4080Z** (that's 4,080 watts bridged, if you like). These amps are equipped with Peavey's exclusive DDT compression/anti-clipping protection circuit, and are housed in tough, light enclosures for easy rackmounting. Peavey goes the extra mile to ensure reliability, as well as great sound reproduction. The 2U **CS 2000**, for instance, sports two temperature-dependent variable speed fans to keep the amp working efficiently.

— continued on page 4



Peavey CS 4000s



# LIVE SOUND Extravaganza

— continued from page 3

PV Series amps put a modern — and even more affordable — spin on Peavey's power amp line. Like the CS units, these amps use proprietary DDT limiting technology to keep things from getting out of hand. The **PV 900** stereo amp puts out 450 watts per channel at two ohms, and its massive toroidal transformer is powerful but very quiet.

The PV system includes a patented Turbo-V cooling system with two “demand-sensitive” fans, a current in-rush limiter, and added safety measures, such as overheat, short circuit, DC, and faulty load protection. The line also includes the **PV 1500**, **PV 2600**, **PV 3000**, **PV 3800**, and **PV 1600** Bi-Pack, which provides an all-in-one bi-amping solution.

Peavey DPC 1400x



is an impressive, compact amp using class D technology to increase power while decreasing the size of the amp. The new **DPC 1400X**, for example, packs an amazing 1,400 watts into a single rackspace, and weighs a scant 15 pounds. It features DDT compression and sports simple, effective front-panel controls and LED status and level indicators. Its best attribute, though, is its classic Peavey reliability.

Not content to rest on their laurels and simply enjoy 30-plus years of power-amp success, the folks at Peavey developed the next generation of amps using new technologies and a decidedly digital bent. Since the 1980s, they've been working on amp designs using digital technology to help their amps develop prodigious power without resorting to conventional large transformers. The result

## JBL PRX Series

When space is at a premium, how do you maximize your amplified sound without filling up the room with PA gear? Using integrated gear, such as compact mixing systems and self-powered speakers, has become a practical solution, especially for performers who also have to transport the equipment in addition to playing through it. Now JBL takes the active speaker concept up another notch, applying their own innovative approach to a type of product that would normally scream “compromise.” Leave it to JBL to create a line of self-powered speakers that sound incredibly clear, put out as much power as you need, and still manage to provide maximum portability. The PRX series offers five new rugged, lightweight active speakers that give you the power you need with great sound for any venue.

A little history: JBL has been associated with sound reinforcement since day one. Since the company's inception in the late 1920s, JBL has made a ton of innovations along the way, and in the process became a live-sound standard, providing sound for some of the largest and most memorable festivals ever held, including Woodstock.

The PRX series ranges from the 650-watt **PRX525** (with a pair of 15" woofers and a 1.5" high-frequency driver) to the compact **PRX512M**, which contains a 12" low-frequency driver and 1.5" tweeter. At the heart of each self-powered PRX cab is a Crown Class-D digital amplifier, and a DSP input section with limiting, selectable system EQ, and crossover functions. You can actually plug a line-level sound source directly into one of these speakers without a mixer and have enough tone- and dynamic-shaping ability to use it as a self-contained PA. Coupled with a mixer and other sound-reinforcement gear, though, the PRXs shine. The output is powerful and clean, and sound dispersion is incredibly wide and efficient.

Other PRX speakers include the **PRX515** (15" woofer with high-frequency driver), the **PRX535** three-way unit, with a 15" driver, 6" midrange speaker, and tweeter, and the **PRX518** subwoofer, which pumps 500 watts into a single 18" speaker. Used together, with other speaker systems, or individually, these PRX speakers live up to their JBL badges proudly.



JBL PRX 518s

JBL PRX 515

JBL PRX 525

## Gibson Digital Workshop

Sweetwater had the pleasure of playing host to two “firsts” recently: We were the site of the first public showing of the Gibson **HD.6-PRO Digital Les Paul**, and that showing was the first All-Access Workshop to be held at our new facility! Gibson clinician Bart Walsh was on-hand to demonstrate this impressive instrument using a Sweetwater Creation Station and a 5.1 surround system.

On display were plenty of Gibson guitars, ranging from traditional acoustics to reissues of electrics to the latest incarnations of classics such as the New Century Les Paul and ES-335 Fat Neck. It was a sight to behold!

Clinician Bart Walsh is a sought-after session ace and renowned guitarist with the Van Halen tribute band Atomic Punks, who went on to be David Lee Roth's tour guitarist. Bart wowed the crowd with his fretboard prowess and the Digital Les Paul did its own share of dazzling through the surround setup. The attendees really got a chance to see the creative power that awaits within the HD.6-PRO.

Bart was able to process each string individually or in groups, displaying just some of the potential of the digital Les Paul as a live or studio tool.

— continued on page 11



**The Sweetwater Difference — Experience it for yourself!** Call, fax, or email us today!

# Alesis ControlPad

We get the opportunity to check out some great, innovative pieces of gear here at Sweetwater. One useful and downright cool product really caught our collective eye (and hand, and finger) recently: the Alesis ControlPad.

At first blush, ControlPad looks kind of like a humdrum drum machine with overgrown pads and minimal tweakability. But this first impression is soon dispelled when you see what it can do! The ControlPad lets you play drums via MIDI, all right, but with far more control than you would expect! This unit has an array of inputs, including two trigger inputs for connecting external pads, two footswitch inputs, and an up/down footswitch input. Do you see a MIDI drum kit taking shape here? It's USB bus-powered, so you don't even need an external power supply when the ControlPad is connected to the computer. In addition, it gives you plug-and-play connectivity, so when you're hooked up via USB to a Mac or PC, the ControlPad is ready to rock — no drivers required. Just launch your virtual drum software.

This compact unit works equally well in the studio or onstage

— continued on page 11



>> Alesis ControlPad • Sweetwater price \$199.97 • [www.sweetwater.com/controlpad](http://www.sweetwater.com/controlpad)

## Hands On: Digidesign Structure

By Mitch Gallagher

Digidesign's A.I.R. (Advanced Instrument Research) division has been cranking out some very cool virtual instruments for Pro Tools. The Velvet electric piano, Xpand sound module, and Hybrid synth each nail the sounds they produce, and Strike is simply the most powerful and flexible virtual drummer you can get. (If you haven't played with these, you really must check them out!)

Now Digidesign has launched **Structure**, a powerful multitimbral sampler that supports the RTAS plug-in format in Pro Tools on both Windows and Macs. I was fortunate to get an advance release of Structure to play with on my Pro Tools LE and HD rigs. I'll give you the verdict right now: I love it!

On the surface, Structure is simple to use. Load up a sound, play it. It works, it's fast, and it's highly CPU efficient. You can quickly assign knobs on your controller to six virtual knobs, which can be seamlessly targeted to control whatever parameters you want. Key switching gives you performance access to a wide range of sounds from your controller keyboard. Database and browser windows let you quickly find the sound you're after, and you can search by keywords.

So Structure is easy to use on the surface. But there's incredible depth to Structure if you want to dig in — we don't have space here to go through every feature (it would take many pages!), but there's plenty onboard to keep you busy. It supports multitimbral operation on 128 MIDI channels. There are built-in effects (these can be inserted in a patch, or up to four can be loaded on each of four separate send/return loops, plus four insert effects on the master stereo output), which are based on respected Digi plug-ins, such as EQ III and Dynamics III. There are also delays, convolution reverb, modulation effects, and tons more. Four LFOs, filters, amplifiers, modulators, it's all in there.



