Transoniq Hacker

The Independent News Magazine for Ensoniq Users

Bavarian Creme de la Creme

Robby Berman

Product: *Austrian Sound Library.*
For: EPSs, ASR-10s.
Price: $39, overseas (that's US, folks) additional $6.
From: Dietz Tinhof, Himmelhofgasse 46, A-1130 Vienna, Austria or call 01143-1-827-0822.

I'm impressed. Is it so weird that in this world of underachievement, I get excited, even moved, when I encounter excellence, work that's clearly the product of someone who takes something seriously, and all the way? Well, that's how Volume 1 of Dietz Tinhof's *Austrian Sound Library* makes me feel.

The *Austrian Sound Library* (*ASL*) consists of a five-disk set of acoustic folk instruments from Austria, Switzerland and Bavaria. The documentation is thankfully thorough, both in regard to the samples and the instruments from which they're taken. The careful thought that obviously went into the sampling and programming of the sounds is very apparent in these pages.

The instruments of Volume 1 are steirische harmonika (Styrian accordion), baritone and tenor alpine horns, ocarinas tief and hoch (low and high), a soft tenor sax, soprano sax, hackbrett (a zimbal, or dulcimer, in normal and memory-saving versions) and a zither. There's a demo for some of the sounds. The instruments offered may not be everyone's cup o' tea; personally, I'd been looking for a really realistic accordion, dulcimer and zither. And, unexpectedly, the low ocarina is lovely, while the soft tenor blew my little mind.

To start with, the samples sound great. The manual refers to the original sampling having been done at "the highest resolution" (44k? 78k?), with some sampling rate reduction done at a later stage to facilitate split-point matching and file-size reduction. The split points are usually downright invisible, merely okay at worst, and examining the sample rates of individual samples in relation to those of their neighbors had me continually shaking my head in admiration for the quality of the matching job.

The samples are reasonably memory-efficient, something that comes as a bit of a surprise considering their fidelity. The looping is well done throughout.

The patch selects, modulators and FX are extensively, and creatively, employed. In a very few cases, they may not be used exactly in the way that I'd like; that's certainly a matter of individual taste and habit. In any event, hacking *is* allowed.

ASL 001: Steirische and AKK BASS

STEIRISCHE and AKK BASS correspond to the right and left hand concerns of the accordion player. Taken together, my search for the ultimate accordion has ended.

In this issue

Articles:

Stereo or Mono on the ASR-10?
Barry Carson 8

Making BigBux — Part II
Jeffrey Fisher 7

Avoiding Dullsville – Samplers
Tom Shear 9

Waveform Mutilation for SQs & KSs
Jack Stephen Tolin 10

Miragefreq — Part II
Johnny Klonaris 18

Reviews:

Bavarian Sounds for Samplers
Robby Berman ..... cover

Basement Tapes: Sethares
Daniel Mandel 4

Dr. Brad – *Volume II* for SDs & VFX-sds
Daniel Mandel 6

Power Tracks Sequences
Brian Rost 13

Joel Simpson Ragtime and R&B Sequences
Sam Mims 14

Regular Stuff:

Random Notes 3
Hypersoniq 3
Classifieds 21

Hackerpatches
Sam Mims & Jeffrey Rhoads 22

The Interface 25
Hacker Booteeq 31

One of the distinguishing characteristics of the entire *ASL* appears to be attention to the secondary noises produced by the various instruments, which are included for the sake of realism, and they usually work quite well. In the case of the accordion, it's the button noises, which are sampled separately and given their own layer.

For STEIRISCHE, the melody-playing right hand, velocity is used to shift between soft and hard attacks. The patch selects provide you with the button "pops and plops" alone (I'm not sure what value there is in this), a one-layer, voice-saving steirische, and a sound best described as a distant accordion pad.

AKK BASS does double duty to simulate the accordion player's adroit left hand, which is responsible for producing bass lines as well as the manipulation of chord buttons. The individual bass note samples run from C2 to A4. From Bb4 on up, every key holds a sample of a major triad (I confess I don't know if real steirisches have minor key buttons as well). There are no patch selects for AKK BASS; Tinhof apparently didn't see any worthwhile use for them.

A clever bit that the two samples share is mod wheel control of volume to simulate the push and pull of the bellows. You can record your left or right hand part on a sequencer track with mod wheel moves, record the other hand, without the wheel, on another track, and merge them. This way, both hands' handiwork will get louder and softer together, like a real accordion.

One last idea: If you're a stereo junkie like me, you can keep your STEIRISCHE and AKK BASS tracks panned opposite each other to mimic the actual stereo spread of an accordion. Of course, you'd have to have your face right into the thing to hear it this way, an experience only accordion players or compulsive studio idiots like me have actually had. (To get your stereo squeezebox pushing and pulling together, you'll need to copy your first, mod-wheeled, track, filter out the key events, and merge that copy with your second track.)

ASL 002: BARITON HORN, TENOR HORN, OKARINA TIEF and OKARINA HOCK

I'm not too fond of the two horn sounds on this disk. BARITON HORN is meant for bass lines of the oom-pah-pah variety. It mostly sounds like a synthesized horn blip. TENOR HORN is a soft alpine horn sound (coughdrops anyone?) that unfortunately contains some kind of static-like noise on the keydown that would render it unusable for me.

Even here, though, there's work to be appreciated. In a clever programming touch, Tinhof has set up one of BARITON HORN's patch selects to play a root note on keydown and fifth on keyup, while another one plays a root on keydown and a fourth on keyup. Automated oom-pah!

When I first espied the ocarina samples, I thought, now here's something I could live without. Hi-fi samples of a cheesy little instrument. Well, what a nice surprise! OKARINA TIEF is downright lovely. A full-bodied monophonic (like the real thing) sound where pressure causes a slow vibrato, and the mod wheel gently lowers the volume and filter frequency, for very realistic variations in breathiness. The patch selects offer a polyphonic version, another with a trill at the front, and a spacy, New Agey sort of sound using the okarina samples.

OKARINA HOCH is quite similar, though not being based on such a deep-throated original, it's a tad shrill for my taste, certainly by comparison.

ASL 003: SOFTENOR SAX and SOPRAN SAX

These saxes are, of course, not traditional Alpine instruments, but I can see why Tinhof wanted to include them. The SOFTENOR SAX is beautiful, and hands down the best sampled sax I've heard for slow, soulful soloing. True, it has built-in vibrato in the basic samples, but I found that to be no problem at all in context.

It's a monophonic, crystal-clear sound, with ample breathiness, and each note is augmented with just enough key clicking noise to make it sound totally real. If, for some reason, you object to the key clicks, they're in their own layer and can be 86ed easily enough. The patch selects may be a little lacking here (they include a pitch fall where the pitch glides down instead of falling in discrete steps like a real saw), but, jeez, I love this sound.

SOPRAN SAX is not as successful, with velocity switching you between two sets of samples, one too soft for my taste, and one too piercing. And, oddly, I actually found the key clicks to be annoying here (maybe they only grate due to my letdown after the tremendous rush I got from the spectacular SOFTENOR).

ASL 004: HACKBRETT and HACKBRETT 139

HACKBRETT's very pretty, offered here in full and memory-saving (HACKBRETT 139) versions. If you've ever had your head inside a dulcimer (no, even I've never accomplished that) it would probably sound much like this: ethereal, nearly delicate. It's a sound with a long, long decay, which, the manual notes, is usually damped with the palm of the player's hand. You may find it necessary to change Envelope 3's mode to NORMAL and the last time setting to something around 40.

One really thoughtful technique employed here, and a mark of the excellence evident in the ASL that I mentioned before, is that Tinhof committed a layer to a faint harmonic, inherent in a real hackbrett note, that would otherwise be lost in the looping. It helps create just that scent of captured overtones that one gets when the high frequencies of a sound are well-recorded without the treble being unnaturally jacked up. Subtle, and slick.

Special note should be made of the ** patch select, with its hard attack and short release. As the documentation points out, it's like an organic-sounding stereo clavinet, very tasty for modern funk (with polypressure pitch bending, no less).

ASL 005: ZITHER and THE THIRD MAN

This is simply a well-sampled zither, with a pleasing polykey vibrato. I could have used a patch select with a second note strike on the keyup, but hey, I'll make my own.

Included on this disk, as a "bonus," is THE THIRD MAN, a sorta silly, and probably useless, sample of the beginning of the original recording of the famous theme from *"The Third Man."* The manual refers to the song as "the world's most famous zither tune." Featuring the only bad loop in the set.

Overall, Volume 1 of the *Austrian Sound Library* series is one exciting collection (got me all hyped up about my 16+ again). Of course, a reviewer will always feel better suggesting that you try sounds out in a store before plunking down your bucks. I do hope stores stock this set so you can. If not, you might want to take the plunge anyway if you're looking for the ultimate accordion, dulcimer, ocarina, zither and/or sax samples for a slow solo. Whew! ▬

RND (♪♪♪)

Ensoniq News

ASR-10 — Ensoniq has released a new O.S. for the ASR-10, Version 1.61. This version corrects a problem for SCSI users which could cause a SCSI device on ID#0 to be accidentally erased when using the COPY FLOPPY DISK command. This O.S. version requires ROM version 1.5B, and is being shipped to all Ensoniq dealers for you to copy free of charge. Be sure to bring a blank formatted disk.

SQ 32 Voice/KS-32 products — Ensoniq has released EX-02, the second card of sounds developed to take advantage of the Expansion waves in the SQ 32 Voice and KS-32 instruments. This card contains 160 new sounds and a sound manual. Sounds using the expansion waves are marked with an asterisk (*) to help identify which ones won't play correctly on a non-32 Voice SQ instrument. Suggested retail: $99.95.

Clinic dates — Ensoniq is hitting the road again with our *Spring '93* clinic campaign. Featured products at this event will include the premier of the TS-10, CD-ROM libraries for the ASR-10, and Notator Logic sequencing/notation software for the Macintosh and Atari computers. Call 1-800-553-5151 for more information about a clinic nearest you.

Hacker News

Well, we always figured this was a learning experience.... Last month's lesson: Give some kind of clue when you're running an April Fool's article. The review of the "Wordsynth" program in our April issue might have been a little too believable for our own good. We apologize to anyone who wasted time trying to chase down one of these critters. (Of course, now that a good chunk of the market research is done...)

We're going to start showing up once in a while on the Sound Management BBS (part of the worldwide MIDILink network), so this provides an additional means of getting mail and articles to us.

Call for writers: We're still looking for DP/4 material! (Hang in there DP/4 users — we're starting to get nibbles.)

Third Party News

Tom Shear's Sample Biz has moved to 706 University Drive, State College, PA 16801.

The International Samplers' Cooperative has joined the list of volunteers in our Transoniq-Net. And Eric Olsen has dropped off.

We'd like to welcome **Perfect Loop** (samples) and **Aaronstotle Music Products** (hard drives) to our Hacker family of advertisers.

TRANSONIQ-NET

HELP WITH QUESTIONS

All of the individuals listed below are *volunteers*! Please take that into consideration when calling. If you get a recording and leave a message, let 'em know if it's okay to call back collect (this will greatly increase your chances of getting a return call).

All Ensoniq Gear – Ensoniq Customer Service. 9:30 am to noon, 1:15 pm to 6:30 pm EST Monday to Friday. 215-647-3930.

All Ensoniq Gear – Electric Factory (Ensoniq's Australia distributor). Business hours – Victoria. (03) 4805988.

Sampling – The International Samplers Cooperative, 310-455-2653 or via MusoBBS, 818-884-6799.

SD-1 Questions – Philip Magnotta, 401-467-4357, 4 pm – 12:30 EST.

VFX Sound Programming Questions – Dara Jones, Compuserve: 71055,1113 or Midi-net and Fido-net. The local BBS is the Nightfly in Dallas: 214-342-2286.

SD-1 Questions – John Cox, 609-888-5519, (NJ) 6 – 8 pm EST.

SQ-80 Questions – Robert Romano, 607-533-7878. Any ol' time.

Hard Drives & Drive Systems, Studios, & Computers – Rob Feiner, Cinetunes. 914-963-5818. 11 am – 3 pm EST. Compuserve: 71024,1255.

EPS, EPS-16 PLUS, & ASR-10 Questions – Garth Hjelte. Rubber Chicken Software. Pacific Time (WA). Call anytime. If message, 24-hour callback. (206) 821-5054.

ESQ-1 AND SQ-80 Questions – Tom McCaffrey. ESQUPA. 215-830-0241, before 11 pm Eastern Time.

ESQ-1 Questions – Jim Johnson, (503) 684-0942. 8 am to 5 pm Pacific Time (OR).

EPS/MIRAGE/ESQ/SQ-80 M.U.G. 24-Hour Hotline – 212-465-3430. Leave name, number, address. 24-hr Callback.

Sampling & Moving Samples – Jack Loesch, (908) 264-3512. Eastern Time (N.J.). Call after 6:00 pm.

MIDI Users – Eric Baragar, Canadian MIDI Users Group, (613) 392-6296 during business hours, Eastern Time (Toronto, ONT) or call MIDILINE BBS at (613) 966-6823 24 hours.

Mirage Sampling – Mark Wyar, (216) 323-1205. Eastern time zone (OH). Calls between 6 pm and 11 pm.

SQ-1, KS-32, & SD-1 Questions – Pat Finnigan, 317-462-8446. 8:00 am to 10:00 pm EST.

ESQ-1, MIDI & Computers – Joe Slater, (404) 925-7929. Eastern time zone.

HYPERSONIQ

NEW PRODUCTS

Startling new software makes Ensoniq go "Bowp Bowp Bwaa!" **WAVeBOY Industries** announces the *Resonant Filter Disk* for the Ensoniq ASR-10 and EPS-16 PLUS. WAVeBOY is continuing to deliver astounding new effects algorithms for Ensoniq samplers. The latest disk contains the RESONANT FILTER Effect, a striking re-creation of the timeless Minimoog. A four-pole low-pass filter is coupled to a lightning fast ADSR envelope generator. The filter resonance control gives it that distinctive analog sound - a sound that turns the sampler into a fun, funky, fat old synthesizer. To show its stuff, the disk comes with a collection of raw Minimoog samples that come to life when they hit the resonant filter. And it's so easy to program the effect that you'll quickly be transforming your entire library of clean digital samples into strange and wonderful synth sounds. The RESONANT FILTER effect algorithm also incorporates some of WAVeBOY's parallel effects: both chorus and reverb. BUS1 plays through the filter, with post-filter sends to the other

effects. Meanwhile other sounds can get to the chorus and reverb via BUS2. Other fun features include a choice of single or multi-trigger modes on the ADSR envelope generator, plus both keyboard tracking and programmable modulation of the filter cutoff frequency. A sample-and-hold function can randomly jump the filter around for that classic ARP sound. But wait... there's more! The new WAVeBOY FM+FX algorithm uses software inside the effects processor to synthesize one voice of live frequency modulation. The DX-7 used sine waves. The first Synclavier used a sine wave and a complex waveform. Now you can go the last step: modulate any sound with any sound! The results are unpredictable: really crazy, really fat, and sometimes really grungy. FM+FX includes chorus and reverb in the same algorithm. The RESONANT FILTER disk, with FM, is $39.95, direct from WAVeBOY Industries. For further information, contact: WAVEBOY Industries, P.O. Box 233, Paoli, PA 19301. Phone: (215) 251-9562.

Ensoniq Corp. is now shipping *Notator Logic*, the long awaited sequencer/notation program for the Macintosh platform, designed by Emagic. *Notator Logic's* software uniquely offers the integration of sequencing and notation, while simultaneously assisting in controlling MIDI set-ups. The same people who were responsible for the design of the award-winning *Notator SL* (for the Atari platform) have started fresh in designing *Notator Logic* using the latest programming techniques. Features include unlimited tracks (any length), unlimited sequences, unlimited polyphony per track, 960 PPQ resolution (auto-dynamically set) and a tempo range from 0.05 to 999.99 BPM. *Logic* also allows the user to look at and edit sequences in real time using the event list, matrix or hyper edit, or notation — all at the same time! In the notation department, *Logic* has automatic triplet recognition, unlimited number of staves, unlimited number of styles, unrestricted text input anywhere on the score page, WYHIWYG (What You Hear Is What You Get) performance, and much more. A version for the Atari platforms (including the new Falcon) should also be out by the time you read this. For more information, call Ensoniq's Customer Service at 215-647- 3930.

New Sound Music announces *Soundtracks For MIDI*TM and *Latin and Afro Cuban Grooves*. The *Soundtracks for MIDI* library of original music offers writers and producers instant access to over 100 professionally arranged soundtracks that can be used for film, TV, radio, business presentations, whatever — with no license fees. Many different styles are included and, of course, all can be easily edited. The *Latin and Afro Cuban Grooves* disk includes over 70 different Latin rhythms, lead sheets for all sequences and playing tips. The *Soundtracks* library is available in SD-1, VFXsd, and EPS formats. The *Latin* library is available in SD-1, VFXsd, EPS, and SQ-80 formats. Each disk is $49.95. For more information, contact: New Sound Music, PO Box 37363, Oak Park, MI 48237. Phone: 313-355-3643.

The Perfect Loop announces their *Classic Analog Collection* of samples for the Ensoniq EPS-16+, ASR-10, and TS-10 samplers. Just a few of the sets available include: Oberheim Matrix, Moog MiniMoog, Yamaha CS, SCI Prophet 5, Roland Jupiter 8, Oberheim OB8, and SCI Prophet VS. The company's engineer, Joel Bouchard, says they're committed to developing studio-quality samples that are unique and fully exploit the Ensoniq features — adding new dimensions to the sounds while keeping true to the original motif. Each set contains a minimum of 20 sounds and costs $49.00. A sample disk is also available for $5. Dealer inquiries are invited. For more information, contact: The Perfect Loop, 6855 Jimmy Carter Blvd., Suite 2150, Norcross, GA 30071. Phone: 404-448- 9243.

HACKER BASEMENT TAPES

Daniel Mandel

Tape: *Sequences and Consequences*.
Artist: Bill Sethares.
Contact: Rivendell Studios, 622 N. Henry Street, Madison, WI 53703.
Equipment: A Quantar MIDI guitar controller and an EPS as well as other sound modules.

Auditory Alternatives

Before we get down to business here, I have to brag and tell you all that I just returned from Sydney, Australia — my big vacation of the decade — where I did actually hear a Digeridoo! Without reservation, I recommend a visit to Sydney to anyone thinking about a big, really big, trip outside the states! But enough of these diversions...

This tape is a real mixed bag of vocals and instrumentals. It arrived with its own booklet and very presentable cassette labels. However, for all of the information in the booklet, there was not much information about the actual equipment that went into making this tape.

What was in the booklet? Glad you asked. Without giving you the long form, Bill has gone into some detail explaining his motivations and sources for his inspirations, as well as describing the type of music and intricacies of each tune. Some songs do need description, because Bill has attempted some elaborate arrangements. One song uses an Aeolic scale from ancient Greece, another uses Archytas' chromatic scales, based on three equal tetrachords, another uses alternate temperaments. The pictures accompanying the text appear to be, upon close inspection, maps from the Tolkien books, which is where the name Rivendell Studios came from as well.

The recording quality is outstanding. Bill's voice comes through with crystal clarity and all the mixes are very well thought out. Bill really does have a good voice all by itself. The engineering on this tape is among the best I've ever heard.

The pace of all the songs is heavy. At worst it is quirky or just uncoordinated. Some of the songs seem to almost trip over themselves. At best they are laid back grooves. The "WHAT'S THE MATTER WITH ANNIE?" BLUES is very listenable piano and flute blues. EVERYTHING I SEE IS NOT FOR SALE is a clever response to appreciating nature. JOYOUS DAY, although it had a beautiful melody, was all but interrupted by the tempo and percussion. The sequences are apparent because the awkwardness was a repeating factor in the song.

WHAT IS A DREAM is the song that employs the Aeolic scale. Many of these songs require a second or third listen, because our ears are not at all used to hearing alternate scalings, tunings and tempos. This song ends beautifully with harmonies. HYSTERIA BOREALIS is a scattered affair involving timpani,

vocal patches, string bites, bells, random percussion and odd synth sounds. Yet, here again the timpani sequence at the heart of the song is a bit quirky and obvious as a sequence. After this overly driving beat is established, it would have been a great relief to hear a difference in rhythm or emphasis.

DAVID begins with a very flowing string/bell patch that carries the chord progression throughout the song. Here again, the drums seem to be fighting against the flow of the song, by entering sporadically — or emphasizing beats for too few measures. Fortunately, the bass patch was very supportive to the string/bell patch and at times meshed well with the drums.

SIGNS brings us the scale of Archytas. As far as I can tell Archytas was a blues musician who lived in ancient Greece. This song is not awkward at all, although it is a bit slow and minimalistic. The instruments do balance well. There is much less a sense of paying attention to a sequence on this song. It sounds as though musicians are playing together.

IMAGENARY HORSES Bill describes as galloping piano riffs and bucking synth lines. This is the best and most moving piece of song writing on the tape. While I am not sure that the horses are galloping and bucking, they are moving around the woods and the fields. The end is rather abrupt and it would have been interesting to hear a different approach.

LAW OF LOVE has a wonderful introduction, and Bills voice sounds especially good with this tune.

DREAM TO THE BEAT OF YOUR HEART turned up with the best lyrics of the bunch. Here's an example:

and I think of the shapes your body makes
Think of the way your fingers play
Think of, the one I love
I'm gonna dream to the beat of your heart

This is an ambitious work by Bill Sethares, and we hope to hear more from him in the future! ▬

If *you* want your tape run through the ringer, err, Hacker, just mail it off to: Basement Tapes, *Transoniq Hacker*, 1402 SW Upland Dr., Portland OR 97221.

Bio: Daniel Mandel is a songwriter, sound designer, and has sold pro audio and keyboard equipment and produced demo tapes for local bands.

opti-case

Cases for Ensoniq Equipment

Now available direct from factory (except in current dealer areas) our full line of ATA cases Category I and II

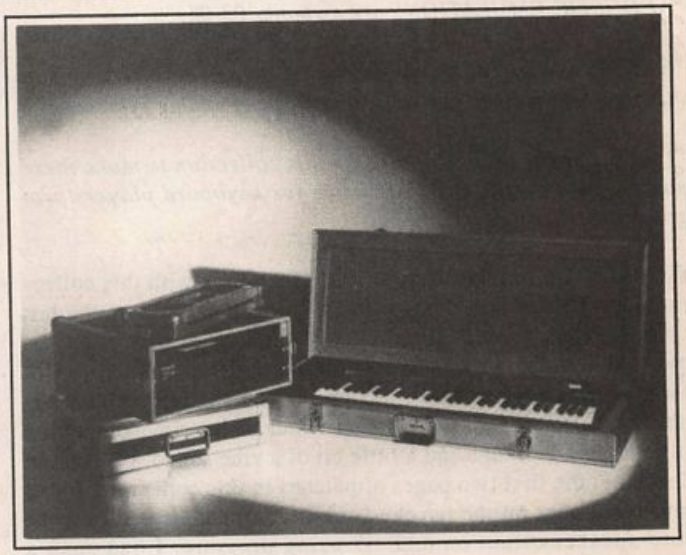
Keyboards: EPS, EPS-16 PLUS, VFX, VFX-sd, SQ-80, SQ-1, SQ-1+, SQ-2

Module rack cases: 3-space, 4-space, 5-space, 6-space. (2-space racks available with surface mount hardware only.)

Mention the (TH) code number 839 when inquiring to receive our special factory direct pricing.

CALL US AT 1-800-637-6635

8:00 am to 4:30 pm CT, Mon. – Fri.
We accept: COD, Visa, Mastercard, American Express.
Dealer Inquiries Welcome!



Shown: 4-space rack with EPS-16 PLUS module, 2-space rack, Eagle-I VFX-sd case

EAGLE

OPTI-CASE • RT. 6, BOX 235 • HENDERSON, TX 75652 • FAX: 903-657-6030

The Doctor Strikes Again

Daniel Mandel

For: SDs and VFX/sd.
Product: Volume II — 60 sounds.
From: Brad Kaufman, 11-26 Saddle River Road, Fair Lawn, NJ 07410.
Price: Offered as trade (in like media) for *original* VFX programs — no tweaks, copyrighted sounds, etc.

Dr. B has done it again. If you weren't aware of his first volume which I reviewed last year, you should definitely pay attention to what he has done this time around. So without further ado let's start out with a few words from Dr. Brad:

"ELECTRIC PIANOS are found on pages 01 and 02 and are all variants on one theme. The mod wheel detunes the 2 voices (chorusing) and is especially effective in the RODZ pianos and TINE pianos. Many of the pianos also have a tine whose volume is adjustable by the data entry slider.

"ORGAN SOUNDS usually have the roto-speaker effect activated by pressure. In PLAY BALL and ROLLER RINK the roto-speaker is toggled on and off by pressure.

"BASS SOUNDS include acoustic-electric and synth varieties.

"ACOUSTIC EMULATIONS are on banks 03-05.

"SYNTHS are spread throughout — be sure to try aftertouch on them all. I hope some of these remind you of analog synths.

"I have worked long and hard on this collection to make these patches fun, useful and instructive for keyboard players/programmers."

First let's talk fun. Dr. Brad scored 100 points with this collection, as with his last. They are very useful. When was the last time you bought a collection of sounds and got lost for hours exploring the sounds in the first two banks? [answer: When I sent away for Dr. Brad's first collection.] If you have a special fondness for that standard old suitcase Rhodes electric piano with a little bit of a bell tone and a little bit of a vibe sound, you should check out the first two pages of patches in this collection. I also must comment on the psyche-funk-organ patches that turn the roto-speaker effect on and off using pressure. I had such a wonderful time getting used to how this played that I almost ignored how great the organ sounds are all by themselves. It is this kind of innovation that makes the SD/VFX such expressive instruments. I told Dr. Brad when I spoke to him that I thought he missed the boat on naming a couple of these funky organ sounds, but when he created them he wasn't thinking psychedelia, he was thinking roller rinks.

Let's talk useful! These sounds are evolved basic patches that I have already copied into my personalized set of INT patches, strategically placed in and amongst my other gems. But I gotta tell you, I had a difficult time picking which Rhodes-like patch was best. The synth patches are all basic, but don't get me wrong here, they are very playable and expressive. Basic is good.

If you've read some of my reviews, you may have noticed that I tend to harp (I couldn't resist) on sax patches because they sound so unrealistic when they are played. Well, Dr. Brad has included several sax patches and I have to admit that SEWERSAX sounds very realistic. But more than that I like his synthetic saxes because they have the expression and guts that a sax should have, but you don't have that guilt that comes with faking an acoustic saxophone.

Let's talk instructive! Because these are arranged in sets of patches you can delve in and explore how Dr. Brad put them together by comparing them to each other. For instance, what gives BALAD PIANO its unique sound as opposed to FENDR BELL? Also as you explore and make changes and you begin to tweak things to your liking, exploring what potential the VFX and SD has for creating and modifying envelopes, you may begin programming for yourself, and (don't tell anyone this, but) it's sorta fun.

Technical note from Brad: "For reasons unknown to me, the VFX has no trouble with high-output patches. The same patches overdrive the SD-1's effects processor, causing distortion (sometimes musically desirable, sometimes offensive). So for the SD-1, a toned-down version of the collection is present on the disk named WIMPY. The original version is named TURBO."

I found that the TURBO was too loud and noisy and I preferred WIMPY. Except that I felt bad that I had to choose WIMPY and I didn't want anyone to know that the one I chose was WIMPY. Now, before you release any more copies, Dr. Brad, could you change the name to LOW CAL, or even NORMAL, but perhaps not WIMPY. You are dealing with the egos of thousands of musicians here.

If Dr. Brad could send along an audio tape explaining each one of the patches you might be able to get a sense of the enthusiasm he puts into each sound. Good things tend to bubble up where you don't expect them!

Finally, I would say that it is really a good idea that we fellow Hackers support someone's efforts like Dr. Brad's, because he is just a Hacker and he happens to have done a great job. In fact Dr. Brad is probably a little too conservative. If he had made up a fancy name for his sound generation company and printed upscale labels in pastel colors and named his patches with words that could be easily pronounced by yuppies, probably more people would rush out and buy his sounds. But the bottom line is, reward yourself and Brad Kaufman with Volume II of his VFX-SD/SD-1 patches. ▬

Making BigBux Doing What You Do Best

Part 2 — How to Pay for All Your Equipment

Jeffrey P. Fisher

I'm no accountant. What I'm about to tell you reflects my limited knowledge. You should consult a qualified tax advisor before skidding head first into business. I learned some hard lessons along the way. You can minimize potential downsides by spending a few bucks and getting some professional advice before it's too late.

When you are in business, all business related expenses are a tax deduction. Sometimes major equipment purchases are depreciated rather than written off as expenses. When you expense an item, you deduct its entire cost in the year it is placed in service. Under IRS Section 179 you can expense up to $10,000 worth of equipment each year.

To depreciate an item, you deduct a portion of its cost over several years. For most electronic equipment this is either five or seven years. Ensoniq keyboards take about seven years to depreciate fully. So you have a choice of writing off your major equipment purchases or carrying portions of its cost over several years.

However, let's look at how investing in your business can mean substantial tax savings to you. For example, you compose a simple score for $2,000 gross income. If you are in the 28% tax bracket, pay the 15.3% self-employment tax, and have a 3% state income tax, your net income, after taxes, is $1074 (2,000 x 46.3%). You would write the government a check for $926!

If you spend $2,000 for a new SQ-1, you reduce your gross income to zero. You pay no taxes because you can expense the equipment purchase (under the $10,000 limit) thus offsetting your income. In reality, you have still spent the money. Instead of paying the government though, you've strengthened your business through a wise equipment purchase. At the same time, you've saved 46.3% (the amount you would have paid in taxes) and therefore acquired a new Ensoniq synth for almost half-price!

This is just one example. I am a firm believer that there is absolutely no advantage to running your business secretly — the so-called underground economy. There are too many legitimate business deductions and other advantages when you start and run an actual business.

If you make $9,999.99 in a year, you can spend every last penny on new equipment that makes your business more profitable. If you don't need this income to live on, you can get a decent studio together quite quickly. In other words, your soundtrack scoring business allows you to write off much of your current lifestyle as a business expense. The main thing to watch out for is the "hobby rule." You have to make sure that you can show that you're really and truly in business to make money. You don't actually have to show a profit, but you do have to be able to show sincere efforts to make a profit if you're ever audited. Talk to your accountant for all the details about business deductions.

Don't forget — music, tapes, CDs, sounds, accessories, subscriptions to music-related magazines are also legitimate business deductions, too. And, they don't have to be depreciated — they're expenses even if they add up to over $10,000.

You can get many free business and tax-related publications directly from the Internal Revenue Service by calling IRS PUBLICATIONS at 800-829-3676. Here are some of the most useful:

- Tax Guide for Small Business #344
- Business Use of Your Home #587
- Business Expenses #535
- Self Employment Tax #533
- Tax Withholding and Declaration of Estimated Tax #505

Another good primer is *Starting and Managing a Business From Your Home* published by the Superintendent of Documents, US Government Printing Office, Washington DC 20402. It's only $1.75!

There are also a bunch of super-cheap publications ($.50 to $2.00) available through the US Small Business Administration. Call your local office (in the White or Yellow Pages) or 1-800-827-5722 and ask for their latest catalog.

Next time: Preparing your demo tape. ▬

Bio: Jeffrey P. Fisher scores, jingles, and sound designs for documentary, drama, and business TV. He is also the author of the book: How To Make Big Money Scoring Soundtracks — Your Complete Guide To Writing And Selling Original Music.

CHANGE OF ADDRESS

Please let us know at least four weeks in advance to avoid missing any issues. The Post Office really will *NOT* reliably forward this type of mail. (Believe us, not them!) We need to know both your old and your new address. (Issues missed due to late or no change notification are your own dumb fault – we mailed them!)

Stereo or Mono Sampling on the ASR-10

A Few Insights on Making an Informed Decision

Barry Carson

Ah, yes, it's sampling time! But, before we actually begin, we have a major consideration to think about — whether to sample in stereo or mono. Since the ASR draws upon its rich EPS heritage, it has more than one way to operate in stereo, in effect giving you three ways to consider a sampled sound: true stereo, true mono and (for lack of a better phrase) pseudo stereo. While the first two of these may need little explanation, let me spend a few minutes on the last; perhaps an anecdote would be edifying.

About a year or so ago, I cooked up a set of EPS 16+ samples of the Yamaha SY77 for my good friend, Garth Hjelte (also known as the Man With the Chicken of Rubber). The SY77 creates these big stereo sounds, and I had to figure out how to get them into my '16+ which has only one input jack. A closer look at "typical" SY77 sounds often revealed a big FM or RCM (similar to FM but with a sampled waveform used as a modulator) sound panned hard right and detuned up a notch and an identical sound panned left and detuned down a notch. This would create a huge stereo sound that could be further enhanced by the onboard stereo effects. One can guess exactly what I did. By turning off one of those RCM sounds, I could create a mono sound that would be pretty easy to sample and loop. I would bypass the SY77 effects so the sound would, again, be cleaner and easier to loop. I could then sample this mono sound into layer one, and copy it to make layer two (using the COPY LAYER command). These two layers could then be detuned (using the edit pitch fine page, up maybe 3 for layer 1 and down for layer 2) and panned right and left (using the edit amp/pan page), just like the original. Similar stereo effects could then be added by the EPS 16+'s own (and frankly, better sounding) effects processor. Presto — a pseudo stereo sample from a mono source.

Since many "stereo" synth sounds are actually some variation on this theme, the creation of pseudo stereo samples can save you lots of memory and trouble. How? Every time you make a stereo sample on the ASR-10, you will use exactly twice the amount of memory that would be needed to make a mono sample of the same length. Making a copy of a layer (parameters only) uses very little memory.

It should also be noted that while a lot of editing can be done with the stereo Layer Link in the on position (like setting filters, creating envelops etc.), you should always loop halves of a stereo sample separately with the Layer Link off. Since this seems like it would take twice as long, the obvious question is "Howcome?". Since you asked, when the stereo Layer Link is on, the ASR turns off the expert-system-auto-zero-crossing-positive-value parameter that can make looping so easy on the newer Ensoniq samplers. Looping with this parameter off may bring smiles to the faces of long time Ensoniq users who have become nostalgic about creating loops on the Mirage, but it is not recommended for normal people (no letters please). With the Layer Link turned off, both halves of the stereo sample can be looped separately using the expert- system parameter (it may be necessary to go to the Edit System/Auto Looping page to turn it back on), but, of course it will take you twice as long as looping a mono sample. Copying a mono layer that has looped samples will copy the loops along with everything else.

To summarize, if you are sampling a stereo synthesizer sound like the one described above, you save yourself a lot of memory and looping time if you create a pseudo stereo sample.

Good old-fashioned mono sampling is what you want to do to recreate those all time samplers' favorites — the MiniMoog and the DX-7 and things like that. Of course sounds like these can also be played back in pseudo stereo (as described above) to make them even "better" than the originals (wouldn't you have loved a polyphonic, stereo MiniMoog back in the 1970s?). It is also possible with the ASR-10 to play one of these mono instruments through the ASR's built- in stereo effects and sample the resulting sound in true stereo. And don't forget that, just like on the '16+, any mono sample can be played back through a stereo effect creating a stereo sound.

Most of the above is stuff that EPS users have known about for years. Now we head into new ASR territory: true stereo sampling. The first question may be what exactly to sample. Obvious answers include string orchestras, symphonic bands and choral ensembles. While these would sound real nice indeed, they may be a bit daunting to average sampling folk. An easy way to start stereo sampling is with a nice, basic non-electric instrument, like an acoustic guitar. Everybody knows somebody with a guitar lying around the house.

Because of the way the wooden body of this kind of instrument passes the vibrations of the strings into the air, it doesn't pour out a unified, homogeneous sound the way a loudspeaker might. Although it is a somewhat subtle effect, playing back a stereo sample of an instrument like an acoustic guitar gives numerous auditory clues that this is the sound of a real instrument in real space as opposed to a recording of an instrument. This vastly enhances the illusion that your sampled instrument is indeed real.

Now that we've picked our instrument and decided to sample in stereo, let us round up our tools to do the job. We will need

some kind of acoustic guitar (or mandolin or something like that). We will also need a pair of matched microphones (this is stereo, remember?). Microphones that are not matched will work, but the tone quality of the channels will be different. This may not create the best effect, but it will give you a chance to get started if you can't find identical mics. Speaking of microphones, make sure they are wired properly to avoid your samples being out of phase. I was recently doing a quick demo of the ASR. I was playing back a stereo sample I had just made, and to show how much keener stereo is than mono, I switched the amp to mono mode. I expected to hear the same sound without the stereo effect, but instead the sound almost completely disappeared. Sure enough, it turns out the mics were wired improperly and phase cancellation devoured about 90% of my samples when they were played in mono — not a pretty sound.

Now we're ready to go — next time we actually get that stereo acoustic guitar sound into your ASR-10. We also will look at sampling through the effects, how stereo loops can actually help enhance a sound, and a contest looking for some creative and conceptual uses of stereo sampling. Prizes include actual Mirage samples formatted for the instrument of your choice and autographed by somebody (we're still looking for volunteers). Details to follow — same Hacker time, same Hacker station. ▬

Bio: Barry Carson has sampled everything from lutes, violas and krumhorns to Vox combo organs and digital synthesizers. He has sampled on the Mirage, EPS, EPS-16+, and ASR-10 — as well as the Roland and Prophet samplers. He is eagerly awaiting the 10th Anniversary Mirage reissue.

Avoiding Dullsville

Tom Shear

I'm sure that I'm not the only EPS owner out there who, in an ongoing quest for new sounds, has sampled sounds from existing records, tapes, or CDs. While this practice may eventually become illegal, at this point there have been no reported cases of lawsuits over the use of an individual sound. As long as this is the case, we sound junkies have plentiful, cheap (that is, unless you get sued) sources for new sounds. I've found that there are an average of 3-4 completely isolated sampleable sounds for every album I buy and even more if I care to dig a little, so it's clear how fast one's library can grow this way. Anyway, the point here is not to encourage you to become sound thieves, but rather to discuss a particular problem you may encounter if you choose to do this, and the best solution I have been able to find thus far.

What is this problem? Well, it exists if you don't have a CD player and must sample from cassette, or if the CD you're using is from an old recording and therefore isn't of the highest fidelity. You hear an awfully nice snare sound on one song, and decide you'd like to add it to your library. So you sample it, wait, press the root key, listen, and...and well, you sigh, because your sample sounds really dull and flabby and for most purposes, it's totally unusable. So what do you do? Throw away this new sound? Sure, if you're a schmuck! But since you aren't, I'm going to suggest a trick to salvage this puppy that's worked for me on many occasions. The technique I am discussing is aimed specifically at non-melodic and drum sounds.