**digidesign**

The beautiful thing is that all of that power is dead simple to utilize. The user interface is graphic-based, and largely operates by dragging and dropping. For example, layering two parts together is a matter of dragging one on the other. If a part contains effects, you can change the signal flow or the order of the effects by just dragging the effect where you want it in the chain. Easy and clean! Of course, there's full editing control if you want to get in and tweak parameters.

Want to get in even closer? Click the "Edit" button on a Patch, and a second window opens up that allows you edit keymaps, set up velocity switching, and even edit the audio waveform, set fade-ins and fade-outs, set up loop points, and set loop crossfading! This is

what separates Structure from many other soft-samplers. It has all the sound editing power of a true hardware sampler. But even at this level, it's click-and-drag simple to use.

Want even more? You can drag and drop audio directly from a track in Pro Tools into a Structure Patch, where it can be edited, looped, crossfaded, and mapped into a zone and velocity-switching setup. It has never been easier to fly vocals into an arrangement! While remixers, in particular, are going to love this feature, I can also see an endless list of applications for the rest of us as well.

Structure will ship with a massive library that was developed by East West. It will also import sounds from Kontakt, EXS 24, and SampleCell. I had no problem loading in EXS and Kontakt sounds from my library.

All in all, Structure is a tremendously powerful music production tool. And have I mentioned it's simple and fast? This one is a complete winner.

>> Digidesign Structure • Sweetwater price \$499.00 • [www.sweetwater.com/structure](http://www.sweetwater.com/structure)

# Hands On: Stomp On It!

By Mitch Gallagher

I've been using the same old stompboxes for many years, and to be honest, they're showing some wear and tear. So my "vintage" mono chorus (heavily coated in icky duct tape scum) and analog delay (with the footswitch that works about 20% of the time) and other pedals are being retired and I'm refilling my pedalboard with a new crop of stomps.

What could be more fun than to sit down with a pile of stompboxes? That's just what I did recently; let me share some of the things I heard while I was playing around... make that *working!*

In my opinion, few things are more essential to your tone than the right overdrive pedal. I had my eye on the venerable Ibanez **TS-808 Tube Screamer** reissue, but there are many others to consider. I was especially enamored of the incredible fidelity, dynamics, and low-end response of the TC Electronic **VPD1**, plus it has a boost as well as an overdrive. The Digitech **Bad Monkey** offers sweet overdrive, and has the advantage of both bass and treble tone controls. To really put some hair on the notes, a ProCo **Rat 2** is the way to go. And if you're after a "stack in a box," I was blown away by how "British" the Digitech **Hot Head** sounds. For true tube sounds, the Radial Engineering "**Tonebone**" pedals are awesome, as are the Damage Control offerings and the VOX Cooltron pedals. If you're after more of a "fuzz" experience, then the ElectroHarmonix **Big Muff Pi** has the goods, as do a variety of pedals from Digitech, Line 6, and BOSS — each one has its own unique tone. Whether you're looking for a fat bluesy vocal tone or over-the-top metal scream, there's a pedal that can do it. For a plethora of overdrive, distortion, and fuzz possibilities, try Digitech's modeling **Distortion Factory** or the BOSS **Drive Zone**, which has 16 different overdrives/distortions

For modulation, BOSS launched the chorus revolution with the venerable Chorus Ensemble. Whether it's the current **CE5 Stereo Chorus Ensemble**, **CH1 Super Chorus**, or **CE20 Chorus Ensemble** with six chorus modes, the rich, lush tones you love are all there and readily available. For versatility, the TC Electronic **SCF** (Stereo Chorus Flanger) can do subtle or lush chorus, as well as flanging and pitch mod effects, all with incredible fidelity. For a variety of choruses in one box, the Digitech **Chorus Factory** models a ton of different sounds.

Crybaby or Vox? That's the big question when it comes to wah-wah pedals. My old Crybaby has held on for almost 30 years (I'd call that a good investment!) but it's definitely showing its age and mileage. I'm still torn on which way to go when replacing it. But since I already have the Crybaby, it may be time to broaden horizons with the Vox. Which should you choose? Hey, they both sound great, you can't go wrong! For a variety of wah sounds, check the modeling BOSS **PW-10**.

If you love analog delay on guitar like I do, then check out the Ibanez **AD9**, ElectroHarmonix **Memory Man**, or the incredible Moog **MoogerFooger MF104Z**, with 1,000ms of delay. I'm also looking to add a digital delay for longer delay times and transparent sound — my candidates include the BOSS **DD3** and **DD6**, the Line 6 **EchoPark**, and the Digitech **DigiDelay**.

For some pop and extra sustain, don't forget a compressor pedal; I like the Digitech **Main Squeeze**, BOSS **CS3**, and VOX Cooltron **Snake Charmer**.

But the list of pedals doesn't stop there; you're going to need a good phaser (ElectroHarmonix **Small Stone**, BOSS **PH3**, Digitech **Hyperphase**), a nice tremolo (BOSS **BR2**), maybe even a rotary speaker (Line 6 **RotoMachine**, BOSS **RT20**), an EQ (BOSS **GE7**, DOD **FX40B**), or a reverb pedal (BOSS **RV5**, Digitech **DigiVerb**, Line 6 **Verbzilla**) — you can never have too many stompboxes to dance on when you're after the ultimate tone!

Sweetwater carries hundreds of guitar and bass pedals — there's literally something for every taste.

This is just a small sampling of some models that made their way into my test kitchen. Check with your Sales Engineer or visit our website at [www.sweetwater.com/shop/guitars/guitar-pedals/](http://www.sweetwater.com/shop/guitars/guitar-pedals/) to find out more about the pedals we carry, and which ones might work best to help you find *your* tone!



# Mackie Monitors Take Two!

**MACKIE.**



Mackie's HR824 and HR826 studio reference monitors have been studio standards since the HR series was introduced more than ten years ago. Now Mackie resets the bar, introducing new "mark 2" models with updated designs and even better accuracy than before. The sleek **HR824mk2** and **HR624mk2** represent the company's drive to refine and update their products — even those we thought couldn't be improved upon.

What made the HR monitors so popular in the first place? In a word: accuracy. The HR series was designed to be completely neutral, allowing you to count on the "sweet spot" in your studio for a true representation of what was being monitored. The ability to provide this level of non-hyped, non-fatiguing monitoring is usually reserved for units costing substantially more, but Mackie managed to pull it off, providing reliable, great-sounding monitors at an attractive price point.

Though it was a daunting task, Mackie managed to improve on the proven design of the HRs. The HR824mk2 and HR624mk2 both feature a new Zero Edge baffle, which is constructed from a solid piece of aluminum. The new baffle design minimizes diffraction and helps provide a clear sonic image, as well as tight bass response. An optimized waveguide disperses sound evenly over a wide field, as well as providing robust mids. These improvements to frequency response and depth of field make the HR monitors sound better than ever.

These THX-approved monitors are designed with high-definition audio in mind. Producers and engineers who work extensively with 5.1 and 7.1 surround sound applications will especially appreciate the clarity and neutral character the HRmk2s offer; surround demands an incredible degree of accuracy, especially in the mixing and production stages. An integrated Acoustic Space Control feature makes these monitors ideal for locations (such as video post suites and home/project studios) where available space is limited. This feature gives you full-space, half-space, and quarter-space settings, which adjust the bass response when the speakers are positioned away from walls, against walls, or in corners. Low-frequency roll-off and high-frequency shelf functions are also switchable on the back panel.