1. Sample the drum sound you want to use. Select a root key and truncate off any unnecessary parts of your sample.

2. Listen to your sample. It's identifiable as the original sound, but sounds very muffled, huh? Don't worry!

3. Create a new layer and copy this new wavesample into it. Select this newly copied wavesample for editing and press EDIT-FILTER. Select F1/2 LP F2/ 2 HP. This individual wavesample should now consist only of high frequencies and will sound almost tinny.

4. Hit EDIT-PITCH. What I suggest you do here is bump the ROOT KEY of your copy of the original wavesample up a note or two. This helps avoid any problems you might encounter with unwanted phasing. Optionally, you can try shifting the pitch by extreme amounts to get different sounds.

5. Go to the AMP page and adjust the volume of the copy wavesample to taste. (I usually find this isn't really necessary.)

What we've done here is to give our sample a sharper, clearer attack and added some high frequencies that make it sound brighter than it really is. Because most drum sounds are very short, the attack transient is extremely important and as a result this technique works surprisingly well. Incidentally, this also works quite nicely if you want to transpose a drum sound down a few notes, but don't want it to lose its punch.

So next time you're trying to take a sample of aunt Shirley playing the triangle off your 5th generation copy of a cassette and are having trouble making the sound punch through like the original, keep this technique in mind. It's saved me more than once! ▬

Waveform Mutilation for SQs & KSs (& SQ-80s!)

Part 11 - Back to the Bass (X)

Jack Stephen Tolin

Ever since the beginning of sound synthesis, people have wanted to create the most moving bass sounds to get the most motion out of their music. This is most evident in much of today's dance music, R & B, and other assorted contemporary music styles. The reason is simple: It is hard to sit still when listening to the right bass line that's being provided by just the right bass sound.

For example, if you're familiar with Keith Thomas, you will notice this all over his music for Amy Grant, Carman, and many others. In *"Holy Ghost Hop,"* from Carman's *Addicted to Jesus* album, the bass sound is so stinkin' cool, I can hardly stand not having it. Another music programmer (pardon the term) who does excellent work with bass sounds is Michael W. Smith. Try listening to just about anything from *Change Your World* or *Go West Young Man.*

But part of the trick with making a bass sound stick out is not just a matter of what the essential patch sounds like. With some creative programming, you too can have bass sounds to die for in your very own music. Though it is initially a matter of taste, part of the trick is in the part played. How you play (or sequence) the sound can have a major impact on how the sound does its ultimate job. Let us now proceed to step through a complete example from the ground up.

And so, without further ado, let's begin.

The sounds we will be using this month include "Steinberger BassX" for the SQ/KS series, and "BASS-X" for the SQ-80. ESQ-1 users will want to modify the wave on OSC2; you can probably try just about any wave(form) there is. This is what I did: on OSC2, OCT is changed from -3 to -2 and WAVE to "SAW"; on DCA2, MOD1 is changed from *OFF* to ENV1 with a depth of +63 and the level is reduced from 63 to 00; ENV1 is set to look something like this:

+63	+63	+00	00L	52
00	10	02	00	00

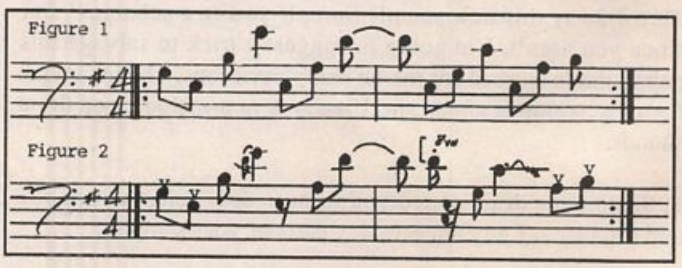
This is the initial of a typical transient — it should reproduce a "tap" at the beginning of the sound. Adjust to suit for taste. You may also desire to adjust the OCT value of OSC2 depending upon the wave(form) you choose. A wave(form) such as PULSE, NOISE1, 2, or 3 will yield more of a metallic initial while something like SAW or SQUARE will yield more of an analog analogue. You may wish to substitute Pedal for Press if you have a CV pedal. If not, you will probably be restricted to taking turns switching each real-time controller to Wheel.

Notice that both of these sounds have a few things in common: a base (or bass) waveform, a waveform that constitutes a partial of the initial attack of the entire program itself, and a wave that will come in depending upon the velocity (SQ/KS: Voices 3, 1, and 2; SQ-80: OSCs 1, 2, and 3 — both respectively). The base waveform is a bass waveform via the identity postulate — it comprises the basic bulk and identity of the program. The initial attack is embellished with a blip-like sound (the "tap") that is modulated to sound a little different every time you hit a note. It comprises a simulation of the randomness of analog sound in general. Hitting a note harder or faster will bring in another wave to further embellish the sound.

Some small adjustments you may want to make may require being aware of certain parametric guidelines, specifically the following — for "SteinbergerBassX": Vel-Level and Vel-Attack on the Amp bank for Voice 3 control the general velocity response of the program (you may want to copy these values to their respective places on Voice 1 as well); the Vel window parameter in the Output bank controls how easily Voice 2 comes in; Modwheel controls vibrato; Modpedal controls the Chorus Rate. For "BASS-X": Mono on the Modes page may be turned ON for more of a Moog feel; aftertouch opens up the filter a bit; Wheel controls vibrato; Pedal emphasizes the panning motion. An important difference between the two sounds should be noted: Voice 2 in "SteinbergerBassX" is brought in *suddenly* by any velocity greater than that of the value as indicated by Vel window in the Output bank. OSC3 in "BASS-X" is brought in *incrementally* by ENV2 which modulates DCA3. Another important difference, and one much more obvious, is that the SQ-80 program sounds much more analog, much more warm and alive.

Now, try playing Figure 1 with your respective bass program, and make sure that you use a light touch. For SQ/KS users, you can easily play this by holding down the low E; every time any other keys are up, this note will retrigger. For SQ-80 users, you may want to make sure that MONO = OFF; this will maintain the initial attack of the program — you people will have to make sure you keep hitting that low E. This is a simple, no-frills bass line. It is semi-interesting but has no real variation to the bass sound itself. Ho-hum. Pass the barbecue sauce, please.

Next, try playing Figure 2 with your respective bass program, and make sure that you include all the changes: (1) notes with a "v" over them indicate a harder key-down (or faster velocity) so that all three oscillators are firing at full throttle; (2) a grace



SQ-1/2 & KS-32 Prog: Steinberger BassX

By: Jack Stephen Tolin

WAVE	1	2	3
Select Voice	On	On	On
Wave Class	Trans	Expansion	Bass
Wave	PlanetX	SynBass3	PickBass
Delay Time	000	000	000
Wave Direction	-	Forward	Forward
Start Index	00	00	00
MODSCR	LFO	Off	Off
MODAMT	+99	-	-
Restrk Decay	00	00	00

PITCH	1	2	3
Octave	+0	+0	-1
Semitone	+00	+00	+00
Fine	+00	+00	+00
ENV1	+99	+00	+00
LFO	+06	+05	+05
MODSCR	Off	Off	Off
MODAMT	-	-	-
KBD Ptch Track	On	On	On
Glide	Off	Off	Retrigger
Glide Time	00	00	00

ENV1	1	2	3
Initial	00		
Peak	99		
Break	00		
Sustain	00		
Attack	20		
Decay 1	20		
Decay 2	20		
Release	00		
Vel-Level	00		
Vel-Attack	00		
Vel Curve	-		
Mode	Normal		
KBD Track	+00		

LFO	1	2	3
LFO Speed	40	35	35
Noise Rate	99	00	00
Level	50	00	00
Delay	00	00	00
MODSRC	Off	Wheel	Wheel
Wave	Sine	Pos/Sine	Pos/Sine
Restart	Off	On	On

FILTER	1	2	3
Filter 1	3Lo	2Lo	2Lo
Filter 2	1Hi	2Hi	2Hi
FC1 Cutoff	000	127	100
ENV 2	+00	+00	-25
FC1 KBD	+00	+00	+00
MODSCR	Env1	Env1	Off
MODAMT	+25	+25	-
FC2 Cutoff	000	000	000
ENV2	+00	+00	+00
FC2 KBD	+00	+00	+00
FC1MOD-FC2	On	On	Off

ENV2	1	2	3
Initial	99		99
Peak	69		99
Break	54		75
Sustain	34		00
Attack	00		00
Decay 1	15		35
Decay 2	34		55
Release	00		00
Vel-Level	59		19
Vel-Attack	00		00
Vel Curve	Convex		Convex
Mode	Normal		Normal
KBD Track	+00		+56

AMP	1	2	3
Initial	70	99	99
Peak	99	99	99
Break	00	99	75
Sustain	00	00	00
Attack	00	00	00
Decay 1	10	50	50
Decay 2	20	50	70
Release	16	16	30
Vel-Level	00	00	06
Vel-Attack	00	00	06
Vel Curve	-	-	Linear
Mode	Normal	Normal	Normal
KBD Track	+00	+00	+56

OUTPUT	1	2	3
VOL	99	99	99
Boost	Off	Off	Off
MODSRC	Off	Off	Off
MODAMT	-	-	-
KBD Scale	Zone	Zone	Zone
Key Range	A0 C8	A0 C8	A0 C8
Output Bus	FX2	FX1	FX2
Priority	Med	Low	Med
Pan	+00	+00	+00
Vel window	>000	>088	>000

8-VOICE CHORUS	
FX-1	99
FX-2	49
Chorus Rate	09
Chorus Depth	18
Chorus Center	50
Feedback	+00
MOD (Dest)	Rate
BY (MODSRC)	Modpedal
MODAMT	+99

SQ-80 PROG: BASS-X — **BY: Jack Stephen Tolin**

	OCT	SEMI	FINE	WAVE	MOD#1	DEPTH	MOD#2	DEPTH
OSC 1	-3	11	29	BASS	LFO1	+03	OFF	-
OSC 2	-3	00	00	LOGDRM	LFO3	+63	OFF	-
OSC 3	-1	00	03	SQUARE	LFO1	+03	OFF	-

	LEVEL	OUTPUT	MOD#1	DEPTH	MOD#2	DEPTH
DCA 1	63	ON	OFF	-	OFF	-
DCA 2	63	ON	OFF	-	OFF	-
DCA 3	00	ON	ENV2	+63	ENV2	+63

	FREQ	Q	KEYBD	MOD#1	DEPTH	MOD#2	DEPTH
FILTER	035	12	07	ENV3	+63	PRESS	+30

	FINAL VOL	PAN	PAN MOD	DEPTH
DCA 4	63	08	LFO2	+63

	FREQ	RESET	HUMAN	WAV	L1	DELAY	L2	MOD
LFO 1	22	OFF	OFF	TRI	00	00	20	WHEEL
LFO 2	09	OFF	ON	TRI	63	00	20	PEDAL
LFO 3	00	OFF	ON	NOI	63	00	63	VEL

	L1	L2	L3	LV	T1V	T1	T2	T3	T4	TK
ENV 1	-	-	-	-	-	-	-	-	-	-
ENV 2	+63	+63	+63	63L	52	00	00	00	63	00
ENV 3	+63	+18	+00	63L	00	00	28	26	20	00
ENV 4	+63	+59	+55	10L	00	00	20	63	28	00

	SYNC	AM	MONO	GLIDE	VC	ENV	OSC	CYC
MODES	OFF	OFF	OFF	00	ON	ON	ON	OFF

SPLIT/LAYER	S/L PRG	LAYER	L PRG	SPLIT	S PRG	SPLIT KEY
OFF	-	OFF	-	OFF	-	-

note on D leads in to the high E in bar 1; (3) the low E after the high E in bar 1 is left out completely; (4) an ultra-high D "pop" (aka slap or staccato) substitutes for the first low E on bar 2; and (5) when the C is hit in bar 2, it is quickly pitch-bent up by two semitones and returned, and then, as it is bent down toward one semitone below, the modwheel is pushed forward and vibrato applied.

This figure is quite a bit more interesting than Figure 1. Notice how just one (albeit synth) bass program can be used in conjunction with a little changing of some notes to make a more catchy or — dare I say? — groovy type of bass line. One may also add passing, escape, or reaching notes as well. How about just a droning E? How about a catchy rhythmic E, A, and B? How about a walking bass line? Arpeggiation, maybe? Try anything you can dream up. Just keep in mind that a few extras from the bass program itself may make the best bass line even better.

That's all for this month. Keep those waveforms mutilated!

Bio: Jack Tolin is currently a psych major, owns CrossWave Sounds (a music production studio that markets sounds for Ensoniq instruments), and performs at Boston area churches with his econo-band, "Clay in Hand."

(800) 800 - 4654

THOROUGHBRED MUSIC

FAX (813) 238-5443

Your Music Department Store.

NOW IN STOCK

NEW ARMADILLO CASE COMPANY

	Carpet Cover	ATA
EPS, EPS-16+, SD-1, SQ-1, VFX, VFX-sd	$119.00	$235.00
Mirage, Mirage DSK	$119.00	$235.00
SQ-2	$150.00	$270.00

CUSTOM DESIGN YOUR OWN CASE!!!

Memory Expansion Kits for SD-1, SQ-1, SQ-2

Phoenix

Only $129.00

Phoenix

Internal And External Hard Drives

Customize your sampler

20 Meg Internal from $199.00

Any type HD available
Any size, any format
Also available for HD recording

Universal Sync Box with SMPTE, Song-Pointer, & Direct-Lock!

SYNCMAN is a full-feature, professional quality sync box which supports all major syncronization formats including SMPTE, MIDI Time Code, Direct Lock (for Performer) and Song Pointer. With ***SYNCMAN*** you can precisely synchronize any sequencer to tape and meet all of your synchronization needs.

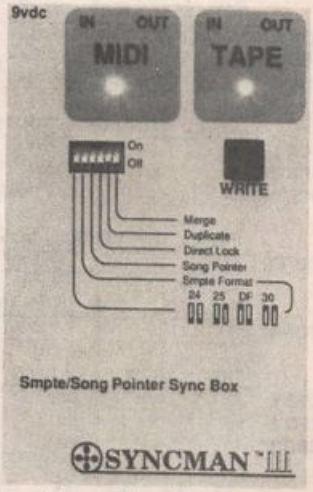
SYNCMAN features include:

SMPTE Time Code Generator/Reader

- Generates and reads all SMPTE formats including 24, 25, 30, and Drop Frame.
- Converts SMPTE to either MIDI Time Code or Direct Time Lock (for Performer).
- Special Duplication Feature allows you to duplicate recorded SMPTE Stripes.
- Includes special SMPTE "Jam" Sync to recover from tape drop-out.
- Can write SMPTE manually (with 0 offset) or remotely with specified offset upon receipt of a User Bit message and a Time Code message.

Song Pointer Sync Generator/Reader

- Special Song Pointer Sync (SPS) Duplication feature allows you to duplicate recorded SPS Stripes.
- Includes "Jam" Song Pointer Sync to recover from tape drop-out.



midiman™
Guaranteed for life.

Additional SYNCMAN Features:

- Built-in Merge Mode allows you to merge all keyboard or sequencer MIDI information with either MIDI Time Code or Song Pointer Sync information
- Dimensions: 4" x 6" x 1"
- Weight: under 1 lb.

Lowest prices on anything musical in the USA!

Power Tracks Sequences

Brian Rost

For: Reviewed for SQ-80, available for most Ensoniq instruments.
Product: *Power Tracks* sequences.
Price: $14.00 per song.
From: Midwest Digital Services, PO Box 21, What Cheer, IA 50268.

The use of sequenced backing continues to grow, for simple economic reasons. One or more good vocalists plus a MIDI rig can provide the sound of a much larger band. The problem for these kinds of acts is building up a library of sequences. Nature abhors a vacuum, though, so vendors offering preprogrammed sequences have been springing up to support this market.

Midwest Digital Services offers a series of sequences they call Power Tracks. They support a number of formats: Ensoniq SQ-80, EPS and SD-1, Cakewalk (IBM), Roland MC-500 and Korg O1-W/FD. Bearing in mind that support for the SQ-80 is not too common these days, I sampled three sequences in this format.

The SQ-80 floppy came with three sequence banks (one per song) plus a sys-ex bank intended for an Alesis D4 drum module. A track sheet for each song was provided. According to the Midwest Digital Services catalog, they offer lyric sheets and sheet music for an additional fee.

First I should mention that these sequences require more than an SQ-80 to play back. In particular, a drum machine or module is required and an additional synth or sampler is also needed. The reason is simple: With only eight-note polyphony, it would be impossible to get a lone SQ-80 to play these sequences. The track sheets clearly stated which tracks were to be played by an external module, what sound is required by that track, and what MIDI channel is used for that track. However, the program number for the external sounds is not provided on the track sheet, so the user must punch up the MIX/MIDI window on the SQ-80 after loading the sequence to get this information. In addition, the user must set up an external synth or sampler on the appropriate MIDI channel with the appropriate sounds at the pre-programmed patch location. All tracks played by the SQ-80 itself are supported by patches provided on the disk (with one exception which I will mention later) so that no additional SQ-80 programming is required.

The drum map used for all the sequences is compatible with the map used on most Roland drum machines and synth modules. For some reason, the drums are assigned to channel 15, although the standard Roland default is channel 10. This seems an odd choice, especially since channel 10 was not used for any other tracks. If you use a Roland-compatible drum source, you must either reprogram it to respond to channel 15 or edit the songs, sequence by sequence, to change the MIDI channel assignment. If you should happen to own an Alesis D4 drum module, the included sys-ex file will configure the module to work with the drum tracks. Owners of other drum machines not compatible with the Roland map are on their own.

In addition to instrumental sounds, the sequences each had a track designated "vocals." Apparently the sequence contains data for a DigiTech VHM-5 harmonizer, so if the lead vocals are processed through the harmonizer the harmony parts will be generated. I guess this is a cool idea, if you happen to own a VHM-5, but it's of no interest to those that don't. One sequence also contained a track dedicated to a "light show" (I assume a MIDI controlled light system). Again, I'm not sure of the utility of this for the average user.

The three songs I reviewed were *"Sgt. Pepper's Lonely Hearts Club Band"* (the Beatles), *"Rosanna"* (Toto) and *"Rocking the Paradise"* (Styx). In general, all the sequences were well programmed. The only real oddity was that *"Sgt. Pepper's"* features an extended jam section in the middle which doesn't exist in the Beatles recording. However, the sequences for this section are easily edited out of the song if desired. One possible oversight was in the last section of *"Rosanna."* The first track calls up an SQ-80 sound at location 70. This location maps to the cartridge slot, so it's unclear what patch was intended to be used here. If no cart is plugged into the synth, this track plays a piano sound (at location 30) which sounded okay to me. On these three songs, the electric guitar parts and horn parts were all assigned to be played over MIDI — for the purpose of this review I tried an SQ-R and it worked well. Users will have to experiment to see what patches on their gear would be best for these tracks). The guitar parts were not 100% convincing but were not bad as guitar emulations go. The rest of the parts seemed very close to the original recordings.

Overall, the three Power Tracks songs I auditioned were well done and suitable for professional use. SQ-80 users looking for pre-programmed sequences should definitely check out the Midwest Digital Services Catalog. ▬

Bio: Brian Rost has been spotted around the Boston area playing cajun/zydeco bass with Swamptone recording artists Gator Bait. He still is trying to get their accordionist to go MIDI.

Review: Joel Simpson's Ragtime & New Orleans R&B Sequences

Sam Mims

For: SD-1 and VFX-sd.
Product: Ragtime and New Orleans Rhythm & Blues Sequences.
Price: $30.00.
From: Joel Simpson Productions, 902 Montegut St., New Orleans, LA 70117, (504) 943-7322.

The wonders of modern technology strike again! If you want to learn to play the piano like Professor Longhair or Dr. John, you need no longer hang out in the smoky barrooms of New Orleans, or transcribe scratchy records to cop their styles. Now you can call up Joel Simpson, pop his disk into your VFX-sd or SD-1, and have your own keyboard play the tunes for you. You can slow them way down, isolate tracks, loop just the chorus, or solo along over a rhythm bed. It's hard to imagine a better way of learning — unless you hang with the Prof all the time, and Dr. John drops in to see your sister every weekend.

Ragtime

The songs are broken up into two groups: Ragtime and R&B. The first set of tunes is a selection of ragtime solo piano numbers that generally follows printed editions of the music, and Joel does a great job on these. They are not quantized, step-entered, robotic sequences; instead, they are played by a human, and they have feel, timing nuances, and all that good stuff. Joel is a fine piano player and knows what he's doing when it comes to the New Orleans style. The Ragtime set is very well done throughout and highly recommended. If you have any interest in playing this style of piano, you can't go wrong here.

The tunes can be played individually or the song file RAGPROGRAM will play them all in sequence for a 12-minute concert. I noticed that the first two tunes were slower in this medley than they played individually; this is because the individual sequences were recorded at one speed, then the two songs were sped slightly up as a whole. Since you can't increase the tempo of just part of a song file, the RAGPROGRAM plays them at their original speed. Joel should have adjusted the individual sequence tempos so that everything would play correctly. In addition, the reverb used for the RAGPROGRAM medley is a gymnasium from hell; just copy the 'verb from any other song in this set to fix this. These are both minor oversights that I'm sure Joel will have tightened up by the time you place your order.

If you listen closely, you can catch a clipped note here and there, as well as a few timing inaccuracies, but nothing that blatantly detracts from the performance. You can tighten these things up yourself if you so desire; I'm just glad a human played the tunes for us, rather than a step-time sequencer.

Out of necessity, the VFX-sd version relies on the CLASSIC-PNO patch, which is anything but a classic. If you have the Mega-Piano in your machine, you'll certainly want to call it into service. Or you can switch the tracks to play your EPS piano or something. Otherwise, you're subject to the VFX's limitations.

Charleston Rag is Eubie Blake's gem, and Joel Simpson's prizewinner. It made me smile big. It made me wish I could play like that — a lot.

Maple Leaf Rag also blew me away. Scott Joplin's stride piano style is wonderfully recreated, and makes me wonder how the stride players — Joel Simpson included — grew a third hand to play this stuff.

Morton's Maple Leaf is Jelly Roll Morton's version of the above tune. There is no printed sheet music for this version; this is Joel's transcription from a Morton recording. It's another very fine rendition, much more delicate, slower, and thoughtful than Joplin's piano blitzkrieg.

King Porter Stomp is a Jelly Roll original. It was much fun listening and stomping.

New Orleans Blues, another Morton tune, really showcases how to apply the "New Orleans" beat to solo piano: the left hand is playing a stride style, but instead of bass-chord-bass-chord on beats 1-2-3-4, Morton gives us bass-chord-bass on 1-(and of 2)-4, then switches later to the normal stride style to end the piece. Again, Joel does a fine job, though the timing didn't feel as smooth as in the other Ragtime pieces.

Rhythm & Blues

The second group of tunes, called MARDI GRAS, is actually two separate 60 SEQ/SONGS disk files, though if you've got a memory expander installed, you could fit these all together. (Hey — you're getting a lot of notes for your money.) There are some solo piano tunes here, but most are "band" arrangements that, unfortunately, don't work as well. They sound too thin, too synthesized, and too sequenced. Some deviate from the New Orleans style; there's nothing wrong with that in it-

self, but I expected the whole set to follow the New Orleans motif.

Another big problem I had with this set is that if you're purchasing it for use with a VFX-sd, you've got a lot of work ahead of you, correcting problems that you should not have to worry about. The internal bank of patches that loads with the sequences contains many sounds that only the SD-1 can play, and many of the tunes try to use these patches. You'll have to find reasonable substitutes on your own. You'll become particularly annoyed when you try this with the drums, as Joel uses SD-1 drum patches throughout that are mapped completely differently from anything on the VFX-sd. And, of course, you can't change the mapping on a VFX-sd. These things should all be corrected if the product is marketed for that keyboard; a user should be able to pop the disk in and play. Period.

Jacomofeenanay kicks off the set with a percussion intro which really establishes the New Orleans feel. An organ carries the melody, with a guitar doing the accompaniment. The song is set up so that you can play along on piano, and I had a lot of fun doing just that. (I'm not a fan of the ROM patch BRIGHT-PNO2 that is offered for this, so I turned off the octave transposition and swapped it for POP-GRAND.) With the push of a button, you can also switch to the guitar sound for live playing.

Do You Know What It Means (to Miss New Orleans) uses a rock ballad beat with an acoustic bass, over which a piano plays the melody. Strings also come in down the line to round things out. The soft bass sound and the hard drum sounds didn't seem to work together very well; I would have preferred a softer, jazzier drum beat. And the ending seemed a bit abrupt.

Big Chief really shows off Joel's agility on the black-and-whites. A piano intro leads into a full full band arrangement with horns, then the piano drops out and the melody is whistled before returning to a final round of piano. I wasn't too big on the whistling, though, and a lot of things just seemed way too loose. For example, in one spot a sax note is bent crazily. When I soloed just that sax track to check it out, I also found that the track started with a doubled note. There is a bit of sloppiness here; I feel that such mistakes should be cleaned up completely before the product is marketed.

Following the band arrangement is a solo piano version of *Big Chief*, with some quite colorful playing, but also with some quite noticeable timing problems. The piano that is live on the keyboard is transposed two octaves down; not a very usable range.

Jambalaya has the melody on fiddle, and Joel does a nice job of getting an authentic sound. The accordion, however, is not quite so convincing, and is rather behind the beat in places. A lengthy (two- and-a-half minute) section with just bass and drums is then left open for soloing, and we are given either the accordion or the fiddle for filling in here live.

Basin Street Blues started out pretty stiff, I felt. The intro was just too straight, and didn't have much feel. When the band kicks in with a pretty jazzy arrangement, it gets better, and then the spotlight is on you to solo on piano for a bit. But the tune goes out in the same stiff way it began, and the solo sax ends up sounding pretty artificial.

St. Thomas is a pretty nice sax/bass/drums/marimba combo version, though the drums seem a bit too heavy and contemporary for this jazz standard. Again, a "hole" is left in the middle for soloing, and we're given a choice of vibes or a nice jazz guitar for this. The ending doesn't use a separate sequence, but instead uses the regular verse sequence, so what should be the last note isn't.

Go to the Mardi Gras is a fairly thin arrangement, which relies on bass and drums, and TOP-BRASS for the melody. The horn melody line, like Joel's *"Basin Street Blues"* arrangement, seemed stiff and synthetic. The solo hole in the tune can be filled with jazz guitar, vibes, organ, acoustic piano, or an electric piano stack. The ending is quite a surprise, since it just stops in the middle of a turnaround. Like in *St. Thomas*, a separate end sequence is needed.

Struttin' With Some Barbeque is a samba arrangement, with drums, bass, and jazz guitar. Do a cool piano solo in the hole. Not really New Orleans flavored, but nice. It loops forever, so you have to figure out your own ending.

They All Asked for You is a fun New Orleans party song, but I wasn't knocked out with this version of it. There were some doubled bass notes (mistakes) which were a bit too obvious. And though the rhythm felt New Orleans-ish, the jazz rhythm guitar and the electric piano melody didn't. I didn't want to solo on that darned accordion as long as Joel wanted me to.

Manha de Carnaval has a great feel to it, with lots of percussion. The melody is supposed to play on steel drums, which sounds like a very cool idea — but that song track looks to a cartridge for the sound. Again, an annoying but easily corrected problem. Fortunately, we're also given a muted vibes melody track that is easily unmuted. You'll enjoy filling the solo spot with either vibes, electric piano, or acoustic guitar. This one loops forever, too.

Texas Boogie is a masterpiece. It's solo piano, it's short and sweet, it's in the Dr. John style, and it's great.

Tipitina is done in the Professor Longhair style of solo piano, and like Joel's other piano numbers, it really is wonderful. It will make you swear you're strolling through the French Quarter chewing on a muffaletto (the best sandwich ever in-

vented). Joel demonstrates not only that he can play the piano, but that he's absorbed mass quantities of the Crescent City's heritage.

A second version of *Tipitina* adds upright bass and drums, but they seem to detract from the piano. The drums are heavy and much too loud in the mix.

Whirlaway is an Alan Toussaint song, done in the style of Dr. John. It didn't fire me up quite as much as the other piano pieces, but it is still quite nice.

On the Sunnyside of the Street is a fabulous rendition that offers a healthy dose of New Orleans ragtime piano. Joel plays James Booker's version of the tune, and I really loved it.

In addition to the tunes, Joel provides us with a couple of New Orleans-style drum beat sequences, which are pretty happenin'. Use them to build your own tunes, and you'll be ready for Bourbon Street. It's *lagniappe* — Louisiana-speak for "a little bit extra."

The Verdict

There's no simple answer here to whether you should buy this or not. Joel is obviously a very talented piano player, and the solo piano pieces here are jewels. If solo ragtime piano is your focus, I can easily recommend this disk.

But the sequencer-band arrangements don't work nearly as well. It's indeed hard to get a sequenced synthesized sax to sound like a real one, so this sort of problem isn't unique to Joel's disk. But I think these tunes could be done better. The lack of solid endings bothered me particularly; it's not that hard to add another sequence onto the song. In addition, the problems with the VFX-sd version will make owners of that keyboard have second thoughts.

I like that Joel actually played the stuff like a real musician, but he should take advantage of the editing features to pull out the obvious clipped notes and tweak up things in general. As I mentioned earlier, there are several silly mistakes, such as a song trying to call up a cartridge sound, but I know that Joel will fix these pronto. When I contacted him about some other minor problems, he immediately fixed them and sent me a new disk. His company is not a multi-national conglomerate, so these sorts of things can sneak through. But the good part is that you get a quick response to any questions or problems, you get a unique product, and you get more New Orleans charm than any boardroom of executives could come up with. ▬

Power Track Productions
A Division Of
Midwest Digital Services
We are soon to be the first word in Rock Sequences!
EPS, SQ-80,VFX-SD, SD-1 01/W FD,Cakewalk-IBM
Custom Sequencing Available!
Over 26 years of keyboard experience!
Free Catalog Available!
Midwest Digital Services
PO Box 21
What Cheer, IA 50268
(515) 634-2019

TURN YOUR MIDI SEQUENCER INTO A HIT SONGWRITING MACHINE WITH BACKGROUND RHYTHM PATTERNS!

Now with just the touch of a button you can have the perfect rhythm track to use for creating your original songs, jingles, and soundtracks. This innovative program offers over 180 professionally arranged background accompaniments that will help to get your ideas flowing to the top of the charts. A variety of musical styles are featured:

ROCK LATIN JAZZ
C&W BALLADS BLUES
R&B FUNK
NOVELTY AND MORE!

- Sounds 100% real! All sequences were played in real time.
- Chord charts provided for all of the sequences.
- Excellent for learning how to arrange and play all styles of music.
- Works with any midi set up that can produce drums, piano, bass, and guitar. Type 1 midi file format for all computer sequences.

AVAILABLE DATA FORMATS:
MAC, IBM, ATARI, AMIGA, Roland MC300/500/MC-50/MV-30/W30 **Ensoniq** SD-1/VFX-SD/EPS/SQ-80 **Yamaha** SY77/SY99/QX3 **Korg** T-Series/01/WFD

$49.95
VISA AND MASTERCARD ACCEPTED

NEW SOUND MUSIC
P.O. Box 37363
Oak Park, MI 48237 Phone: (313) 355-3643

PROFESSIONAL QUALITY LOW COST SEQUENCES FOR THE EPS/EPS-16 PLUS, SQ-80, ESQ-1, VFX-sd, SD-1, Roland, IBM/DOS

TOP 40
COUNTRY
ROCK ('50s, '60s, '70s, '80s)
BIG BAND

CALL OR WRITE ANY TIME 24 HOURS

MUSIC MAGIC
10541 EARL AVE.
BENNINGTON NE 68007
1-402-238-2876

L. B. Music Sequences

From the "I-Just-Wanted-To-Let-You-Know Department"

"You guys are great." L.M.
"I love your sequences." B.M.
"Keep them coming." S.Y.
"I've tried other companies and keep coming back to you guys." G.M.
"It's like your ad said, I just loaded the disk and hit play." A.L.
"It's true, I only had to learn the lyrics!" B.G.

Why not give L. B. Music a try and see why so many people love our sequences — and keep coming back for more!!

Ensoniq: EPS/EPS-16 PLUS/VFX-sd/SD-1/32
Korg: T-Series/01/WFD
Roland: MC50/300/500
IBM & MAC: SMF (Standard MIDI File)
Alesis Data Disk/Proteus/Dedicated Sequencers

Order Line: 1-800-3LB-MUSIC

Tech Support: 215-356-7255 FAX: 215-356-6737

L. B. Music Sequences
51 Charter Oak Drive, Newton Square, PA 19073-3044

Visa *MasterCard*

Introducing ...

The Rubber Chicken Introductory Pak

10 disks of great sounds - from the entire RCS Library - Only $59.95!

You want some great drum sounds - but you also want good basses and strings and... well, you want everything! Here you'll find the best samples we've got - in one dynamite collection! You'll also find coupon for 15% off your next buy.

Call today!

RUBBER CHICKEN SOFTWARE CO.

Serious Samples for the EPS family of instruments

Call Today for your free Catalog and Sound disk!

(available only to first time customers)

Piano!

Even for you ASR-10 owners, this piano is the standard that you play around! With full body and resonance, just like a real piano, and not like the non-"sustaining" fakes. Try it out - at a rock-bottom price!

Only $24.95!

Organs!

Minotaur Ultimate Organ Library!

Killer Hammond samples you'd swear were the real thing! With this 10 disk set, start finding good reasons to sell your B-3, and the rest. Distortion Hammond, Chorus/Vibrato, Fast - Slow Leslie, and more!

Only $59.95!

Subscribe to the

Chicken Chronicle

If you want to know more about your EPS, and the Hacker just isn't enough, turn to the Chicken Chronicle. With interesting articles, regular monthly columns, and up-to-the-minute information on new EPS releases, you'll know all there is to know about your keyboard.

Only $10.00 yearly

MicroWave Chicken II!

The ground-breaking vector synthesis pioneer, the Korg Wavestation is the now favorite of many top performers and studio musicians. Great samples for you EPS for thousands of dollars less!

Only $59.95!

MasterCard VISA

TOLL-FREE ORDER LINE
1-800-877-6377

Flock to: **RUBBER CHICKEN SOFTWARE CO.**

P.O. Box 2513 • Kirkland, WA 98083-2513

Keyboard sounding a bit ♭? You need some ♯ new sounds, and ♮ly, we've got them. It's our *f*.

ASR-10, EPS-16 Plus, EPS...

Buy a classic Minimoog, an Ibanez guitar, a K4, and a set of Yamaha Recording Custom drums for $9.95 each?! Sort of.

Our samples go beyond these originals. Add polyphony to a Minimoog, make a K4 sound incredibly huge, get the ideal drum sound in seconds!

Television versus Sledgehammer! (The hammer wins.)

Syntaur Productions has a dynamic sound effects sample library, ideal for post-production work or for adding an extra dimension to your recording project. Frighteningly realistic sounds, from chainsaws to crickets to Harleys, only $5.95 per disk!

SD-1, VFX-sd, VFX...

Get the patches straight from the Hackerpatcher himself!

A new set of 60 slammin' sounds from Sam Mims - used on top selling albums and in live touring around the world. Drop $49.95, and get the absolute best.

ESQ and SQ-80...

Sounds that a *Transoniq Hacker* reviewer found to be "by far the best I've seen. Ever!"

Soundsets 1 through 4, from Sam Mims, use radical techniques to make these keyboards sing like you've never heard them before. New "hidden waveforms" in both the ESQ-1 *and* the SQ-80? Yep! $17.95 gets you a Soundset of 40 patches you won't erase.

Mirage...

It may be a dinosaur, but dinosaurs roar loudly!

If you've got one, it's probably hungry. Feed it a new disk. Minimoog basses, DX7 Slam Bass, and cool VFX sounds - all on a single $7.95 floppy.

Want the complete scoop? ☎ for a free catalog, or drop a ✍ in the box. Your keyboards will love you for it.

Syntaur Productions

2315 Mid Lane #44
Houston, TX 77027
(713) 965-9041

Can't find what you need anywhere? Call for a quote on custom digital recording, sampling, and programming.

MIRAGEFREQ

A Design for a Mirage Sampling Tool — Part 2

Johnny Klonaris

One of the constraints of the Mirage, and all samplers, is a finite number of sampling rates. This becomes more of an issue with the Mirage because of the way short loops work. Wouldn't it be great to be able to get a synth to produce just the right pitch so that your loops would work out great? What I've done is to write a program to generate MIDI note and pitch bend commands to make any synthesizer do just that.

Last month, I roughed out the program and went over the part of the program that fetches the sample rate from the Mirage. Now that we have that information...

Calculating the Frequency

This one is actually trivial. For any given sample rate [73], the sampling frequency is:

Sampling frequency = 1 MHz / sample rate

Pretty tough, huh? So why was this a separate section in this article? Well, because there are some other parameters (from above, remember?) that we may also want to provide to the user. These are a bit less trivial to calculate. Some of this is a bit strange, which can also lead to creativity, so watch out.

When sampling, it can be helpful to know the frequency of the note you're sampling as well as the frequency of the input filter. This allows you to make relatively informed decisions about filter frequencies, Nyquist rates, and other things that would impress your Mom. Maybe.

The following formula will calculate the Internal Filter Frequency accurately enough that all of values match those in the manual except one, and it is within 1 Hz. It will also calculate the values that are not listed in the Advanced Sampler's Guide, but I have no way of knowing if they are correct.

Internal filter frequency = $e^{((parm74-25)*0.05776 + 5.6868)}$

Where parm74 is the value of parameter [74] from above and e is the base of the natural logarithm (approximately 2.71828) — most computers have a function that will do this kind of exponentiation. I basically just figured this equation out one night. I'm not sure I want to go into how or why.

The internal frequency value is only meaningful if the external frequency value [93] is zero. When parameter [93] is not zero, then an external filter is being used (the Input Sampling Filter or ISF) and that frequency is the one that should be reported. I used a simple look-up table to get the frequency, and I got that from the *Advanced Sampler's Guide*.

You can also calculate the nearest equal tempered note and the error in cents. This is can be useful to someone attempting to sample an acoustic instrument. The formula might be a bit intimidating, but the math is pretty straightforward.

$N = \log(f / f_r) \div \log (\sqrt[12]{2})$

Where:
N = note number (more on this later)
f = frequency in Hertz of the tone in question
f_r = reference frequency in Hertz of a note. Middle C=261.63
log is log base 10 (actually any base will work, so long as the root is the same)
$\sqrt[12]{2}$ = the twelfth root of two — about 1.059463
(the $\log_{10}$ of this number is about 0.025086)

The note number "N" above, is the distance in equal tempered steps between the frequency ("f") and the note we used as a reference ("f_r"). For example, if we used middle C as the reference and got "N" as –2.3, that would mean the frequency we started with is 2.3 semitones below middle C, or about a third of the way from Bb to A just below middle C.

Let's take an example through. For example, let's take a frequency of 280 Hz, and see what we get. Let's start with f_r equal to middle C, or 261.63 Hz.