The HR824mk2's 8.75" low-frequency driver receives 150 watts from an onboard FR (Fast Recovery) amplifier. The waveguide-loaded aluminum dome tweeter is powered with 100 watts, and an active crossover helps to eliminate phase anomalies. These monitors also include time-correction circuitry, which allows the highs and lows to reach the listener at the same time. The more compact HR624mk2 features a 6.7" LF driver and 1" dome tweeter with waveguide. Fast Response power amps provide 100 watts and 40 watts to the driver and tweeter, respectively. This model includes the same features as its big brother, but provides a smaller footprint for space-intensive locations.

To hear what your music really sounds like, you need great monitors. The brand-new Mackie HR824mk2 and HR624mk2 provide all the quality and flexibility you need to hear every last detail. Call your Sales Engineer now to learn more!

>> Mackie HR824mk2 • Sweetwater price \$599.99 • [www.sweetwater.com/HR824mk2](http://www.sweetwater.com/HR824mk2)  
>> Mackie HR624mk2 • Sweetwater price \$449.99 • [www.sweetwater.com/HR624mk2](http://www.sweetwater.com/HR624mk2)

## TASCAM's Pocket-sized Guitar Trainer

**TASCAM.**

Let's face it: We're in the age of the iPod. When was the last time you saw someone jogging by with one of those circular "portable" compact disc players? The MP3 format has allowed an entirely new wave of smaller and smaller products to take hold for listeners. Why not apply this wonderful wand of miniaturization to something musicians can really use?

Since we still prefer our guitars and amps full-size, TASCAM set their sights on scaling down the award-winning CD-GTmkII CD guitar trainer and came up with the ultra-portable **MP-GT1** MP3 guitar trainer. This mini-mite has enough memory on board to store up to 240 songs, and its Variable Speed Audition function gives you the ability to slow down songs without changing their pitch — perfect for learning those tricky passages. You can also change the pitch of a song to match your guitar's tuning, freeing up your time to learn songs instead of tweaking tuners.

The MP-GT1 has a guitar input, so you can plug right in and start playing (try that with your iPod!). Also included: a tuner, metronome, data wheel, dedicated buttons, and, of course, a high-speed USB port for loading MP3s and to recharge the onboard battery. You can also beef up your guitar's tone via built-in overdrive and multi-effects, and a Guitar Cancel function lets you put your own guitar in the middle of your favorite songs! You get all this in a box that's quite a bit smaller than a stomp box, so it's easy to find a place for the MP-GT1 in your gig bag.

What are you waiting for? It's time to start practicing! And with the MP-GT1, it will be easier and faster than ever.



>> TASCAM MP-GT1 • Sweetwater price \$199.97 • [www.sweetwater.com/MPGT1](http://www.sweetwater.com/MPGT1)



By Daniel Fisher

As a keyboard player I'm always looking for new ways to make my sounds more real, more expressive, or more exotic. A recent project has had me taking the output of numerous instruments from a virtual sampler and feeding them into a virtual guitar processor. The results far exceeded my expectations and I now find myself using these guitar processor plug-ins quite a bit.

At first I was using them in a conventional manner by feeding sample-based guitars into the processor and was able to sculpt almost any electric guitar into a wide

variety of guitars, which allowed me to get by with just a handful of raw guitar instruments.

Then I started applying the guitar effects plug-in to other instruments and found that this was the perfect antidote to "the same old sound" syndrome. Careful use of amps, mics, and cabinets can produce a "liveliness" that conceals the fact that you're playing lifeless snapshots of an instrument.

You'll also find that there are a number of effects that use your instrument's amplitude to dynamically modulate the effect parameters in a very musical way. Currently, I'm feeding the output of Native Instrument's **Kontakt 2** sampler into their **Guitar Rig 2** software using their plug-in host application called **Kore**. With this setup I can save all of the instruments, routings, and effects settings in one package.

Instead of Kore, you could do the same thing with computer-based sequencers like MOTU **Digital Performer**, Apple **Logic**, Steinberg **Cubase**, Cakewalk **SONAR**, and even Apple Garage Band

Other really enjoyable guitar effects plug-ins include Line 6's **GearBox Gold Bundle** and **GearBox Silver Bundle**, IK Multimedia's **AmpliTube 2** and **Amplitude Live**, and Waves' **GTR**.

Soon you'll find yourself using these processors on wind instruments, vocals, percussion, and even sound effects, which is amazing for something that doesn't add any weight at all to your computer!



Other really enjoyable guitar effects plug-ins include Line 6's **GearBox Gold Bundle** and **GearBox Silver Bundle**, IK Multimedia's **AmpliTube 2** and **Amplitude Live**, and Waves' **GTR**.

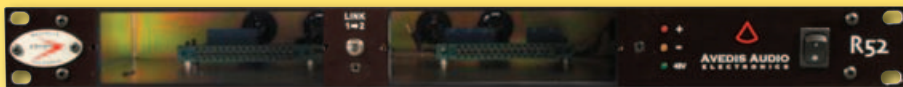


LINE 6

# A Designs EM Cards

A Designs

This time last year, the pro audio world was abuzz thanks to great new products from A Designs, namely the Pacifica dual-channel mic preamp and Reddi tube-driven DI. This year, there's similar excitement in the air over A Designs and the release of the company's new modular system.



R52

The heart of this modular system is the **R52** input/power supply unit. The R52 sports a pair of XLR inputs and outputs and space to hold two modules, or "cards" as A Designs calls them. The R52 is rackmountable and the inputs and outputs are electronically balanced.

A Designs offers five different preamp cards, each with its own distinct sonic flavor. First up is the **PM-1**, which is essentially a single-channel version of the smash-hit Pacifica. With custom input and output transformers, the PM-1 hearkens back to the sound of the Quad-Eight, the famous console that was used to mix Pink Floyd's *The Wall*.

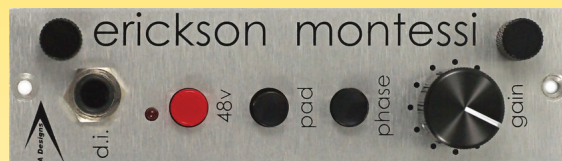
The remaining preamp modules — the EM Series — provide variations on the PM-1. A Designs swapped out different custom-wound input and output transformers for each model to give each a very distinct sound. First up is the steel-transformer **EM-Silver**, which is a wonderful fit for ribbon mics, and also fares well on kick drums. The DI input is perfect for bass guitar. The overall tonality of the EM-Silver leans toward the dark side.

The **EM-Blue** is equipped with a custom-wound nickel transformer for a more open top-end. The Blue works exceedingly well with vocalists (particularly females) and is the bee's knees on snare drums. Electric guitar also does quite well fed into the Blue's DI input.

For a preamp module that easily handles acoustic guitar and drums, look to the **EM-Red**. The unique 50/50 output transformer aligns with a different input transformer to create a preamp that condenser mics — especially those pointed at acoustic guitars — just seem to love.

The **EM-Gold** merges the input transformer of the EM-Red with the output transformer of the EM-Silver to create a preamp with a dark edge but plenty of "oomph" in the mids. The Gold is becoming a favorite on such varied sources as vocals and bass, and toms seem to like it as well.

The beauty of the R52 and the modular card system is that you can now build your ultimate front end, tailored specifically to the kind of sounds you're looking for, and with the unique A Designs quality and sonics. Your recordings will thank you for it!



EM-Silver

➤ A Designs R52 • Sweetwater price \$475.97 • [www.sweetwater.com/r52](http://www.sweetwater.com/r52)

➤ A Designs EM-Silver • Sweetwater price \$795.97 • [www.sweetwater.com/emcardsilv](http://www.sweetwater.com/emcardsilv)



# GUITAR 101: Necks

By **Jim Miller**

Until recently, guitar players had very little information regarding a specific guitar's neck profile. But today that information is easy to come by. Many companies use a code to describe the size or shape of a particular neck. Some builders don't specify neck shapes although they will include a measurement for the width of the neck at the nut.