The calculation becomes: $N = \log(f / f_r) \div \log (\sqrt[12]{2})$
$= \log(280 / 261.63) \div 0.025086 = 1.175$

This is approximate, but the value of N tells us that the note corresponding to 280 Hz, is a C# above middle C, plus about 17.5% or 17.5 cents.

Producing the Frequency (make some noise!)

For the C=64, the SID chip uses a 16-bit value to determine the frequency of its voices (we're only using one of the three voices). This 16-bit value is found with the formula:

NTSC: n = f / 0.0609594585
PAL: n = f / 0.058735384
The difference is based on the internal crystal frequency used by the U.S. vs. the U.K. machines (different TV's and all).

So, now the number "n" is a 16-bit number that represents the frequency. For the C=64/128 this is a simple process of dropping it into two 8-bit registers, but since I've already done this and made it generally available, there's no sense spending any more time on this.

Playing it via MIDI!

For MIDI, the calculation is nearly as simple. Remember that we computed a note number which was an integer part that represented the equal tempered note (based on a C) and a fractional part that represented how close we were to that note. Well, that's just what we need for MIDI.

In our case, the MIDI key number is: mk = int(N + 0.5) + 64

Where:
mk = MIDI key
N = note number from above
int is the integer (floor) function.
64 is the MIDI key number of the reference note — in this case middle C.

The remaining fractional part: er = N – mk

Where:
er = the error, of portion of a semi-tone that thefrequency we're trying to generate differs from the equal tempered note "mk."

To convert that to cents we multiply times 100. But we're not interested in cents other than for displaying it — we want a pitch bend value. Well, pitch bend is a 14-bit number, with the value 8192 (0x2000) representing no pitch change. The formula for calculating this 14-bit number is:

pb = (er * 8192) / br + 8192

Where:
pb = pitch bend 14-bit value
br = bend range on the target machine in semi-tones

So, we just split the pitch bend range to two 7-bit numbers:

pbh = int(pb/128) (pitch bend high)
pbl = pb - pbh*128 (pitch bend low)

To make a synthesizer make the frequency that we've been looking for you would send:

0xE0	plus channel number (0-15) (decimal 224-239)
pbl	(pitch bend low)
pbh	(pitch bend high)
0xC0	plus channel number (0-15) (decimal 144-159)
mk	(MIDI key number)
0x40	(default velocity — 64)

If you want this program to update the pitch on the synthesizer automatically, it will have to be smart enough to handle turning notes on and off.

TALK TO ME!

As we all know, the user interface is the most funnest part of programming. Well, ok — it is, for most of us, the hardest part — machines seem quite content with kludged, redundant, cryptic interfaces, so long as the necessary rules are obeyed. With the rest of us, the rules aren't so clear.

One rule I try to follow is to keep it simple. The simplest program might not even need a user interface — if you don't care about setting the waves/page or other options, this program could run continuously, producing the sampling tone as needed. On the other hand you could write a Motif compliant window based Sampling Tone Windowing System. Right.

What I settled on was to give me a simple interface, driven by a small number of one-key commands. The functions I wanted the program to do are:

- Turn on and off the sampling pitch (C=64/128 SID chip)
- Turn on and off the MIDI note
- Change the number of waves per page
- Change the MIDI channel number
- Setting of the MIDI channel and pitch bend range.
- Increment/Decrement parameter [73] from the computer.
- Display helpful info.

The display screen I settled on looks like this:

```
Mirage Freq 2.1  Sample Tone Generator

 Sample Rate [73]: 54
 Sampling frequency: 18518.52 Hz
 Nyquist rate: 9259.26 Hz
 Filter freq: 7071 Hz (Int [74])
 Note freq: 144.68 Hz (D -25.7%)

Commands:

 T - Tone Off        space - Note Off
 B - Bend Range: 2     C - Channel: 1
 ? - Help   E - End  +/-  Adjust [73]

Waves per page:  2
 4 - Four waves per page
 2 - Two waves per page
 1 - One wave per page
 H - Half wave per page
 Q - Quarter wave per page

Enter command:
```

The commands "T" and space toggle the tones on and off and also change what is shown on the screen, since the command will now do the opposite. Some people find this annoying because the screen says "tone off" when the tone is in fact on. Hey, there's strength in diversity.

I added the capability with the "+/-" commands to alter the value of parameter 73 from the computer keyboard. To do this you need to send a Mirage Command Code to the Mirage:

Hex	Dec	
F0	240	SysEx start
0F	15	ensoniq code
01	1	Mirage code
01	1	Mirage Command Code
07	7	"7" parameter 73
03	3	"3"
0D	13	Value button

At this point you would send either a

0E	14	Up button

or

0F	15	Down button

followed by

F7	127	SysEx end.

Or, shown another way, one of the following:

up: 240, 15, 1, 1, 7, 3, 13, 14, 127
down: 240, 15, 1, 1, 7, 3, 13, 15, 127

Finally — doing it....

This project actually surprised me. I got the basic stuff working in one day — but due to fun with handling spurious input from the Mirage (like having the Mod wheel not at zero, or rebooting the Mirage) proved to be more of a challenge. So, some things to watch out for:

Make sure you've received a valid Configuration Dump Parameters message from the Mirage before you start doing math with the results, unless you like dividing by zero.

You're going to need to do some floating point math. Writing assembly language floating point is not on my list of "Fun Things to do," so I wrote in Basic except for the MIDI I/O code which is in 6502 assembler. The language(s) you choose will depend on what you've got, how fast your computer is and all the rest of the fun aspects of programming.

I wrote my version to run on a C=64 or a C=128 (40 or 80 column display) with either a Passport or Sequential Circuits style interface. This is six combinations and generally one or two of them didn't work when the others did. Keep in mind how many configurations you're likely to need your program to work with. Nothing wrong with just writing to whatcha got....

I have no idea why, but I've noticed that after booting MASOS 2.0 on my Mirage, it sends out MIDI data for several seconds. I don't recall this from previous programs I've written for it, so it must be the phase of the moon or something. Anyway, be prepared for handing data other than the Configuration Parameters Dump Data message.

Now, for the meat....

Version 2.1 of MIRAGEFREQ is available via the following:

CompuServe: MIDIFORUM /Amiga/Other
Filename: MIRAGE.SDA

Q-Link: CIN / Software Libraries / Music: MIDI and General / MIDI: Sequencers, Libraries & Utilities / Ensoniq
Filename: miragefreq.sda
Username: jawknee

(On Q-Link you can access the file directly if you have the file name AND the username above.)

Permission is granted to distribute this freely so long as the package is uploaded as you found it (i.e., with copyright, disclaimer, etc.).

If you are on the Internet and on a un*x system, drop me a line at johnny@cup.hp.com and I'll mail you a share file that has everything you need for running my implementation of MIRAGEFREQ on a C=64 and/or C=128. (Note: "un*x" is not, to the best of my knowledge, a registered trademark of anyone. But it looks a lot like one.)

When you send me mail, specify if you'd like:

- C=64/128 runnable programs
- C=64/128 runnable programs and assembly sources
- Sources in standard ASCII for non-Commodore users

Finally, you can send a 5-1/4" floppy disk and return postage and I'll send you a 1541/1571 formatted 5-1/4" floppy disk with all of the C=64/128 goodies on it. Send it, and a return address to: Johnny Klonaris, 2151 Old Oakland Road #371, San Jose, CA 95131. No salesman will call.

But wait, there's more....

While I'm at it I'll put in another plug for the Mirage-Net. This is an informal Internet based mail network of Mirage owners. If you can send and receive mail from the Internet (this includes CompuServe subscribers), then you can be a member of Mirage-Net. For more information about Mirage-Net, send e-mail to: mirage-request@hpdsojk.cup.hp.com or, on CompuServe to: >INTERNET:mirage-request@hpdsojk.hp.com. And ask for more info.

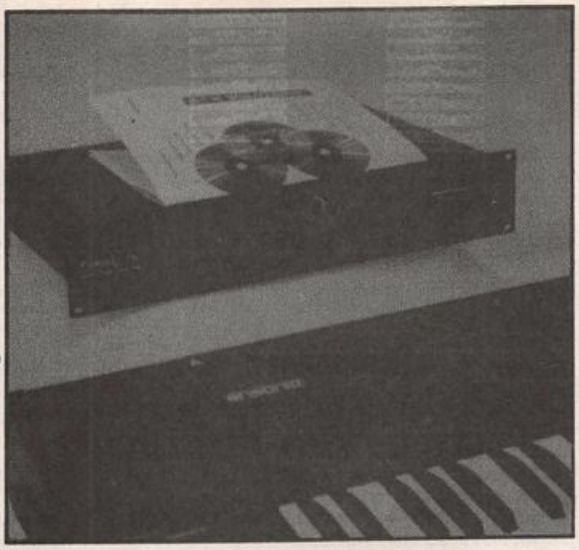
Finally...

Hope this proves helpful — it has for me. Have fun. ▬

And now.....A drive for all reasons !!

No Hassle Design

R-Series
44 Meg Removable
$629.00
88 Meg Removable
$799.00
Each unit comes complete with sounds for the EPS
The R-Series includes a cartridge and cable.



No Hassle Service

D-Series
D525Mb - **$1,499** 2u
D1050Mb - **$2,399** 2u
D1900Mb - **$3,149** 3u

CDR-Series
CDR-CD-Rom -**$599**
CDR-44 -**$1,095**
CDR-88 -**$1,248**

No Hassle Selection

No Hassle Delivery

Buy Factory-Direct and Save the Hassles!

We fix and upgrade Eltekon Drives and other manufacturers!

Ramtek, Inc.
Memory Driven Technology

Call 313-462-4181 to Place an Order
30057 Orchard Lake Road, Suite 225, Farmington Hills, MI. 48334

Classifieds

EQUIPMENT

EPS: 4X/SCSI, Mint, all manuals, huge sound library included. $999 obo. Phone: 800-776- 3199.

SD-1/32 Voice, mint condition, home use only, still under warranty, 2000+ sounds, two cartridges, $1395. Mike, (504) 752-9199.

VFX-sd II Mega-piano waves, expanded Seq memory & 500-sound library. Must sacrifice $1300. Kurzweil 1000SX string module. Upgraded with HX block. Pro II equivalent: $600. Alesis Micro-EQ $75. All equipment used in studio only. Prices include shipping. (708) 427-1615.

Ensoniq EPS 2X expander, $80. 303- 688-2628.

I have an EPS-16+ keyboard with memory expander and would like to trade even for an EPS-16+ rackmount. Interested, call George at 310-318-8294 (voice mail).

Desperately looking for a Mirage Input Sampling Filter. Call Garfield at (212) 681-3880.

SQ-80, latest OS, CV and sustain pedals, 80- and 160-voice RAMs, manual, box, 2000+ sounds (many pro sounds), VGC (church/ home only, never on road). $750 (including shipping) obo. (804) 740-5367 after 6pm and weekends.

EPS 4X expander. Fits completely inside case. Best offer. Call Jim, (914) 246-9047.

$999 EPS:4x/SCSI, all original accessories. (319) 242-6377.

EPS-16 PLUS. Absolutely like new. Used approx 15 hrs. 1.5 years old. All disks as new. $1350. Call Bill, 406-873-2027 or 406-873-5063, ext 39.

USER GROUPS / CONTACTS

The International Samplers Cooperative is available for all sampler users to meet and trade non-copyrighted, proprietary and non-proprietary samples. We also offer user support via MusoBBS (818) 884-6799, Midilink, and FidoNet. Check out our newsletter, "The Loop." For details write: ISC, 20920-47 Ventura Blvd, Suite 293, Woodland Hills, CA 91364. Voice: (310) 455-2653.

SAMPLES

Incredible 16-bit samples of Minimoog, Matrix 6, D-5, SQ-80, VFX, Prophet VS and more. They're cheap, but sure don't sound it! Send large SASE for catalog. Tom Shear, 706 University Drive, State College, PA 16801.

ASR-10 owner will trade custom guitar loops for samples. I need dance, R&B drums, other synths (ID-800, etc!). Send me a guide disk with your sequence & I'll create a state of the art guitar loop and send it back to you. B. Presomt, 6950 NW 186th St., #209, Miami, FL 33186. Phone: 305-460-5888.

Wanted: Roland JD800 samples for EPS-16 Plus, especially stock and custom electronic piano, pad, and brass sounds. Bill Groener, 15940 SE Arista Dr, Milwaukie, OR 97267.

EPS, EPS-16+, ASR-10 samples you can really use: Grand Piano, B-3, Rhodes, Flute, Nylon Guitar, Pedal-Steel, etc. Quality not quantity. Tweaked for months. Minimal blocks. For sound list write: "Little Buddy Sounds," P.O. Box 254, Sandy, Utah 84091- 0254.

Blow-out sale! This is your last chance to get the complete SoundProcess library for Mirage with the run-time O.S. on each Disk. I have the "Lush," "X," "DeMity," "Addy," "Turbo," "Keyboard," and now a 1-bank disk of "SQ-1+" sounds, normally a $160 value, for $79! Add $4 p/h. Also, used MIDI equipment for sale. Send a SASE for my list. Bob Spencer, 703 Weatherby Ln., Greensboro, NC 27406.

ECCENTRIC SAMPLES (Mirage and EPS). Ethnic, Ancient Greek, Medieval instruments; Partch creations; Industrial Percussion & more. Mirage demo tape: $3. EPS demo tapes (Vol. II or Vol. III): $6 each. U.S. funds only. Demo tapes include disk list. For lists alone, send SASE to: NIGHTWIND Sound, 170 Mar Monte Ave., La Selva, CA 95076.

MIRAGE SAMPLES. 57 new samples for $30. Most are unusual. 5 disks, $6 each (US funds). Demo $3. SASE for free listing. Treehouse Sound, PO Box 18563, Boulder, CO 80308- 8563.

SUPERB EPS-16 PLUS SAMPLES of E-mu Procussion, Minimoog, K-4, and more, from the *Hacker's* Sam Mims, $9.95 per disk. Post-production quality sound effects samples for EPS-16 Plus, all from digital source recordings, $5.95 per disk, $5.45 each for six or more. Mirage Disk 1, samples from Minimoog, DX-7, and VFX, for $7.95. Send SASE for free listing to: Syntaur Productions, 2315 Mid Lane #44, Houston, TX 77027, or call (713) 965-9041.

PATCHES/SOUNDS

SD-1 Studio-endorsed sounds from programmer Eric Olsen. Top quality sounds that can't be beat! Get an edge with these! Volumes 1-4: $25 each. Check or M.O. to: Eric Olsen, 6050 Adaway Ct., Grand Rapids, MI 49546.

Wanted: VFX users wanting to trade sounds. Please send Alesis Data Disk format to : Dave Musumeci @ 202 Catalina Drive, Harmony Hills, Newark, DE 19711 or phone (302) 368-7324.

The *Hacker's* Jack Tolin presents CrossWave Sounds: The classic drums of the HR-16 (2-disk set; 49 sounds); SYNTH-BITS! – turn your EPS-16+ or ASR-10 into a synthesizer with these low-memory samples – M1 Series (5-disk set; 50 sounds). All disks are $5 each (foreign s/h – add $5.) To: Jack Tolin, 23 E. Elm Ave., Quincy, MA 02170.

60 VFX-sd patches created by Jim Grote. Wide variety of sounds with complete documentation. Call for free Information Packet, or send $30 for VFX-sd disk to: Jim Grote, 3721 Frances Ave., Cincinnati, OH 45211. Phone: (513) 661-8885.

NEW SQ-80 SOUNDS from the *Hacker's* Sam Mims! Soundset 4 takes full advantage of the SQ-80's unique waveforms, and brings "hidden waveforms" to the SQ-80 for the first time. Also available for the ESQ and SQ-80 are Soundsets 1, 2, and 3. Forty patches per set, each with 22-page booklet of programming notes and performance tips, for $17.95. Send SASE for free literature. Syntaur Productions, 2315 Mid Lane #44, Houston, TX 77027, or call (713) 965-9041.

INSTRUCTION

TALKING OWNER'S MANUALS, 90 to 120 minute length cassette instructions are available for SQ-1, SQ-2, KS-32, EPS-16 PLUS, SD-1, SD-1-32 Voice and VFXsd models. Request ordering info from TALKING OWNER'S MANUALS, PO Box 10822, Costa Mesa, CA 92627.

MUSIC

The Ministry for the Absorption of Protohumans, Androids & Cyborgs. Original New Age/retro/synth/rock/ArtMusik. Composed and performed by William Holt Penninger, Jr. **Man/Machine/Music** (1991) $6.00; **The Accessible Penninger** (1991, reviewed in TH 11/92) $10.00; **Fdt=mdv** (1992) $6.00. To order, contact: Computer Musician Coalition, 1-800-4CMC, 1024 W. Wilcox Ave., Peoria, IL 61604.

SEQUENCES

RAGTIME AND NEW ORLEANS R&B SEQUENCES on SD-1, VFX-sd DISK: Joplin, Eubie Blake, Jelly Roll Morton, Professor Longhair, James Booker, Dr. John. Ten for $30 + $2 P&H. Perfect for gig break – or fun. Check or MO to Joel Simpson, 902 Montegut St., New Orleans, LA 70117. Phone: 504- 943-7322.

SOFTWARE

For IBM: Cakewalk 4.0 sequencer, and Dr. T's Copyist Professional music notation program. Complete original programs with manuals. $75 each or $135 for both. Steve, (206) 565-4701.

Midicaster is still available. The way-cool operating system that turns your Mirage into a very capable System Exclusive data librarian, a 20,000-note sequence player, a disk copier/ formatter, and wave-draw synthesizer is still available. For more info, or to order, contact Tim Martin, 1510 S 5th W, Missoula, MT 59801. Phone: 406- 542-0280 And thank you for your support.

OUT-OF-PRINT BACK ISSUES

M.U.G. will provide Out-of-Print issues for cost of materials and postage. M.U.G. Hotline: 212-465-3430 or write: G-4 Productions, PO Box 615TH, Yonkers, NY 10703. Attn: TH Back Issues. Phone: (212) 465-3430.

Photocopies of out-of-print past issues of the *Hacker* can be obtained by calling Jack Loesch, 908-264-3512 after 6 pm EST.

Folks in the New York City area can get copies of unavailable back issues of the *Hacker* – call Jordan Scott, 718-983-2400.

FREE CLASSIFIEDS!

Well – within limits. We're offering free classified advertising (up to 40 words) to all subscribers for your sampled sounds or patches. Additional words, or ads for other products or services, are 25 cents per word per issue (BOLD type: 45 cents per word). Unless renewed, freebie ads are removed after 2 issues. While you're welcome to resell copyrighted sounds and programs that you no longer have any use for, ads for *copies* of copyrighted material will not be accepted. Sorry – we can't take ad dictation over the phone!

ESQ & SQ-80 Hackerpatch — *Guest Hacker: Tom Shear*

SQ-80 PROG: FMORGN — **BY: Tom Shear**

	OCT	SEMI	FINE	WAVE	MOD#1	DEPTH	MOD#2	DEPTH
OSC 1	0	00	00	TRI	LFO1	+01	LFO2	+02
OSC 2	0	00	00	TRI	LFO1	-02	OFF	-
OSC 3	-1	00	05	SINE	LFO1	+01	LFO2	+01

	LEVEL	OUTPUT	MOD#1	DEPTH	MOD#2	DEPTH
DCA 1	63	ON	ENV2	+63	ENV2	+63
DCA 2	55	ON	ENV2	+63	ENV2	+63
DCA 3	48	ON	ENV2	+63	ENV2	+63

	FREQ	Q	KEYBD	MOD#1	DEPTH	MOD#2	DEPTH
FILTER	127	31	63	*OFF*	-	*OFF*	-

	FINAL VOL	PAN	PAN MOD	DEPTH
DCA 4	63	8	*OFF*	-

	FREQ	RESET	HUMAN	WAV	L1	DELAY	L2	MOD
LFO 1	24	OFF	ON	TRI	00	01	19	ENV4
LFO 2	22	OFF	ON	TRI	00	01	20	ENV4
LFO 3	-	-	-	-	-	-	-	-

	L1	L2	L3	LV	T1V	T1	T2	T3	T4	TK
ENV 1	-	-	-	-	-	-	-	-	-	-
ENV 2	56	63	43	13L	00	18	29	63	00	09
ENV 3	-	-	-	-	-	-	-	-	-	-
ENV 4	53	46	29	25L	00	00	44	63	00	00

	SYNC	AM	MONO	GLIDE	VC	ENV	OSC	CYC
MODES	OFF	OFF	OFF	00	OFF	OFF	OFF	OFF

SPLIT/LAYER	S/L PRG	LAYER	L PRG	SPLIT	S PRG	SPLIT KEY
OFF	-	OFF	-	OFF	-	-

SQ-80 PROG: FMORGN.

The Patch

This is a light, jazzy Hammond-type organ sound. The LFOs help give the sound some fullness and a very subtle Leslie effect. What makes it different is that it doesn't use any of the organ WAVEs and that it has velocity sensitivity unlike most organs.

The Hack

ESQ owners can get a pretty close, albeit lighter sound by changing the OSC 1 & 2 waves to SINE. If you want to add a little distortion to your organ, change RES(Q) to 00 on the FILT page. Increasing ENV4's LV amount increases velocity sensitivity while lowering it to a value of 00L eliminates velocity sensitivity entirely. You can get a slightly more synthy sound by turning AM on on the MODE page. If you do this, you may want to turn RES(Q) to 00 on the FILT page. To get a new sound, simply change OSC3's WAVE to BREATH.

Prog: BRASS-CLASS

By: Bradley Kaufman, Dr. Brad Sounds

Notes: Thanks to Dynamic Component Synthesis, here is a punchy Brass Stab/Synth Brass ensemble. The two SAWTOOTH waves interact with subtle, continuous pitch variation due to NOISE modulation. Also, ENV1 makes Voice 1's attack briefly sharp and Voice 2's attack briefly flat – this effect is stronger the faster the keys are hit. MODWHEEL opens the filter of Voices 1 & 2. Voice 3's filter is modulated via "TIMBER" (data) slider as a Preset. SQ users without pressure-sensitive keyboards: Change LFO MODSRC to Pedal and be sure your master page has CV pedal set to MOD instead of VOLUME.

WAVE	1	2	3
Select Voice	On	On	On
Wave Class	Waveform	Waveform	Brass
Wave	Sawtooth	Sawtooth	FrHornVar
Delay Time	00	00	001
Wave Direction	-	-	Forward
Start Index	-	-	00
MODSCR	-	-	-
MODAMT	-	-	-
Restrk Decay	0	0	0

PITCH	1	2	3
Octave	-1	-1	-1
Semitone	0	0	0
Fine	+02	-02	+01
ENV1	+25	-25	00
LFO	+03	+03	+03
MODSCR	Noise	Noise	-
MODAMT	+11	-11	00
KBD Ptch Track	On	On	On
Glide	No	No	No
Glide Time	0	0	0

ENV1	1	2	3
Initial	50	50	
Peak	0	0	
Break	0	0	
Sustain	0	0	
Attack	06	06	
Decay 1	0	0	
Decay 2	0	0	
Release	0	0	
Vel-Level	99	99	
Vel-Attack	0	0	
Vel Curve	Concave	Concave	
Mode	Normal	Normal	
KBD Track	0	0	

LFO	1	2	3
LFO Speed	28	28	28
Noise Rate	30	30	-
Level	0	0	0
Delay	0	0	0
MODSRC	*Press*	*Press*	*Press*
Wave	Tri	Tri	Tri
Restart	Off	Off	Off

FILTER	1	2	3
Filter 1	2LP	3Lp	3Lp
Filter 2	1Lp	1Lp	1Lp
FC1 Cutoff	000	000	000
ENV 2	+91	+91	+91
FC1 KBD	+22	+22	+22
MODSCR	Wheel	Wheel	*Timbr*
MODAMT	+41	+41	+41
FC2 Cutoff	000	000	000
ENV2	+78	+78	+78
FC2 KBD	+40	+40	+40
FC1MOD-FC2	Off	Off	Off

ENV2	1	2	3
Initial	00	00	00
Peak	80	80	80
Break	60	60	60
Sustain	55	55	50
Attack	02	02	02
Decay 1	12	12	35
Decay 2	03	03	54
Release	10	10	10
Vel-Level	16	16	00
Vel-Attack	99	99	06
Vel Curve	QuikRise	QuikRise	Convex
Mode	Normal	Normal	Normal
KBD Track	+14	+14	-14

AMP	1	2	3
Initial	99	99	99
Peak	99	99	99
Break	99	99	00
Sustain	99	99	00
Attack	20	20	00
Decay 1	20	20	46
Decay 2	20	20	00
Release	15	15	15
Vel-Level	19	19	19
Vel-Attack	00	00	00
Vel Curve	Convex	Convex	Convex
Mode	Normal	Normal	Normal
KBD Track	00	00	00

OUTPUT	1	2	3
VOL	99	99	77
Boost	Off	Off	On
MODSRC	-	-	-
MODAMT	0	0	0
KBD Scale	-20	-20	-20
Key Range	A0-C8	A0-C8	A0-C8
Output Bus	FX1	Fx1	FX1
Priority	Med	Med	Med
Pan	-25	+25	0
Vel window	000	000	000

EFFECTS —

CONCERT REVERB

FX-1	30	FX-2	00
Decay Time	35	Diffusion	40
Detune Rate	20	Detune Depth	40
HF Damping	40	HF Bandwidth	66
LF Decay	20	MOD (Dest)	Nothing
BY (MODSRC)	Off	MODAMT	00

The Hack: Here's another great Dr. Brad VFX sound adapted for the SQ family. "Brass-Class" is a warm yet biting brass stab that should please those of us in search of more "usable" horn sections. Perhaps its strongest point lies in its variation of tonal modulation sources (and destinations). Follow Dr. Brad's suggestions in order to fully appreciate this patch.

The only changes really necessary here are in the conversion of some VFX software values to those of the SQ and setting the values for the SQ Concert Reverb effect. I've made these changes on the sheet above.

My thanks to Dr. Brad for making this month's Hackerpatch a pleasure to enter.

Jeffrey Rhoads

Bio: Jeffrey Rhoads has been a keyboardist/composer on the Philadelphia Jazz and R + B scene for a period of time resembling forever. He has an interest in cinema and has developed some film courses. Jeff still believes in magic and longs for city lights.

Hackerpatch is intended to be a place where patch vendors can show their wares and musicians can share their goodies and impress their friends. Once something's published here, it's free for all. Please don't submit patches that you know to be minor tweaks of copyrighted commercial patches unless you have permission from the copyright owner. All submitted patches are subject to consideration for mutilation and comments by Sam Mims and Jeffrey Rhoads — our resident patch analysts. If you send in a patch, *please* include your phone number. Requests for particular patches are also very welcome.

Pending Hacker-Requests: **SQ-1/2** – An "Elton John" Oberheim Bass patch — like in *Rocket Man*.
SD/VFX – A sitar patch.

SD & VFX Prog: GOODOLDAYS

By: Brad Kaufman, Fair Lawn, NJ

NOTES: Be sure to try aftertouch on this synth patch.

THE HACK: This is a great sonic reminder of the Good Ol' Days of fat analog synth timbres. Dr. Brad uses a recipe of Sawtooth and Pulse transwaves for the meat of the sound, witha dash of Resonant transwave for that "Owwww" flavor in the bass. This is a split patch, with the resonant bass on bottom, and a punchy synth brass on top. Aftertouch adds vibrato. The ** patch select changes the patch on the upper split. I'd pipe these two voices (1 and 4) through the FX1 bus (Output page) like the 00 upper sound. The other two patch selects are silent, so let's give them a say by letting 0* play voices 1, 5, 3, and 6 and let *0 play voices 3, 4, 5, and 6. Since the modwheel isn't really doing anything, I'd change the LFO Level MODSRC to WL+PR. (When I play analog synth patches, it just feels natural to add vibrato with the modwheel...) Dr. Brad did a fine operation here, and I'd leave everything else alone — don't fix it if it ain't broken.

– Sam Mims

WAVES

	1	2	3	4	5	6
Wave	Pulse1X	Sawtooth	Pulse2X	Pulse2X	Sawtooth	Resonant2
Wave Class	Transwave	Waveform	Transwave	Transwave	Waveform	Transwave
Delay	0	0	0	0	0	0
Start	99	-	0	0	-	0
MODSCR	Mixer	-	Mixer	Mixer	-	Mixer
ModAmt	-84	-	+84	+84	-	+99

MOD MIXER

	1	2	3	4	5	6
SRC-1	*Off*	LFO	*Off*	*Off*	LFO	Env1
SRC-2	Env1	Noise	Env1	Env1	Noise	Press
SRC-2 Scale	1.0	8.0	1.0	1.0	8.0	0.9
SRC-2 Shape	Smoother	Smoother	Smoother	Smoother	Smoother	Smoother

PITCH

	1	2	3	4	5	6
Octave	-1	-1	-1	-1	-1	-1
Semitone	0	0	0	0	0	0
Fine	0	0	0	0	0	0
Pitch Table	System	System	System	System	System	System

PITCH MODS

	1	2	3	4	5	6
MODSRC	Timbr	Timbr	Timbr	Timbr	Timbr	Timbr
MODAMT	+12	+12	+12	+12	-12	-12
Glide	None	None	None	None	None	None
ENV1	0	0	0	0	0	0
LFO1	-3	-2	-3	-3	+2	0

FILTER 1

	1	2	3	4	5	6
Mode	3LP	3LP	3LP	3LP	3LP	2LP
Cutoff	0	0	0	0	0	30
KBD	0	0	0	0	0	-10
MODSRC	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
MODAMT	0	0	0	0	0	0
ENV2	+76	+76	+76	+76	+76	+40

FILTER 2

	1	2	3	4	5	6
Mode	1LP	1HP	1LP	1LP	1HP	2LP
Cutoff	0	0	0	0	0	91
KBD	0	0	0	0	0	+54
MODSRC	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
MODAMT	0	0	0	0	0	0
ENV2	+81	0	+81	+81	0	0

OUTPUT

	1	2	3	4	5	6
VOL	99	99	85	99	99	68
MODSRC	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
MODAMT	0	0	0	0	0	0
KBD Scale	Zone	Zone	Zone	Zone	Zone	Zone
LO/HI Key	F4/C8	F4/C8	A0/E4	F4/C8	F4/C8	A0/E4
Dest Bus	Dry	FX1	Dry	Dry	FX1	Dry
Pan	50	50	50	50	50	50
MODSRC	*Off*	Mixer	*Off*	*Off*	Mixer	*Off*
MODAMT	0	+20	0	0	-20	0
Pre-Gain	Off	Off	On	Off	Off	On
Voice Prior	Medium	Medium	Medium	Medium	Medium	Medium
Vel Thresh	0	0	0	0	0	0

LFO

	1	2	3	4	5	6
Rate	28	28	28	28	28	-
MODSRC	W1+Pr	W1+Pr	W1+Pr	W1+Pr	W1+Pr	-
MODAMT	+25	+25	+25	+25	+25	-
Level	0	0	0	0	0	-
MODSRC	Press	Press	Press	Press	Press	-
Delay	0	0	0	0	0	-
Waveshape	Triangle	Triangle	Triangle	Triangle	Triangle	-
Restart	Off	Off	Off	Off	Off	-
Noise SRC RT	-	53	-	-	53	-

SELECT VOICE

00		2	3	5	6
0*					
*0					
**	1		3	4	6

ENV1

	1	2	3	4	5	6
Initial	0	-	0	0	-	99
Peak	99	-	99	99	-	0
Break 1	0	-	0	0	-	50
Break 2	99	-	99	99	-	25
Sustain	0	-	0	0	-	0
Attack	30	-	30	30	-	12
Decay 1	30	-	30	30	-	21
Decay 2	30	-	30	30	-	23
Decay 3	30	-	30	30	-	23
Release	0*	-	0*	0*	-	0
KBD Track	0	-	0	0	-	0
Vel Curve	QkRise	-	QkRise	QkRise	-	Cnvx1
Mode	Repeat	-	Repeat	Repeat	-	Repeat
Vel-Level	0	-	0	0	-	0
Vel-Attack	0	-	0	0	-	-

ENV2

	1	2	3	4	5	6
Initial	0	0	0	0	0	99
Peak	99	99	99	99	99	75
Break 1	75	75	75	75	75	50
Break 2	65	65	65	65	65	25
Sustain	65	65	65	65	65	20
Attack	2	2	2	2	2	12
Decay 1	10	10	10	10	10	21
Decay 2	5	5	5	5	5	23
Decay 3	5	5	5	5	5	20
Release	10	10*	11	11	10*	0
KBD Track	-10	-15	-68	-68	-15	-99
Vel Curve	Cnvx1	Cnvx1	Cnvx1	Cnvx1	Cnvx1	Cnvx1
Mode	Norm	Norm	Norm	Norm	Norm	Norm
Vel-Level	0	0	0	0	0	0
Vel-Attack	0	0	0	0	0	0

ENV3

	1	2	3	4	5	6
Initial	99	99	99	99	99	99
Peak	99	99	99	99	99	99
Break 1	99	99	70	99	99	70
Break 2	99	99	70	99	99	70
Sustain	99	99	70	99	99	70
Attack	20	20	0	20	20	0
Decay 1	20	20	68	20	20	68
Decay 2	20	20	0	20	20	0
Decay 3	20	20	0	20	20	0
Release	15	15*	50	50	15*	28
KBD Track	0	0	0	0	0	0
Vel Curve	Cnvx1	Cnvx1	Cnvx1	Cnvx1	Cnvx1	Cnvx1
Mode	Norm	Norm	Norm	Norm	Norm	Norm
Vel-Level	0	0	0	0	0	0
Vel-Attack	0	0	0	0	0	0

PGM CONTROL

Pitch Table	Off
Bend Range	**
Delay	x1
Restrike	0
Glide Time	0

EFFECTS (1)

Effect	Large Hall Reverb
Decay	30
FX1 Mix	12
FX2 Mix	25

EFFECTS (2)

Pre-Delay	100
Early Refl Level	10

EFFECTS (3)

FX2 Mode	Norm Stereo Send
HF Damping	40

PERFORMANCE

Timbre	59
Release	0
Pressure	Key

The Interface

Letters for The Interface may be sent to any of the following addresses:
U.S. Mail - The Interface, Transoniq Hacker, 1402 SW Upland Dr., Portland, OR 97221
Electronic mail - GEnie Network: TRANSONIQ, CompuServe: 73260,3353, Internet (via CS): 73260.3353@compuserve.com.
This is probably one of the most open forums in the music industry. Letter writers are asked to please keep the vitriol to a minimum. Readers are reminded to take everything with a grain of salt. Resident answer-man is Clark Salisbury (CS). Letter publication is subject to space considerations.

[TH – Last month, Ensoniq said they would have a more detailed answer to part 5 of Becky Dierkson's question regarding getting both cartridge programs and their associated tracks to default to internal RAM on her VFX-sd.]

[CS/Ensoniq – Last month we received a question from Becky Dierkson regarding the organization of sounds in the VFX-SD for sequencing purposes. After discussion with Jerry Kovarsky of Ensoniq, we've come to the conclusion that our original answer, while technically correct, did not go far enough in explaining some of the options for organization of sounds and sequences that the VFX-SD provides. So herewith is our improved response, version 1.10:

Perhaps an easier way to accomplish what you wish is to keep your sequenced tracks pointing to internal RAM during the sequencing process; this way, when the sequence is complete you can save the whole thing to disk as a 60 SEQ/SONG file (or a 30 SEQ/SONG file). If you make certain to save your programs along with your sequences (an option which is presented when you save the aforementioned file types), all the sounds will be re-loaded into the correct locations when you later load the sequence/song file.

I know what you're going to say next – how do you keep the sounds you're using in RAM while loading new sound files from disk, to look for other sounds? What I'd recommend is that whenever you find a sound you want to use, copy it to a specific bank of 6 sounds. This bank can be saved to disk as a 6-PROG file. You can then load the next set of 60 sounds, continue the hunt, and save sounds that you like in other 6-PROG file groupings (or even as 1-PROG files, if you wish to save only a single sound). Once you've collected all the sounds you need, you can then load the 6-PROG files (and 1-PROG files) you've saved; the VFX-SD will allow you to specify into which bank (or location, in the case of single sounds) you'd like to load any of the files. This will allow you to arrange the sounds and banks of sounds in internal RAM in whatever way you'd like. Save the result as a 60-PROG file, or better yet, as a 30- or 60-SEQ/SONG file. If you wish, you can then delete all the 6-PROG files from disk to free up the disk space.]

Dear Ensoniq, TH and Clark,

Well, Ensoniq, you've done it again – you've come out with another keyboard I just can't live without. I tried out a **KS-32** recently and was very pleasantly surprised at how good it sounded and felt. I plan on selling everything in sight to buy one. (My little brother got real upset when he got the bad news but I'm sure he'll calm down after I explain to him that certain sacrifices have to be made for musical progress.)

Knowing full well how many wall-fist imprints (with my commerative plaque underneath), broken chairs and pencils have been dedicated at the factory to my good name, I felt I could not break with tradition and allow this letter to go by without a few comments and suggestions.

1. A high density disk drive for the KS-32 would be nice (wouldn't it, Ollie!).

2. I personally would like an 88-key version of the KS-32. I mentioned this in a previous letter but thought I would run it by you one more time before I take the final plunge.

3. I hope someone (either programmers, engineers) (ATTENTION PATCH REQUEST COLUMN!) will develop sound equivalents for the following sounds or patches: The beautiful and warm acoustic 12-string guitar in the song *"Love Is Blue."* An accordion patch as good as the sound Keith Emmerson uses with ELP in *"C'est La Vie."* A punchy electric guitar patch like the D-50's "Chorused Strat" patch. Any good electric 12-string patch. An acoustic guitar patch that sounds as good as the JV-80's sensational Velo Harmonix patch (internal preset A56). A guitar-flute and/or a guitar-vox patch.

4. One of the problems I run into in live performing is often when I place a music book on top of my synth (an SD-1) the book will change a patch or parameter setting in the middle of a sound. What do you think of the idea of a firmer push on the buttons to change the settings so it doesn't happen inadvertently.

Feel free to implement these suggestions any time before I buy a KS-32. I requested a piano-string patch as good as the D-70's in a previous letter and there's an excellent chance that the piano-string patch on the KS-32 will inspire me to sell my D-70. My patch suggestions take nothing away from the fact that I was highly impressed (maybe the correct term is "floored") at how good the KS-32 internal sounds are.

A few last questions: Any prospect in the near future for a new flagship synth?. Is there a KS-32/SQ-1 users group out there?

Sincerely,
The Secret Mysterious Interfacer
Redondo Beach, CA

[CS – And I'm still waiting for the drink holder/ashtray accessory.]

[Ensoniq – 1, 2) Thanks for the input, but we have no plans to add these features to the KS-32. We believe that part of the success of the KS is the price/performance ratio, and adding features until we raised the price too high might not allow us to reach all the musicians out there who have to make their decisions based on a limited budget (which is most of us!).