There are now many websites and books that devote significant space to describing necks. Probably no instrument has had more written about its neck than the Gibson Les Paul. See, Les himself had a fondness for big necks. Maybe this was simply because a big, fat neck should — in principle, anyway — be more rugged and dependable than a skinny one. And more wood should help sustain. Whatever the reason, early Les Paul models had extremely chunky necks.

By 1959, Gibson had shaved some girth off the Les Paul neck. In 1960, they went all the way and gave the Les Paul its thin, "slim-taper" neck. Knowing a good thing when they saw it, the company used this sleek, speedy neck on the SG, which debuted in 1961. Some of the other Gibson models also followed suit, so a '58 ES-335, for example, will have a much larger neck than one built in 1960.

It's harder to generalize about necks at Fender, although profiles tended to be larger in the early years (1950-1954) with

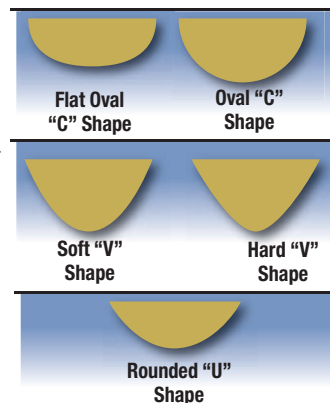
a pronounced "V" shape or deep oval. Over the next few years, the profiles became rounder. Yet by late 1956, necks were produced that were both "V"-shaped, as well as round, proving that players were not actively seeking out specific neck profiles; nor was the company making consistency a priority in terms of its necks. So how did guitar players know which guitar to choose? Essentially, if they tried one out and it played well, the choice was made. Today, Fender has the widest range of neck profiles in the industry. These include both "hard" and "soft" versions of the "V" shape, "C"-shaped necks with an oval or "flat oval" profile, and the chunky and rounded "U" shape with high shoulders.

Over at Paul Reed Smith, necks come in one of three basic profiles: Wide-fat, Wide-thin or Regular, which is somewhere between the two. Special order or Private Stock instruments may have their own specific profiles.

Unless you have exceptionally large or small hands, you should be able to handle any electric or acoustic guitar neck — the trick is finding the size and shape that feels best to you. Your Sweetwater Sales Engineer understands why this is important and often will have played many of the models in stock so they can give you an excellent description. But neck profiles are just one factor. The fingerboard material and radius are just as important. Which is why we'll be covering those next issue!



## Neck Profiles



## Customer Studio: Zircon Skye Production



This time out, we get to visit beautiful Ojai, California, 70 miles north of Los Angeles. There we find John Brokaw's Zircon Skye Production, a recording studio that also functions as an independent record label. The 3,200-square-foot facility features a huge tracking room with 14-foot ceilings, as well as three isolation rooms and a large control room.

In-house producers/engineers Ken Eros and Jeff Evans wear many hats, including helping handle the day-to-day functions of Zircon Skye Production's label and music publishing. "It's a beautiful place to work," says Evans of Ojai. He might also be referring to the studio, which is outfitted with a stunning array of modern and vintage mics, outboard, and musical instruments. Zircon Skye is based around a Pro Tools|HD 4 Accel system. Evans points out, "We've kept up with the latest updates as we've moved into working with 5.1 surround, and

Sweetwater's been really helpful." He notes that the studio's ADAM S3A monitors, Martinsound monitor controller, and Apogee Big Ben clock came from Sweetwater. "[Sweetwater Sales Engineer] Jason Koons was instrumental in helping us choose the right gear," says Evans. "He's really knowledgeable, and has never let us down."

Zircon Skye, like many studios, has humble roots. "John's first intentions were to get some equipment and record his friends," says Evans, who came onboard in 1997. By '99, Brokaw had purchased a studio facility. "That was when we really started working with Sweetwater," Evans remembers.

Evans and Eros list the studio's Manley Massive Passive EQ, Grace and Avalon preamps, and Royer SF-24 stereo ribbon mic among their essentials. Says Eros of the Royer, "It's an amazing mic; we've been using it constantly since we got it." Evans points to the Shure SM7B: "It's kind of my 'go-to' mic for voiceovers — it's also being used a lot for lead vocals."

What does the future hold for Zircon Skye? Eros says, "We've branched out into publishing, getting songs placed in films and on television." The studio is always welcoming new clients. "They like working here, as opposed to driving all the way down to L.A. We plan to keep making great records here, giving the clients what they need," he says, adding, "Sweetwater has been a really big help." Visit Zircon Skye at [www.zirconskye.com](http://www.zirconskye.com).

**Want to see your studio in SweetNotes? Email photos to Mitch Gallagher now! ([mitch\\_gallagher@sweetwater.com](mailto:mitch_gallagher@sweetwater.com))**

**The Sweetwater Difference — Experience it for yourself!** Call, fax, or email us today!



Inside  
Sweetwater®  
music technology direct™

Chuck Surack

We've really been enjoying our new building — or should I say, Phase I of our new building. Even though the construction is only about half finished, our warehouse and all of our sales and office space is completed, and our huge new retail store is fully operational.

I can't tell you what a difference actually having space to work has made in our efficiency and productivity! To say nothing of the fact that we're a lot more comfortable in a purpose-designed facility! In our old building, our Marketing department, for example, was located on the first floor of a house — the dining room, living room, and master bedroom — while our business offices were in the house's basement! It's made things much better having everyone in one building; communication is faster, and it's a whole lot easier to get people together for a meeting on short notice!

I'm happy to say that we've begun building Phase II of the new headquarters. This part of the facility will house our multi-room recording studios — designed for

us by studio designer Russ Berger — as well as a high-tech training theater (also designed by Russ) that will be used for educating our Sales Engineers on new products and technology. We're expecting to put that theater to use for other things as well, such as hosting music events for local organizations, and more.

Phase II also houses our cafeteria/restaurant, which will offer meals both to our employees and to customers and visitors to the facility. And there will be a number of amenities in Phase II, such as an employee fitness center and more.

I still remember back in 1979, when I used to load my TEAC 3340 four-track reel-to-reel recorder into my VW bus and head out to record local bands playing at area clubs. When the gig was finished, I'd wheel the deck into the living room of my mobile home and get busy mixing. Things have sure come a long way since then! From a staff of one — yours truly — to where we're approaching 300 employees, it's been an amazing ride.

But we haven't forgotten our roots. I remember what it was like as a customer trying to find gear when I had that VW-based studio. I swore then I'd find a better way to run a music instrument and pro audio retailer, and with the help of my staff, we're doing our best to fulfill that promise.

We also haven't forgotten our even deeper roots: the music. That's why we do things like host workshops with companies like Gibson, Taylor, Fender, Digidesign, and Sony (to name a few from our April/May schedule). Yes, we're promoting those companies' products, but we also get the fun of watching bass legend Tony Levin and guitar wizard Greg Koch showing off the latest from Ampeg and Fender, respectively. What a kick it is to have such great musicians perform here!

I hope you have a summer filled with music and sunshine. Please come to visit our new headquarters when you are in the area!

## Hands On: Vocalist Live 2

By Mitch Gallagher

There's only one word for it: *Magic!* How else can you explain how the DigiTech Vocalist Live 2 is able to do what it does? The Vocalist Live 2 is a 2-part vocal harmony processor. You can select unison, or a third or fifth above or below the "lead" vocal. The unit also includes built-in vocal effects: compression, reverb, and EQ. You can store and recall up to 50 presets.