4) We would suggest a music stand since playing on the keyboard with the music on top many times results in shaking the book off the keyboard (at least the way we play).

5) We think the new TS-10 Performance/Composition Synthesizer should fit the bill as a new flagship – wouldn't you agree?]

Dear TH,

As I enter my 7th week of marking time until my **VFX-sd** gets its SD-1 32-voice upgrade from the factory, I realize how addicted I've become to the instrument. I had been putting off getting the upgrade because I had finally put together my little dream studio and I wanted to complete tracks for my first round of songs. But when my VFX started acting temperamental, I decided the time was perfect. I was later informed that I was the last person signed up for the upgrade; they were no longer offering it. It's really wonderful that Ensoniq provides these update possibilities but it surely would help if they would announce expiration dates as well. I would certainly have driven the 55 miles to Malvern sooner, if I had only known.

After week 2, I took out my old Farfisa combo organ from under the basement steps. After cleaning and tuning it I used it to practice with the oldies band with whom I record and gig. Except for the psychedelic numbers that we do, they missed the cool VFX presets.

After waiting through weeks 3 and 4, I started playing my acoustic piano again. Once I got used to it, I noticed how different my style was becoming. Next, I took out my Guild D-50 guitar – had to build up those calluses all over again.

Finally my keyboard was ready. The upgrade is

even more excellent than I imagined it would be. I don't know whether they cleaned or replaced the disk drive, but it's running more quietly and smoothly. The sounds are great and they gave me so many! Hacker, your publication has to be the most valuable and usable one of its type that I've seen. And, Ensoniq, I hope you will continue to provide your first-rate customer service and much-appreciated upgrades.

Reesa
Glassboro, NJ

To the Interface:

In the February '93 SQ1/2 Hackerpatch, Jeffrey Rhoads suggested we change the SQ RHODES patch to "let the tone come from ENV 2." Under the Freedom of Information Act, I hereby request that those ENV 2 parameters no longer be kept a secret.

Sam S. Mims
Syntaur Productions
Houston, TX

[Jeff Rhoads – The press secretary for one (or any) of the recent White House occupants might have said, "...and, information is no longer free." But, for Sam Mims and a rather steadfast chorus of Hacker readers, the all-important "cost of information" is paid-in-full by staying alert – find a mistake or, in this case, a casual disregard for detail. So now that we're all totally confused, I offer you the values for ENV2. They are: Initial=99, Peak=99, Breakpoint=99, Sustain=99, Attack=20, Decay1=20, Decay2=20, and Release=10. This is what's known as the Default Envelope.

What's more, our Default Envelope will revert to the first envelope on the SQ's Default Envelope list, FULL ON. In point of fact, most of the time when we indicate NO SETTING by leaving an envelope parameter window blank, we actually mean, "...use Default Envelope set to FULL ON." The FULL ON envelope has a square shape on the x,y axis – sort of an upside-down coffee cup. It is very simple, yielding but two changes over the course of the note: Key On and Key Off. (Our Release value in FULL ON is 10. This just smooths out the return to 0 at Key Off. Technically, it's a cheat, but some small Release value eliminates an audible harshness.) The FULL ON envelope can also be called "The Organ Envelope" – check out ROM sound #31, Organ 1.

The FULL ON envelope does not really do much of anything exciting. In fact, it's boring. It will respond to a level change in an ENV2 setting in, let's say, the Filter Section. But it is so dull. Thus, the Amp Envelope will generate any more detailed or dramatic shape for our Wave of Choice. (How am I doing, Sam?)

So, "Why not use the ALL ZEROS instead of FULL ON for the default envelope?" he muttered. Well, try the ALL ZEROS Default for ENV2. Then go to the Filter. Adjust any ENV2 parameter (with the FC set to 000). Know what you'll hear? Nothing, nada, zilch. If you use full zeros, you're gonna hear full zeros.

So, no written values in the envelope parameter window equals Default Envelope FULL ON.]

Gents and Ladies:

Just got my KS-32. It's got incredible action but I've a couple of problems. The first is that I can't seem to program a decent acoustic piano. I need one that uses just one voice of a sound. Secondly, I wish there were some kind of music holder for this board. All my previous synths had one. And, last, I need a place to get memory cards for a reasonable price.

Hope you can help.

Sincerely,
Carl Hull
Fairfield, OH

[CS – A number of the factory piano sounds that use two or three voices can easily be changed to use a single voice. For example, the sound "Dynamic Grand" uses three voices; two which play the 16-Bit Piano wave, and one that plays the piano "THUD" wave. Since the two piano waves are split, though, (they use the waves 16 BIT PIANO-HI and 16 BIT PIANO-LO) they only use a single voice of polyphony, so nothing is gained by using a single voice in their place. The THUD wave is layered with the piano wave, so it uses an additional voice. Try turning this voice off, and see how you like the sound. If you miss the nice "thunk" it makes on the higher notes, consider restricting this voice to a specific zone of the keyboard by setting the "KeybdScale" parameter in the OUTPUT section to ZONE. By so doing, the patch will end up using two voices only when you play within the zone that has the "THUD" wave assigned; outside this zone, the patch will use only one voice.]

[Ensoniq – There is no provision for a built-in music rack on the KS-32, but we will certainly keep that in mind for future product development. As we stated in our response to The Secret Mysterious Interfacer, we recommend getting a regular music stand.

3) The MC-32 card retails for $99.95 and dealers are likely to offer some level of discount from that price. When you consider that a card holds 160 sounds the cost equates to $0.62 per sound, not a bad price.

If you want memory cards to hold sequence data, you will quickly find that with each card holding approximately 8000 notes that cards will become an expensive way to store your songs. In that case, we recommend using a MIDI disk drive that can store greater than 32k of data. Some models to look at would be the Alesis Datadisk, the Peavey MIDI Streamer, the Brother PC-100 or a computer.]

Dear Hacker,

I'm a loyal Ensoniq customer from the PM (post-Mirage) era. I bought an ESQ-1 when you had to wait months before your keyboard was shipped. When the SQ-1 came out I decided I had to have one of them too. I shopped around and I still think that I made a great choice. (I jammed with a guy who plays a Korg M1 recently – garff!)

Okay, enough kudos...here're my questions and concerns.

1. When the ESQ-1 came out there was a lot of excitement and a flurry of third party products. There were patches available from a dozen different sources and competition was healthy. I don't see the same thing with the SQ-1. Patches come from a few sources – mainly Ensoniq and closely-affiliated third party vendors. I still don't see an alternative vendor to the MC-32 RAM card for storing patches and sequences. With the ESQ-1 you could buy an EEPROM cartridge that doubled your capacity. And, now, worst of all, I can't buy a RAM card with patches on it. I have to buy a ROM card for $100 that I can't modify. I have to use my precious internal locations or spend another $100 for a RAM card to store my preferences on. Isn't there a cheaper way to distribute patches for the SQ-1 series?

2. Every product that I get interested in for sequencing is only available for the EPS/ASR line of samplers or the VFX/SD line of synths. I suppose it's easier to distribute data on synths that have disk drives. But I would love to have some sample sequences from some people who have more time than I do to play with the SQ-1. Or how about some MIDI-based training that would work on the SQ-1 sequencer? It just seems puzzling to me that there aren't dozens of vendors competing for the patch and sequence market created by the purchase of all those SQs.

3. Does anyone else who used to have an ESQ-1 find it hard to get accustomed to the way the the SQ-1 cuts off sustained notes when you're hunting for that next patch you want to play? Yeah, I know that you can have a zillion presets that allow you to go from patch to patch like you used to be able to do on the ESQ-1. And I read the manual which describes why the SQ-1 operates the way that it does. But damn, I wish I could just hunt for the patch I want when the guitar player says it's your turn for a solo and you can't remember where that chiffy flute sound is. How

about a master override button that kills the effects processing or puts all onboard patches at the same effect so that you can transition between sounds easier? Or, better yet, how about a preference setting that says that you have to punch two buttons to select the next patch?

4. Before I comment about this point I want to say that I think Ensoniq should be commended for their policy of upgrading machines without having to buy a whole new keyboard. And what other company in the world allows for you to take the samples that were made on an instrument like the Mirage (how old is it, anyway?) and provide an upgrade strategy to the newest line of samplers? I'm all for it. I have a garage full of keyboard dinosaurs that I kept because I couldn't sell them for the amount of money, time and effort that I put into them. I've owned Yamaha and Korg gear that were quickly obsoleted by new product lines offering small increments of increased function and were completely incompatible with previous products. I'm convinced that these companies are more concerned with profit margins than customer satisfaction and long-term relationships with their clients.

My concern is that I don't know when the best time is for me to upgrade my SQ-1. I'm glad that I waited for the piano samples. Now there are new waves and 32-voice polyphony available to me as upgrades. If I send my SQ-1 in now for an upgrade what type of guarantee do I have that there won't be another upgrade available a month from now? My problem isn't so much the price of the upgrade but the hassle of doing without my main axe. Ensoniq has been fair to the people who upgraded and then wanted to upgrade again. I'm not worried about that. My problem would be solved if Ensoniq would adopt a policy where qualified technicians could perform the motherboard swap instead of me having to send my SQ-1 back to Malvern multiple times.

I understand that it is necessary for Ensoniq to be secretive about future releases and products from a competitive viewpoint. But I want Ensoniq to understand our concerns too. If they officially announce that there will be no more upgrades to the SQ-1 I'll make plans for an upgrade and send my board in. And maybe I'll upgrade if the next upgrade is 8 months away. And how long will the upgrade be available when the next major new SQ machine comes along and obsoletes the SQ-1 line? I hope Ensoniq can provide some insight into this. Please don't stop the upgrade policy though. I'd rather live with the dilemma than have to buy a new keyboard.

5. I just bought a new notebook 486/50MHz, 240Mb hard drive with a docking station that supports two external plug-in boards. When can we expect a sound/sequencer board and software from Ensoniq? I went to the music store and listened to the Soundblaster cards and the Roland cards. I was not impressed. Please, Ensoniq, put the same amount of affordability and engineering into this market that you did the sampler, synth and sequencer market! *Keyboard Magazine* says you're working on one. What's up?

Sorry for the length but these thoughts have been building up for a long time now. Thanks again, *Hacker* and Ensoniq.

Jack Ginnever
O'Fallon, MO

[CS – 1. A quick glance through the trade publications reveals that several of the bigger companies (Sound Source Unlimited, Eye & I, etc.) do offer sounds for the SQ series of instruments. Since a company that offers sounds for these products needs to be able to offer them on RAM or ROM cards, or else offer them in a dozen or so disk formats, I think you might find that the smaller companies may not want to make the investment it would take to support the SQ-series.

As I've mentioned, sounds can be distributed on disk, and I believe some of the aforementioned companies offer them this way. This is a less expensive route, although you need to have something (generally a computer with a MIDI interface) that can read these disks and transmit them as MIDI sysex files to your instrument.

2. Most of the companies offering pre-programmed sequences offer these as computer files, often in the form of Standard MIDI Files. Again, you need the appropriate hardware to take advantage of this method of distribution.]

[Ensoniq – 1) There is support for the SQ from third-party companies, but it seems that the times have changed and many of the independent patch developers are being distributed by larger companies. In the past many creative individuals would create some sounds and take out a classified ad to sell their wares – many times to raise enough money to help buy their next piece of gear! We have also noticed a decline in this type of activity, perhaps because of the hassle of running a home mail-order business, the economy, or the competition from the bigger companies – we don't really know why.

But the bottom line is how many sounds are available for an instrument and the SQ is well supported. With SC-1 through 6, ISC-1 and 2, and EX-01 and 02 we offer 1600 sounds. With sounds available from Eye and I, Sound Source, and others there are probably over 3000 available sounds.

As far as sound distribution, that is a more complicated issue. You state that the ESQ-1 had an EEPROM cartridge that doubled your capacity, but the MC-32 card does that for the SQ, we don't understand the issue you are raising. And the ESQ-1 library was distributed on ROM cartridges as well.

The problem in offering sounds on formats other than cards is that there are so many different formats and programs needed for different computers that it is difficult to be able to create, project stock, and cover all the formats that would be needed. If you use a computer you could buy ROM cards, use any one of the many librarian programs that support the SQ (Galaxy from Opcode, Unisyn from Mark of The Unicorn, X-oR from Dr. T's, MIDI Quest from Sound Quest) and create sound sets that can be downloaded to your RAM that can easily be organized and changed as you need.

3) The SQ has Voice Muting which when set to "OFF" prevents the notes from being cut off. You will find this parameter by pressing "Edit Sequences," then "System," then "Screen 3."

4) We don't plan on any more board-swap upgrades for the SQ family so go ahead without fear of any new "secret" plans.

Of course you must realize that we don't design every product planning on some secret future upgrade, but as new possibilities present themselves, and we hear from our customers about a feature that we can add to a product we try to do that. We can't know in advance how that addition can be done, and so some of these upgrades have required total board redesigns to achieve the result. We feel that it has been a good trade-off for you, we continue to add value to your purchase and offer you the chance to decide for yourself if you want to get the new features that are offered, rather than saying, "Buy the new model."

5) Our new Multi-media Division is hard at work at making chip sets and board design for OEM sales. The first designs will be aimed at the SoundBlaster type user (games and simple presentation needs) but we fully expect to offer more advanced products in the future. Stay tuned. We'll announce something when it is ready.]

Dear Hacker,

This is my first letter to you. I had a few concerns to discuss. To begin with, I want to say I am the proud owner of an EPS, and EPS-16+, and, are you ready for this, a Mirage. I don't think I could ever part with my Mirage, which I think (so does my girlfriend) is the most handsome keyboard ever created.

I've been reading a lot of complaints on memory capacity (in relation to the number of "instruments" the EPS and ASR will hold) and sequencing capability. I have read this within these very pages as well as in a review of the ASR done by *Keyboard Magazine.*

DVZZZSSHH!

Dvzzzshh! Kerrranggg! Boowjhsh!
That's about as close as we'll get to describing these sounds in print.
Q Up Arts now offers you the most explosive libraries ever presented—and you've gotta' hear them to believe them.
These libraries deliver the cleanest, most precision-engineered sounds, direct from the artists and engineers who make them happen.
Blxghwzhww! However you spell it, Q Up Arts has it. To learn more, call us today.

CD ROMs!

Master Studio Coll. V. 1 & 2
300Mb each of rare and ethnic instruments and percussion. "The Master Studio Collection contains thousands of well-recorded useful sound effects and musical instruments that provide a wonderful varied resource for the sound editor/designer."
—Bill Koepnick, Emmy award-winning sound editor

Sonic Images V. 1 & 2
300Mb each of synthesized orchestral sounds, musical FX created by Christopher Franke (ex Tangerine Dream). "I believe in the Sonic Images sounds. They're clean and powerful. I use them every day."
—Herbie Hancock

NEW! from the U.K.
MasterKit Drum Library
from RDC and Big Life Records
Now available in Akai CD-ROM. Banks of funk, power, & studio kits offered with programs set up for DrumKat & for keyboards. Call for details!

Denny Jaeger Master Violin Library
NEW! Now available EIII/EIIIXP condensed! "We've never heard anything like the Jaeger library. Sampled strings just aren't going to get any better than this."
—Keyboard review

Dynatek CD-ROM Drive
Desktop and rackmount Sony CD-ROM drive instantly hooks up through your SCSI port. Compatible with all CD-ROM supported samplers, Macintosh and PC computers.

CD-AUDIO

Heavy Hitters Greatest Hits
30 minutes of drum hits from Alan White (Yes), Tommy Lee (Mötley Crüe), and Jim Keltner (legendary session drummer). "...What's on this disc is first rate..." NOW $129
—Greg Rule, Keyboard
"This is the most happening, usable drum library. They're the very best."
—David Bryan, Bon Jovi

NEW!
All Drums from Illegal Radio
70 minutes of DDD acoustic and electronic tracks with brushes, mallets, rolls, comedy fills, loops, and grooves from every genre. $99.00

NEW!
Trails & Reflections from Alpha Omega
30 minutes of wet-only samples digitally outputted from the lexicon 300, cleanest reverb in the world. Samples include stadium, long and short gates, rooms, plates and reverse effects. Add new quality to your existing sounds and sequences. This new concept really works! $99.00

BUNDLE SPECIAL ANY $399 CD-ROM DISC & CD-ROM DRIVE FOR $999.00

All brand names, logos & trademarks are proprietary or registered trademarks of their respective companies.

CD-ROM LIBRARIES

E-mu EMAX II

1. Volume 1 SFX	$179
2. Volume 2 SFX	$179
3. Volume 3 Ethnic, Rock & Prcsn.	$179
4. Volume 4 Orchestral	$179
5. Sonic Images Volume 1	$399
6. Sonic Images Volume 2	$399

AKAI professional S1000/1100

1. MasterKit Drum Library	$399
2. Denny Jaeger Master Violin Library 3-disc set	$1200
3. Sonic Images Vol. 1	$399
4. Sonic Images Vol. 2	$399
5. Heavy Hitters Drums	$399
6. Master Studio Collection Vol. 1	$399
7. Master Studio Collection Vol. 2	$399

ensoniq EPS/ASR-10

1. Denny Jaeger Mstr. Violin Libr.	$349
2. Sonic Images Vol. 1	$349
3. Sonic Images Vol. 2	$349
4. Master Studio Collection Vol. 1	$299
5. Floppy sixpacks!	$79

E-mu EIII & EIIIXP

1. Denny Jaeger Master Violin Library 3 disc set	$1200
2. Denny Jaeger Master Violin Library Condensed	$495
3. Sonic Images Vol. 1	$399
4. Sonic Images Vol. 2	$399
5. Heavy Hitters Drums	$399
6. Master Studio Collection Vol. 1	$399
7. Master Studio Collection Vol. 2	$399
8. EIII Factory Sound Vol. 1; 1–44	$299
9. EIII Factory Sound Vol. 2; 45–88	$299

digidesign SampleCell/II

1. Sonic Images Vol. 1	$399
2. Sonic Images Vol. 2	$399
3. Heavy Hitters Drums	$399
4. Digital Sound Series Vol. 1 SFX/Perc. Sound Designer Files	$299
5. Digital Sound Series Vol. 2 Instr./Perc. Sound Designer Files	$299

Roland S-550/S-770

1. S-550 Universe of Sounds Vol. 1	$299
2. S-550/W30 Club 50 Master Performance Series Vol. 1	$299
3. S-770 Sonic Image 1 disc	$399
4. S-770 Club 50 Foundations	$550

Kurzweil K-2000
Version 2.0 allows you to load all of our Roland/Akai CD-ROMs

1. Sonic Images Vol. 1	$399
2. Sonic Images Vol. 2	$399

Q arts
P.O. Box 1078 Aptos, CA 95001-1078
Tel: 408.688.9524 Fax: 408.662.8172
VISA MasterCard
VISA/MASTERCARD ACCEPTED
(408) 688-9524
Dealers Welcome!

I have experience with many keyboards, and as far as the maximum number of instruments that you can use at a time, I've never ran into one that can use more than eight. That holds true especially for the Korg M1 that was received so well by the same people who criticize this in the EPS and ASR. Also, with between 20 and 32 voices, how many instruments do these people think they can squeeze out of one keyboard at a time? This may be a limitation, but it is not an uncommon or unreasonable one. After all, I bought my second EPS to remedy that very problem.

Secondly, I am not very concerned with on board sequencers since I do all of my sequencing on an IBM. Don't sneer, a computer isn't that expensive. I'm not saying sequencers are useless, on the contrary, I remember the days before my computer. I do think, however, that a parallel line of Ensoniq keyboards would be nice, available without the on-board sequencer (for a few dollars less of course).