As far as the hardware goes, this is a footswitchable floor processor. It has an XLR mic/line input with level adjust, a low-noise preamp, and 48-volt phantom power. There are stereo outputs on both 1/4" and XLR connectors. The whole thing feels solidly built and rugged, is in an all-metal chassis, and comes with the required power supply.

So where's the magic? There are certainly plenty of vocal harmony processors out there, both hardware and software. The difference is that you can plug a guitar into the Vocalist Live 2. The processor uses MusiQ technology to analyze your playing in real-time, and creates vocal harmonies that match with the song. It's absolutely astounding to see this in action. Sing a note, play a guitar chord, perfect vocal harmonies come out that match the chord. For convenience, there's a guitar tuner built-in, and a "guitar thru" jack for sending the clean guitar signal along to your amp or PA.

I set up the Vocalist Live 2, and plugged in a guitar. I had several players/singers come in and strum and sing through harmony-laden songs — the Vocalist Live 2 created perfect harmonies every time. Even when the guys laid down complex chords and arrangements with quickly shifting harmonies, the vocal harmonies followed right along. It's hard to believe how well it works until you plug a guitar in and sing.

The Vocalist Live 2 is perfect for solo performers, bands, singer/songwriters, and studio use. I don't know how they do it. I'm telling you, it's *magic!*

**DigiTech**  
The Power to Create



>> DigiTech Vocalist Live 2 • Sweetwater price \$299.97 • [www.sweetwater.com/VL2](http://www.sweetwater.com/VL2)

**Moving? Moved? Want more than one copy?** Call, fax, or email us your new address and don't miss an issue of *SweetNotes!*

# Mojave MA-100

Occasionally, someone makes a piece of gear that becomes a “must-have.” Everyone that gets their hands on one can’t stop singing its praises. One recent example was the Mojave Audio MA-200 large-diaphragm tube condenser. This year, you can bet it will be the **MA-100**, the MA-200’s small-diaphragm counterpart.

*Mojave Audio*

Tube-powered pencil condensers aren’t exactly commonplace these days, but if there was ever a manufacturer that could reinvigorate that market, it would be David Royer and Mojave Audio (they’re the same team that kick-started the ribbon revolution a few years back with Royer microphones). At the heart of this black beauty lies a military-grade JAN 5840 vacuum tube with Jensen audio transformers. Two 3-micron capsules are supplied, with cardioid and omnidirectional patterns, to handle a variety of miking situations.

The MA-100 handles extremely high SPLs with ease thanks to its “cathode follower” design, making it a suitable choice for applications ranging from guitar cabinets to snare drums. But it also deals with more traditional small-diaphragm condenser situations with ease, as well. The frequency response of the MA-100 sports slight bumps in the low-mids and another at around 6kHz, perfect frequencies for adding body and air to acoustic instruments. This is a microphone that excels on acoustic guitar, overheads, orchestral and choral recording, and piano.

The mic is available singly or in a stereo pair, and ships in a rugged carrying case with a power supply, cable, shockmount, and interchangeable capsules. The Mojave Audio MA-100, with its ability to capture any sound source with great detail, is destined to be a studio classic, just like its big brother.



## Expert CENTER



### Understanding SONAR's Input and Output Routing

Cakewalk SONAR is unique in how it handles inputs and outputs, mostly because it names all drivers by stereo pairs. That is to say, channels 1 and 2 from your audio hardware are grouped together as one pair, as are channels 3 and 4, 5 and 6, etc. You have the option of selecting the left side of the pair, the right side, or both together as a stereo source.

Let’s say you’re using an interface with eight input channels. You have a mic plugged in to channel 1, another in channel 6, and a stereo keyboard plugged into channels 7 and 8. You will need three audio tracks in SONAR to record these. To record from channel 1, your first track’s input needs to be set to “[interface name] input 1 Left” (actual name may vary). This refers to the left side of the first stereo pair. To record from channel 6, your input needs to be “[interface name] input 5 Right.” Channel 6 is the right half of the stereo pair built off input 5. And to record from channels 7 and 8, set the input of your 3rd track to “[interface name] input 7 Stereo.”

If this doesn’t work, here are a few things to verify:

- Under *Options > Audio > Advanced*, make sure your driver mode is set to “ASIO.”
- Under *Options > Audio > Drivers*, only the driver pairs that are checked or highlighted will actually show up as available on a track.
- You can only use one ASIO driver at a time in SONAR.

**>> Mojave Audio MA-100 • Sweetwater price \$795.00 • [www.sweetwater.com/ma100](http://www.sweetwater.com/ma100)**

— *Gibson Digital Workshop continued from page 4*

Pumping each string through a different modulation effect yielded an astounding wash of sound that filled the room with psychedelic-tinged vibes. Similarly, using different reverbs on groupings of strings made the guitar sound larger than life.



The evening was capped with a drawing for Gibson gear with the grand prize being a set of Burstbucker humbucking pickups. Check our Events page ([www.sweetwater.com/about/events](http://www.sweetwater.com/about/events)) to learn more about upcoming free seminars and workshops at Sweetwater — if you’re in the area, we’d love to have you attend!

— *Alesis ControlPad continued from page 5*

— use it with any MIDI-compatible sound source. The eight touch-sensitive percussion pads allow expressive performances, and, if you opt to use the footswitch options, you get a pretty comprehensive drumpad kit without taking up much room at all. Up to 20 MIDI setups can be stored to the ControlPad’s internal memory, and you can customize settings, also.

Alesis really did their homework when they designed the ControlPad. It’s an effective, functional tool that’s perfect for performers, recording artists, and space-starved drummers of all stripes. The ControlPad comes bundled with FXPansion’s BFD Lite drum software, which contains electronic and acoustic kits, all ready for your percussive enjoyment!

**The Sweetwater Difference — Experience it for yourself!** Call, fax, or email us today!

Way back in 1979, when disco was king and Jimmy Carter was president, Chuck Surack (our president and founder) opened a 4-track recording studio. That studio is still at the core of all we do as a company. Our studios aren't just a bunch of gear stacked in the corner of a showroom, they're working, gotta book time to pay the bills, rooms. In addition, they serve Sweetwater's retail division as an incredible real-world "test track" for new gear, a training facility, and much more (including a place we can go to record our music!). In this issue, I'd like to feature an interview with our studio manager, Chet Chambers.

**Tell us about your background and what brought you to Sweetwater.**

I've been a musician since I was four. At 13 I realized I wanted to work in the studio. I'd spend hours figuring out how and why they did things on recordings...not just the notes, but the sounds, feel, the arrangement, the mix.

I first came to Sweetwater in 1981 when the band I was in wanted to record a "45" (yes, a "45") at Chuck's studio that he ran part-time in his home. Chuck and I hit it off and he occasionally hired me to do session work. One day he asked if I would like to work with him and so began my studio career.

**How long have you been at Sweetwater and how has your job changed?**

I've worked at Sweetwater three different times since 1984...about 14 years total. I've currently been here since 2001 and intend to stay until Chuck kicks me out or I go to that big Control Room in the sky.

**What are your department's responsibilities?**

We call what we do "transcription of dreams." What I mean is we take what's inside the client's head and heart and put those dreams and ideas on a CD for them...what an amazing privilege. We create jingles, message on hold, ads for radio/TV, scoring/sweetening for video, artist projects, band demos, art design and replication packages for CD and DVD.

We also are the testing ground for our partners in the retail division. Our studios are a great place for them to put their "ears" on the gear we sell. We're able to



provide real-world experience no other retailer can offer.

**Are there projects you're especially proud of?**

We're proud of everything we do! But we recently did a project with radio station WAJI, *Majic Miracle Music*, a benefit album for the Riley Hospital for Children in Indianapolis. This CD features national artists like Nick Lachey, Jars Of Clay, Gin Blossoms, Landon Pigg, and more, all performing "unplugged" versions of their hits. Many of these artists recorded their tracks in our Studio A. Everything on the project was donated for the kids: Studio time, talent, even the duplication and promotion. We're currently working on the follow-up CD and recently recorded a brand-new song with REO Speedwagon for the project.

I'm also proud of restoring over 250 recordings from 1920 to 1926, recorded at Genette Records.

These are some of the earliest jazz and country recordings ever made of artists like Louis Armstrong, Fats Waller, Hoagy Carmichel, Bix Beiderbecke, and many more. There was even a recording of William Jennings Bryan reading the *23rd Psalm* with an orchestral background. Our job was to lovingly restore these treasures.

**What services do you provide that can benefit Sweetwater's retail customers?**

There's so much: DiscServices ([www.sweetwater.com/discservices](http://www.sweetwater.com/discservices)), which are complete replication and duplication services including art design and packaging. A lot of our clients record at home or in small studios and send the files to us to mix and master. And we provide information. We help people record — whether they do it here or not.

**How much has Sweetwater grown since you arrived?**

When I started we were in the basement and garage of a small home. Then a larger home, then a 6,000 square-foot facility that was outgrown by the time the roof was shingled. We added on to that building until we couldn't anymore. Now we're constructing three new studios in Sweetwater's new building that are designed by Russ Berger. The new studios will be larger and have a better layout. Check out the progress of the new construction at [www.sweetwater.com/feature/expansion/](http://www.sweetwater.com/feature/expansion/).

**Anything else you'd like us to know about your department?**

We love to amaze our clients!



Chet Chambers, Sweetwater Studio Manager



The Sweetwater Studio Team

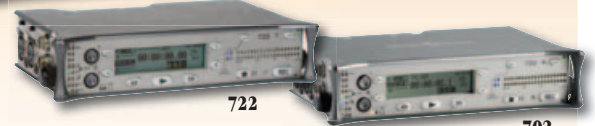
# Sweetwater Welcomes Sound Devices!

**SOUND DEVICES**

We're proud to announce that Sound Devices products are now available here at Sweetwater! Sound Devices makes some of the best pro-quality field- and location-recording equipment you'll ever find. Founded in 1998, the company specializes in rugged, reliable, and portable mixers, recorders, and preamps that can literally go anywhere — from the club down the street to the top of the Himalayas.

Take even a cursory glance at any Sound Devices product and you'll see it's built tough and to high standards. They're compact and packed full of features. The **744T** digital 4-track recorder, for example, is a no-compromise unit with premium preamps, timecode functionality, and dual media (Compact Flash and 40GB hard drive) for flexible recording options. The **722** is similar, with two tracks of recording. The **702** is a streamlined 2-track Compact Flash recorder. Each offers 24-bit resolution and sampling rates up to 192kHz, as well as a ton of features such as AES/EBU digital I/O, FireWire connectivity, MP3 support, and stable recording formats. Plus, these recorders are astoundingly lightweight — a prerequisite for field use.

Sound Devices also makes some stellar portable mixers that are as effective as they are compact. Ranging from the 2-channel ultra-compact **MixPre** stereo mic mixer to the formidable **442** (which includes four channels, all with preamps and transformer-balanced inputs), these mixers are battery-powered and have all the features you need to make accurate, professional location or field mixes. The **302** three-channel mixer gives you an onboard mid-side stereo matrix for effective stereo recording, plus limiting, balanced inputs, phantom power, solo headphone monitoring, a high-pass filter, tape level outputs... all packed into a rugged metal housing weighing less than two pounds and measuring around two inches high and eight inches wide.



- >> Sound Devices 744T • Sweetwater price \$4,095.97 • [sweetwater.com/744t](http://sweetwater.com/744t)
- >> Sound Devices 722 • Sweetwater price \$2,495.97 • [sweetwater.com/722](http://sweetwater.com/722)
- >> Sound Devices 702 • Sweetwater price \$1,875.97 • [sweetwater.com/702](http://sweetwater.com/702)
- >> Sound Devices MixPre • Sweetwater price \$665.97 • [sweetwater.com/mixpre](http://sweetwater.com/mixpre)
- >> Sound Devices 442 • Sweetwater price \$2,495.97 • [sweetwater.com/442](http://sweetwater.com/442)
- >> Sound Devices 302 • Sweetwater price \$1,295.97 • [sweetwater.com/302](http://sweetwater.com/302)

## Fender's VG Strat Clinic

If you happened to be driving past the Sweetwater campus recently and heard otherworldly noises coursing through the air, fear not! It was just the sound of Fender clinician/guitar maestro/comedian/madman Greg Koch putting the amazing new VG Stratocaster through its paces in front of an appreciative crowd.

Koch, an artist on Steve Vai's Favored Nations record label, was on hand for an informative and wildly funny VG Strat clinic in Sweetwater's Conference Hall. Attendees were treated to a demonstration of the incredibly versatile modeling guitar, as well as an in-depth explanation of its features. Koch also plugged into a new Fender Super-Sonic combo amp and extension cabinet, demonstrating its attributes while wowing the crowd with his incredible chops.

Upon entering the Conference Room, participants were treated to a sight that would take any guitar aficionado's breath away: table upon table of new Fender guitars, Hot Rod and Custom Shop Strats, Modern Vintage Telecasters, Mustangs, and more. The axe of hour was the VG Strat, which could have been mistaken for one of its siblings if not for its unobtrusive Roland GK pickup, an extra control knob, and a small battery light. Of course, it *is* an American Standard Stratocaster, and it plays like one, with three single-coil pickups. But the VG Strat also gives you virtual Tele, humbucker, acoustic, and Strat sounds at the turn of a knob. Turn another knob and you transform the VG's tuning instantly to drop D, open G, D modal, baritone, or 12-string guitar. There are no additional cables or boxes — you simply plug into your amp and go.

Any trepidation about the VG Strat's capabilities was put to rest (explosively eradicated is more like it) as soon as Koch took the stage with the guitar. Like a racecar driver taking a Ferrari for a spin, Koch blazed away on the VG, effortlessly running through its features while pulling off jaw-dropping fretwork. His performance was captured by hi-def cameras and projected onto the Conference Hall's huge screen, allowing the entire room to see how he manipulated the VG's functions. He veered from twangy country to drop D thrash metal, and then added some Hendrix-style vintage pyrotechnics for good measure. Koch even gave a mini-clinic on "chicken pickin'" techniques that rivaled any Nashville session cat.

One lucky attendee walked away with a brand-new Fender G-Dec Exec amp, which retails for over \$500. Several others received Fender T-shirts, and everyone got a chance to get their hands on the drool-worthy guitars on hand. It was an incredible opportunity to see Fender's latest and greatest.





Yeah, I've been in bands. Some really good, most just average. Recently, several of my old band mates have been considering some sort of reunion concert to celebrate our high school reunion. In the course of talking with them, I was surprised that everyone expressed the same sentiment, which I'll share with you in a minute.

We're all older and wiser than back in the "old days." Perhaps with age and wisdom, we've found the truth of the matter and it's surprisingly simple. See, just like you and your band members, our dream was to hit the big time. Get signed by a major label. Make records. A few of us did make our way into studio sessions, myself included. I've played guitar and keyboards on more recordings than I can count, though none ever struck gold.

But as I looked back on the early band years, I realized just how close many of us became. Beyond playing gigs, we hung out, went to the movies, the usual stuff. So guys, if you're reading this, I miss you and I miss the good times we had and even

some of the bad times when we were flat broke and hungry. In that context, what difference would a hit record have made?

Here's what we all keep coming back to: If we had just loved playing music together a little more and worried less about how successful our band was, things would have been a lot easier. Ultimately, it's about playing the music. Up there on stage, hitting those incredible highs, communicating without a single word, yet everyone nailing their parts perfectly and ending the songs on the same beat. Incredible!

If we would have thought more about how special that was instead of constantly brooding about our success (or lack of it) the odds are we wouldn't have split, drifted apart, and joined other bands, hoping that might be the answer.

So here's my advice. If you're playing in a band, cherish every moment. If you're lucky enough to go on to achieve fame and fortune, fine. But don't make that the goal. If you're good, you're good and you don't need some suit from a record label to tell you that, because you know it's true. Everybody hitting the chorus on that same big chord, on exactly the same beat... that's your magic!

It doesn't matter if you spend years practicing in your garage until the wee hours. It doesn't matter if your gigs barely cover your expenses. But every note, every harmony, every solo is played, then it's gone forever. The only way to keep from losing that incredible feeling you get on those nights when your sound is just perfect, your instrument sounds sweeter than ever, and nobody hits a wrong note, is to keep doing it. Day after day, week after week, year after year.

Don't end up talking 20 years from now with your former band mates and wishing you had put in just a bit more effort and had just a little more patience. Today is only here once.

As for me, I'm doing my best to get our old band together, even if it's just for one spectacular night that we'll never forget! Wouldn't that be something?

## Hands On: DrumCore 2.5

By Mitch Gallagher

I'll let you in on a secret: I'm a huge fan of Submersible Music's DrumCore software. I've been using it since I reviewed v1.0 for a magazine several years ago. DrumCore is my loop librarian in my system. It comes with tons of great drum loops. But these aren't just simple beats. They're performed by "name" drummers such as Alan White, Terry Bozzio, Matt Sorum, Sly Dunbar, Brain, and others. Plus, you get multiple versions of each beat, with numerous fills, intros, and endings, so you can string the loops together in your DAW to create a song arrangement. Each loop is performed at various tempos, so you don't get any "artifacts" when you change the tempo of your song. There are MIDI and stereo audio versions of most loops provided, and Submersible offers a wide range of Expansion Packs with additional loops.

You can use DrumCore standalone, in which case you can drag and drop loops out of the DrumCore browser into your DAW audio tracks. Or, you can export from DrumCore directly into your DAW — with Pro Tools you can export into the Pro Tools Regions Bin, into an Audio Track, or you can export to "Pro Tools Track Repeating"; DrumCore will ask how many copies you want of the loop and automatically place them one after another in the track. A great time-saver!

You can also ReWire DrumCore to your DAW — I've used it extensively with Live, Pro Tools LE, Pro Tools HD, and Logic Pro. It works flawlessly. In this case, DrumCore becomes your loop player, locked to the DAW's tempo. You can also set it up to play drum sounds over MIDI or ReWire.

There's a corresponding drum kit in DrumCore for each drummer's loops, so it's no problem to add an extra crash or hit to a track if you want. In fact, I often use DrumCore as a drum "sound module" for my DAW. The sounds are awesome, and there are 48 velocity-switching pads available. You can even go in and customize the kits, using the snare from this drummer's kit, the kick from that one, or drag and drop your own samples onto DrumCore's pads to make your own kit. If you're running ReWire, each pad can be routed to whatever separate outputs you want. It's all easy and intuitive.

You can also use DrumCore as a librarian for your own loops; it supports AIF, WAV, SDII, and REX 2 and ACID files. You can tag your loops with key words to make it easy to find the one you want.

Working with loops is great. The problem is managing them, and organizing them in such a way that you can access them quickly and easily. With DrumCore, I've found my solution. Give your Sales Engineer a call; you may find it's perfect for your needs as well!



>> Submersible Music DrumCore 2.5 • Sweetwater price \$199.97 • [www.sweetwater.com/drumcore25](http://www.sweetwater.com/drumcore25)

# studio notebook: Refreshments

By Mitch Gallagher

As I'm writing this, Spring has finally arrived here in Indiana, after a couple of false starts. Traditionally, this time of year means "Spring Cleaning." But with regard to music hardware, I prefer to think of it as "Spring Refresh." (We covered Spring-cleaning computers and software in our April 2006 issue; download it at [www.sweetwater.com/publications/sweetnotes](http://www.sweetwater.com/publications/sweetnotes).) Now is the perfect time to go through your system — this is equally applicable for a studio, PA, live keyboard, or guitar or bass rig — and ensure that everything is performing its best, and doing the job you need it to do.

Begin by giving everything a thorough cleaning. Dust off the mixer or control surface. Wipe down rack gear. Polish guitars and basses and install fresh strings. Clean the slime off your pedals and the grunge off your cables. Visually inspect all the cables at the same time to make sure there aren't any rips or cuts in the casing or damage to the connectors.

Now that everything is spic 'n' span, it's time to check your cables and connections. Hook each cable up, and run a known good signal through it. If a cable is intermittent or broken, replace it. If you're using a patch bay, make sure it's functioning well. If there are funky patch points, get them fixed. There's nothing more frustrating than an intermittent connection.

Once you're sure every cable and connection is perfect, it's time to evaluate your hardware. Go through piece-by-piece and ensure that each is working well. Try all the knobs and switches. Play each key, move every controller, stomp every footswitch. Check tubes, speakers, and guitar or bass intonation, neck relief, and action.

Now take a hard look at your setup. Is it as ergonomic as it could be? Maybe you could work faster if you rearranged your racks. Can you quickly reach all the controls you need to get your hands on? Would your guitar sound better if you changed the order of the stompboxes on your pedalboard?

Now comes the fun part! Consider your gear. Is every piece fulfilling the need you have for it? Would you be better served with a new piece that does more or has cleaner sound? I keep a running list of things I want to replace or upgrade, and work my way through as I'm able to afford new gear. (Sweetwater's *ProGear* catalog is a great "wish book" for this!)

While there's beauty to a vintage piece or one you've owned for many years, I've become ruthless with my gear. Either it performs or it gets replaced with something better — I'm after quality sound and better music, not emotional attachment to equipment. But I don't replace things for the sake of replacing them, and I like to be as sure as possible before making a move — I don't want to regret replacing something. My goal is to have a great rig to make music with, not to have a cherished collection. (If your goal is to have a collection you cherish — good on ya, nothing wrong with that!)

A good Spring Refresh will optimize your rig, and get you ready for a great year of music making — you'll easily get back the few hours you invest in improved efficiency and gear performance. And that's a solid investment in your music, your sound, and your creativity!

## Yamaha Motif XS

Having long been a leader in practically every area of consumer and professional audio, Yamaha sets the standard. In one area in particular — synthesizer keyboards — Yamaha continually breaks new ground. The Motif ES Series offered the most ROM available at the time, coming in at 175MB. The new **Motif XS** Series makes that seem meager, boasting a whopping 355MB of onboard samples and waveforms.

On the spec-y side of things the Motif XS is available with 61, 76, or 88 keys with over 1,100 individual patches and 128 notes of polyphony. Analog inputs allow you to sample from external sources at up to 16-bit/44.1kHz, WAV or AIFF. The Motif XS ships with no RAM, but you may install up to a gigabyte to handle the sampling. These synths are loaded with a whole host of hands-on controls, including pitch bend, mod wheel, ribbon controller, eight control sliders, and eight knobs. A USB port makes connecting to a computer a snap and each keyboard comes with a special version of Cubase, Cubase AI.

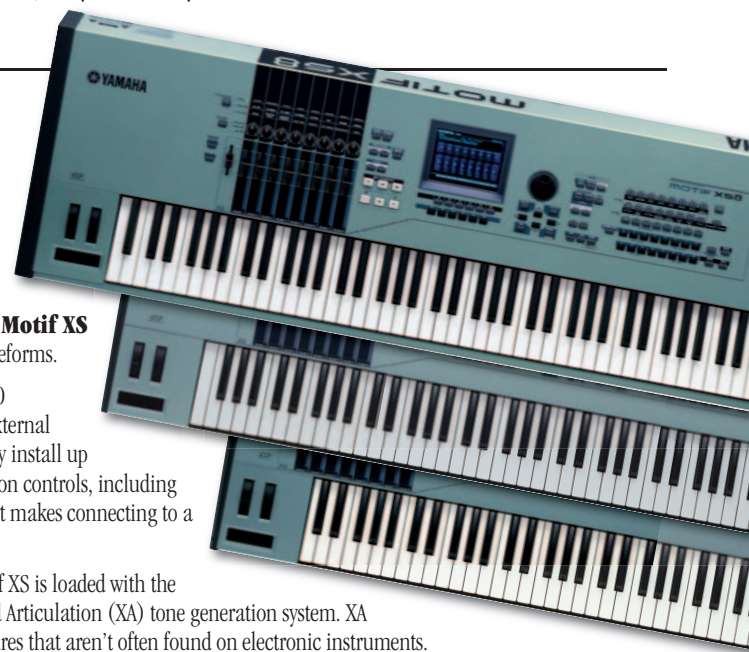
Here's where the Motif XS really stands above the competition: the sound engine. The Motif XS is loaded with the aforementioned 355MB of samples and waveforms, which can be affected by the Expanded Articulation (XA) tone generation system. XA allows you to implement expressive touches such as legato, staccato, and key release, features that aren't often found on electronic instruments.

The Motif XS also features processing that can be used to add nuances to your playing. A half-damper effect breathes realism into acoustic piano sounds, and there are Virtual Circuitry Modeling effects that faithfully mimic analog processing devices. Connect a microphone and process your voice with the vocoder. These effects can be used to take even the most mild, restrained preset patch in crazy new sonic directions.

Aside from amazing sound-sculpting capabilities, the Motif XS is great as a songwriting tool or for live performance. The Motif XS is equipped with the powerful Arpeggio, which lets you trigger up to four of the approximately 6,000 sequenced phrases from the keyboard. Use these to add auxiliary instruments to your songs. Arpeggio is great for triggering song ideas, which you can capture instantly in Performance mode. Finally, the Integrated Sampling Sequencer merges audio and MIDI recording (with optional RAM installed) and allows you to edit using the Slice function to easily change tempos of your songs.

There are literally too many astounding features on the Motif XS to even begin to tap into all of them in the space we have here. But needless to say, there's plenty here to satisfy even the most ardent tweakhead, yet the interface is intuitive enough that inexperienced musicians can dive in feet first and not feel lost. Call your Sales Engineer to get the complete story!

>> Yamaha Motif XS8 • Sweetwater price \$3,199.99 • [www.sweetwater.com/motifxs8](http://www.sweetwater.com/motifxs8)  
 >> Yamaha Motif XS7 • Sweetwater price \$2,799.99 • [www.sweetwater.com/motifxs7](http://www.sweetwater.com/motifxs7)  
 >> Yamaha Motif XS6 • Sweetwater price \$2,199.99 • [www.sweetwater.com/motifxs6](http://www.sweetwater.com/motifxs6)



# Sweetwater®

Music Instruments & Pro Audio

5501 US Hwy 30 W, Fort Wayne, IN 46818  
(800) 222-4700 • sweetwater.com

Change Service Requested

PRSR STD  
U.S. POSTAGE  
**PAID**  
SWEETWATER  
SOUND

## INSIDE THIS ISSUE

TAPCO Thump .....	1	A Designs EM Cards .....	8
Sennheiser Takes The Stage .....	1,2	Customer Studio: Zircon Skye Prod ...	9
Shure In-ear Monitors .....	2	Inside Sweetwater .....	10
Audio-Technica AT2010 .....	3	DigiTech Vocalist Live 2 .....	10
Gator G-Tour Cases .....	3	Mojave MA-100 .....	11
Peavey Powers Up .....	3,4	Inside the Sweetwater Difference ...	12
JBL PRX Series .....	4	Sweetwater Welcomes Sound Devices!	13
Alesis ControlPad .....	5,11	TechNotes .....	14
Digidesign Structure .....	5	Submersible Music DrumCore 2.5 ...	14
Stompbox Roundup .....	6	Studio Notebook .....	15
Mackie Monitors Take Two! .....	7	Yamaha Motif XS .....	15
TASCAM MP-GT1 .....	7	and more!	



©2007 Sweetwater Sound, Inc. All rights reserved. All trademarks are property of their respective owners.



## Meet **Keith** Schreiber

**Name:** Keith Schreiber

**Position at**

**Sweetwater:** Senior  
Sales Engineer

**Start Date:** December  
2004

**Hired as:** Sales  
Engineer

**Education:** Three  
years into a 4-year degree

and record, play keys, and sing. I'm very interested in the historical aspects of the Middle East.

**Personal Motto:** Take it to the extreme!

**Favorite Magazine:** *Keyboard*

**Guilty pleasure of choice:** watching *Star Trek*, *Battle Star Galactica*, *Stargate SG1*,  
*Doctor Who*

**How would your boss describe you?** Hard working.

**How would your best friend describe you?** A creative person who asks too many  
questions.

**What did you dream about doing for a living when you were growing up?**  
Pilot and/or live performer.

**Describe the most dramatic situation in which you provided the  
“Sweetwater Difference” for a customer or the most unusual/creative  
solution to a customer’s problem:** One of my customers needed a package of software  
to save a session over-night shipped to L.A. It was after our cutoff for overnight shipments, so I  
took it to FedEx and got it out in time.

**What in your life best prepared you for the work you do here at  
Sweetwater?** My whole life has centered around music and music production. I have made  
my living from music since I was 16 years old.

**What do you enjoy most about being part of the Sweetwater Team?** Helping  
the company grow and being a huge influence on making positive changes to Sweetwater.

**What is the most important thing you’ve learned at Sweetwater?** Everyone  
has a voice. No matter what your position, you can affect a change.

**Where are you from originally?** Colorado/Arizona

**What was your occupation before coming to Sweetwater?** Pro Tools instructor

**Why did you first apply for a job at Sweetwater?** I was looking for a better way to  
support my family. I was a customer of Sweetwater's and always enjoyed the service. I thought  
it would be a great opportunity.

**Foreign Languages:** German

**Technical Strengths:** Pro Tools, keyboards, sequencing

**Instruments you play:** keyboards, vocals

**Gear you Own:** Kurzweil K2500X, Digidesign Pro Tools HD2, 96 I/O, Command8; Focusrite  
Red 7, Manley mic pre

**Other stuff we should know about you:** I am an aviation mechanic. I trained in  
the Army, and spent eight years overseas in Asia, Europe, and the Middle East. I love to write