Last but not least, I was wondering why the EPS series was discontinued. I realize the importance and advancement of the ASR, but I think that Ensoniq should have kept the EPS running as well as introducing the ASR. I feel a little strange about owning only discontinued keyboards. I don't see the problem, since Akai currently has at least one series of samplers (the "S" series) and there are at least four samplers in that series.

I also want to thank the people at Ensoniq for being so patient and helpful.

Thanks for the space,
Sincerely,
Jonathan P. Tomasello
Matawan, N.J.

[Ensoniq – We have pointed out many times before in the Hacker *that the cost savings for removing the sequencer is minuscule, since the sequencer is all software, except for the Rec/Stop/Play buttons and a bit of RAM. If removing it saved you only about $40 it doesn't seem to make enough difference. And since the sequencer software is already written, removing it is actually more work than leaving it in.*

Because we are a small company we just can't sustain production of too many different models. As the sales of a particular product fall off over time, it makes sense for us to use our limited production capacity to build the newer products that are more in demand. And the Akai line has just completely changed based on new technology, with the S-950, S-1000 and S-1100 being discontinued and replaced by the S-2800, S-3000, and S-3200. The only difference is that they kept the "S".]

Hacker,

I was recently making disk copies on the

EPS+ at my local dealer. I own a classic EPS and when I tried to play some of the samples I noticed that they were about -5dB, too quiet to use. These must have been samples for the EPS+ and not the classic EPS. This is a shame because these are excellent samples and I am dying to use them.

I was wondering if there were a way to manipulate the wave samples to get a greater volume, i.e. – doubling the wave sample, without using a lot of memory.

Thanks for your help,
Louis Dosch
Lake Elsinore, CA

[CS – Before you start mucking about with the actual wavedata, there are a couple of things you should check. The first is filter cutoff. On the EPS-16 PLUS and ASR-10, filter cutoff goes from 0 to 150, whereas on the EPS it ranges from 0 to 127. Consequently, if filter cutoff is set higher than 127, the EPS may have trouble interpreting the numbers. On the EPS classic, try moving the filter cutoff point all the way to 0, then back up to a setting that sounds good.

The other problem has to do with the fact that the EPS-16 PLUS and ASR-10 have a gain boost parameter not found in the original EPS. If this parameter has been used to get a bit more volume out of a sound, the sound may not play back at the correct volume on the EPS classic. The solution is simply to check and make sure that the volume for any wavesample that seems too quiet is turned up.

If neither of these edits helps, the next thing I'd try is normalizing the gain (COMMAND/AMP) for any offending wavesample. If that doesn't work, you can try adding a wavesample to itself (ADD DATA in the COMMAND/LFO section) to get more gain, but you run the risk of ending up with a pretty distorted wave. You'll probably need to do a SCALE DATA command first, to bring the original wavesample level down a bit, then add the sample back to itself.

I'd also like to mention that Ensoniq will soon be releasing an applications note dealing with this subject in some detail, along with applications notes on a number of other topics. I believe that you can request these notes directly from Ensoniq. You should also be able to get them from your local dealer.]

[Ensoniq – We'd like to add that Ensoniq does not condone the copying of our commercially *released libraries. It sounds like the dealer might have been letting you copy sounds that they shouldn't have. That would mean that the developer of those sounds would not be compensated for their work. You wouldn't give away your music for free, so why expect someone to give away their "art" for free? (Of course, if these were public domain sounds – no prob.) We try to price our sounds reasonably so everyone wins. Please consider this when you are in the market for new sounds.]*

Dear TH,

Recently I have seen advertisements from Korg and Yamaha offering CDs which feature sequences performed on their synthesizers. This seems to be a great promotional idea.

I don't know how much money is make from sales of the CDs, but the return is probably made in the sale of equipment in the long run.

Korg and Yamaha sequences were performed by nationally known musicians. I think Ensoniq might profit from just such an item.

Maybe even go for 2 releases, one written and performed by nationally known musicians and another featuring the best sequences submitted by any Ensoniq owner. Ensoniq would have a tremendous promotional item which would really show off their products.

Thank you.
Fred Bass
Worcester, MA

[Ensoniq – Perhaps you have seen our 2-CD demonstration set for the DP/4 Parallel Effects Processor, which in addition to the demonstration disk contains a second CD with 17 tracks of music recorded by top stars such as George Duke, Foreigner, Randy Jackson, Philip Bailey, Joey DeFrancesco, Was Not Was, Nile Rodgers, Michael Boddicker, and many others. We certainly will keep this type of item in mind for our keyboards as well. Thanks for the input.]

Dear Hacker,

I'm a two-years subscriber now as a previous owner of **VFX** and two **EPS-16+s** and a new proud owner of an **ASR-10** Rack. Keeping the Slinkard to a minimum... (Kirk, hope you got humour...) I'd like to point out a few strange things about this machine.

1. TO ENSONIQ: "Did you manage to do quality control on the first racks that were shipped out? I received mine as a gift from a friend in NY, the unit was shipped UPS and I got a cracked ASR-10 shell with screws all over the inside and the drive badly hit by the power transformer that was completely unsecured. Also the main board had lost *three* screws. What is worse is that one screw went inside the drive and it took *major surgery* to recover the unit. Of course, I couldn't send the rack back (very expensive task) and in Italy no one will assure me servicing. I know it all depends on the Italian distributor – but aren't we living in a global village? Is there anything you guys in Malvern could do to make my guarantee valid also here? Maybe an agreement with MPM?

2. TO UPGRADING EPS-16+ FRIENDS: When using my old Syquest cartridges with the ASR something strange happened. The O.S. automatically overwrote the old one (great thing), the sounds were easily retrieved from the carts BUT when I tried to save back some sounds to the removable I got BAD FAT ALLOCATION. Does that mean the units save in different formats (therefore they're not fully compatible) or is this something strange that depends on my unit?

I kept the "thanking" and the "Great Mag!!" to the last. I'm probably part of your 0.25% Italian readers. I can honestly say I'm in love with the *Hacker* and rely on you for most of my purchases.

Once again, you're doing a great job,
Sincerely yours,
Mike Della Bella
Rome, Italy

[CS – 1. Picky, picky, picky.

2. I know several people with BAD FAT ALLOCATION, but if you mention it to them they seem to tense up.]

[Ensoniq – 1) The problem with your situation is that it seems that the damage was caused by the shipping company, and a claim should have been filed with them right away. When we send a product to our distributor (or dealer in the US) we take responsibility for that product arriving safely. If there is a problem we would file a claim with the carrier and resolve the issue. In your situation the unit arrived safely to the dealer in New York, but was damaged going from New York to Italy. That carrier was responsible for the damage and not MPM. I would hope that your friend insured the ASR and they should be able to get money back against that insurance claim. MPM will of course fix the unit for you, at a reasonable charge which should be billed against the insurance claim. We're sorry to hear that you had such a problem.

2) The file formats of the EPS-16 PLUS and ASR-10 are compatible with each other and you shouldn't have a problem with old media. Our best suggestion would be to make a back-up of your cart and restore it to a new cart. Contact us again directly if you keep having a problem.]

The Interface

Hi there from another reader who can't seem to grasp all the intricacies of getting a MIDI studio to function properly. I recently purchased a 486/25 IBM-compatible (DOS 5.0 & WINDOWS 3.1), Geibler Enterprises' VFX Diskette Manager, and Passport's TRAX and

MusicTime. They are connected to my keyboard through a Music Quest PC MIDI card. I thought I understood my VFX manual concerning program changes, but this sure is giving me a hard time. Less than ideal documentation on the software hasn't helped any, either. If anyone out there has a similar setup and it all works, PLEASE call me collect an help me. If you live close enough, I'll even buy you dinner! Specifically, the areas I am having problems with are as follows:

1.) Initializing programs on the VFX-sd to the correct default banks when running MusicTime. I send the needed control code (usually 127 gets me to the ROM bank) and then send the desired patch number. This is done from a chosen staff in MusicTime and it works. I then save the MusicTime setup with the Preferences option. When I open the file up again, invariably the bank has changed on my instrument, giving me the familiar "interesting-but-not-very-usable" results. I have tried setting the VFX to ROM sounds or INT sounds (I don't have a sound cartridge) before opening the file, but this makes no difference. It seems one workaround might be to default all staves to program 127 and send the desired changes after a couple of clocks have gone by, but this requires recording data into the staff track, and I am trying to set up blank templates. My VFX is in multi mode, send channel = tracks, tempo = ext, xpos = both, track MIDI status = both, MIDI loop = on, cntrls = on, song sel = on, start/stop = on, sys-ex = off, prog-chg = on.

2.) This is really a question for Passport, buy I'll ask anyone. When running TRAX, how do you filter different MIDI channels to the desired tracks by using the strip data function after loading a sequence into track one from an external sequencer (i.e. my VFX-SD)? Nothing I've tried has worked.

3.) I have set up template "combo-bands" on my keyboard that I am already used to using (as per Jeffrey P. Fisher's excellent article in the Nov. '92 *Hacker*). I want to map these to certain templates in MusicTime so that for example VFX track 3 (classic-pno in my template) always prints on staves 2 & 3 in MusicTime. Is it better to use the MIDI mapper functions in Windows, the maps in MusicTime, or the maps in my MIDI card? It seems like the MIDI mapper in Windows would be the logical choice, but I think I want to use this to map the VFX-sd to General MIDI protocol because of the key-mapping features. Am I on the right track?

Any help in this area would be greatly appreciated. Thanks again for making a forum available from which we may all learn and benefit. I look forward to hearing from you!

Sincerely,
Gary Stone
Austin, Texas
(512) 266-3261

[CS – 1. It sounds to me as if you are doing things correctly, but I have no experience with Music Time. In my experience, sending the correct Program Change number to select the bank (ROM or INT), followed by the program change number for the sound you want to select works fine. And any subsequent program change numbers will continue to select sounds in the currently selected bank, unless you specifically send one of the program change numbers designed to select a new bank.

2. Although I haven't used TRAX, I do have experience with Passport's Pro 5 program, and I'd assume that the two programs handle this in a similar way. In Pro 5, the easiest way I've found to separate tracks from a single multi-channel track is to select the track in question, choose STRIP DATA from the menu, set the parameters in the STRIP DATA window to CUT all data, but only on one channel (channel 7, for example), click OK, then PASTE the data you've just cut into an empty track. This procedure will need to be repeated for each MIDI channel you want to extract to a new track.

3. Beats me.]

Dear Interface,

I am using a class set of **SQ-1 Pluses** to teach music composition. My problem is storage. I need to be able to efficiently store sequences at the end of one class and load at the the beginning of the next. Though they are expensive an MT-32 card for each student would be great but they do not hold but the smallest amounts of data.

So does any one or will any one make a larger memory card?

Otherwise what storage mediums do you suggest? We have a Mac so I guess we could use a software program and repatch a bunch of midi cords each load. What software would you suggest? (We do have a EPS-16 Plus but using it for system exclusive dumps is cumbersome and still requires lots of repatching)

Or how 'bout a dedicated MIDI filer? Again any recommendations.

Sorry about starting the letter without the usual and deserved compliment to both the *Hacker* and Ensoniq. I have been using Ensoniq boards for teaching since the ESQ1 because they let my students make music faster. This storage problem though has really slowed us down though.

Thanks for your help.
Brent Huber
American School in Japan
1-1-1 Nomizu, Chofu-shi, Tokyo 182 JAPAN
brenton@well.sf.ca.us

[CS – It seems to me that you could accomplish what you want with a sophisticated Mac MIDI interface, or a good MIDI patcher if you already have an interface you like. This could be used to patch the MIDI ins and outs of your SQs into the MAC, and would probably be less expensive than purchasing RAM cards for each of the SQs. Once you're patched, you could use either of a couple of good public domain programs to handle the sysex dumps from the SQs. Look for either MidiEx Mac or Bulk Sysex Utility at your local user group or on any of a number of online telecommunications services. Also, most Mac sequencers include sysex dump capabilities, so if you have a sequencer for the Mac you could probably use that for the transfers.]

[Ensoniq – 1) We have no plans for a larger memory card for the SQ. It would be too expensive to be marketable.

2) See our response to the above letters from Carl Hull and Jack Ginnever.]

Hello at Transoniq Hacker,

I don't know if you get that many letters from Switzerland, but I'll try to put my problem down in just a few sentences.

First, I'd like to say that I like your magazine very much and it helps a lot to get all the details and hints to my **ASR-10** and **VFX-sd**. It's fun to work. I have a question regarding my subscription: I received my first issue right away at the beginning of February and since then I've been waiting for the March issue. You do print and distribute at the beginning of the month don't you?

Then I have a technical question. I wanted to use my VFX-sd in concert live on stage but it refused to work at all. Suddenly notes were put on hold and sometimes no sound at all was coming out of the machine. All I could do was to turn off the machine and try to restart. This never happened in my home, where I usually keep it. Is this a problem of ac-line conditioning? Am I the only one having every minute error messages? I have to say I don't use the sequencer at all because it's normal for it to break down. This is too bad – it sounded very good for the sound check. I tried to convince our keyboard player to buy one of Ensoniq's synthesizers but after that disaster in concert, the band told me to give the keyboard to the... you know!

Thanks for answering,
Markus Tinner
Rheineck, Switzerland

[TH – Issues get printed about one week before the beginning of the month. The overseas issues get shipped to an international mailer on the East Coast (this probably takes about five days). They ship them (via air) to

England where they enter the mail stream. The use of an international mailer makes it possible to only charge ridiculous rates instead of outrageous rates for overseas subs. When a new subscription comes in we mail the first issue directly to the new subscriber – usually within one day. Depending on when you happen to hit in the monthly cycle, the time can vary quite a bit between your first issue and the subsequent issue. (There's also a small possibility of error at this point when your subscription gets entered in our computer.) But no matter where you are they should come in at a steady rate of once a month from then on. If they don't, we're either dead or there's a problem in the mail.]

[CS – AC problems have been the bane of many performing musicians – I wouldn't rule that out as a possible problem. Normally, I'd recommend you get in touch with your service center, but I don't know where that might be in Switzerland, so I'll leave that for Ensoniq. Don't lose heart, though. I've been performing live with VFX's and SD-1's for quite some time, with very few problems. I'm sure everything can be ironed out.]

[Ensoniq – Our distributor in Switzerland is Jaques Isler Ltd. Goldbacherstrasse 8, CH-8700 Kuesnacht, Zurich, Switzerland, Tel: 41-1-911-0990. They can help you, you might need a keyboard mechanism upgrade, or simply to use a surge suppressor on your gear.]

HACKER BOOTEEQ

Protective Dust Covers

-Ensoniq SD1,KS32,ASR10
Reg. ~~$24.95~~ Sale 19.95
Black Regency Only • Add $4.00 S&H

For these & others call:

1-800-228-DUST(3878)
Mastercard / Visa Accepted

The Le Cover Company
1223 Kingston Lane
Schaumburg, Ill. 60193

DANCE SAMPLES

DANCE CONSTRUCTION SET CD - Over 140 Drum Loops, Spoken FX, Hundreds of drums and percussion, TB-303, SH-101, Moog synths & bass, Analog Classics, Shredding Techno by E.K.O., Hip Hop & New Jack Loops. 1200 samples $78
See Review in Transoniq Hacker.

#1 HOUSE ACID SAMPLING CD
TR-808, TR-909, AKAI XR-10, DX-7, MINIMOOG, KORG BASS, EMU PROTEUS, HOUSE DRUMS, HOUSE ACID FX, LYRICAL HOUSE FX $49

CLASSIC DRUM LOOPS CD
75 DOPE AND DELICOUS LOOPS, RAVE GROOVES, RARE BEATS, LIMITED EDITION, NO RIGHTS RESERVED ONLY! $52.95

EPS, S-900 & S-50 SAMPLE DISKS
Also For: ASR-10, EPS-16, S-550, S-330, W-30. (Specify)
Demo disk $5 - refundable with purchase of disks.
SHIPPING INCLUDED
FREE CATALOG CALL
310-699-0095
MIDI MARK
BOX 217 • WHITTIER, CA 90608

Liven Up Your SQ-80!

The PrivatLabel Collection

120 handcrafted, seriously musical sounds
Available in a three volume set
No effects, no filler, no buzzes or doinks

Now only $32.00!
How can you stand to be without them?

SQ-80 disk - or - Galaxy format

California residents please include 8.25% sales tax
Make check or money order payable to:

Redshift Limited
4804 Hollow Corner Road
Suite 126
Culver City CA, 90230

Use Ensoniq Disks on your IBM-PC with our *Ensoniq Diskette Manager.*

Convert Standard MIDI Files to/from Sequences for these keyboards:

ESQ-1 SQ-80 SQ-1 SQ-2 KS-32
ASR-10 VFX-sd SD-1 EPS EPS-16+

Call now to order or for more information on these and other software packages.

Giebler Enterprises
8038 Morgan Road
Liverpool, NY 13090
(315) 652-5741

Why settle for less memory and a higher price tag? Our quality, fully warranted SCSI hard drives will take a smaller *byte* out of your wallet. All drives are fully compatible with the EPS, EPS-16 Plus, and the new ASR-10.

120 MB Buzzy Drive $649
213 MB Buzzy Drive $849

Please add $15 for shipping and handling.
Idaho residents add 5% sales tax.
Price includes case and cable.
Make check or money order payable to:

Aaronstotle Music Products
617 N. Five Mile Rd.
Boise, ID 83709

Make Money

Scoring Soundtracks

FREE step-by-step guide shows you how to turn your original music into cash! Contact:

Jeffrey P. Fisher Music
924 S. Lake Ct., #209
Westmont, IL 60559
708-971-1641

BLOWOUT SALE

16 BIT SAMPLES FOR EPS/16+

Series 1: Analog Classics
Series 2: Legendary Digital
Series 3: Studio Drums
Series 4: Experimental Industrial
Series 5: Rave, House & Techno

Each 5 Disk Series $20 with Free Shipping
REGULAR $30

DENNIS COOKE
128 Greendale Cres.
Kitchener, Ontario
Canada, N2A 2R6

Play Along Sequences for the EPS 16+ and ASR 10

The Gospel Set includes 8 songs designed specifically for the EPS 16+ and ASR 10
Perfect for offertories, preludes, etc.

Each song includes 6-8 new sounds and printed music
$10.00 per song/$60.00 for the entire set

Demo audio cassette and complete song list $3.00

The Rhythm Factory
1910 Campfire Court • Lewisville, TX • 75067
214/315-8141

CYBERSOUNDS

FLY IN SOME NEW SOUNDS! With the WORLD's LARGEST ASR-10 Library

We have been in the studio sampling everything on the ASR-10. Write or call for the new ASR-10 listing (sounds also work on EPS/16+). Or take the plunge and purchase our new demo package with 20 disks from the new library for only $60 (free shipping). Our quality & prices can't be beat, so give the World's Largest library a try!

NEW! Atari ST Serial Port MIDI Expander... Works with all Export compatable MIDI software to give you an extra MIDI port for 32 independant MIDI channels. Works with Creator, Notator, Cubase (Ver. 3+), KCS, Realtime and Multi. $40 + $4 S/H

WE HAVE A HUGE LIBRARY OF SOUNDS FOR ASR-10, EPS, EPS16+, MIRAGE, TX-16W, EMAX, S-900, S-50/330/W-30, & DPM-SP PRICED AT ONLY $4 + .50 S/H PER DISK. PATCH DISKS FOR SYNTHS $15 + .50 S/H PER DISK.

FREE LISTINGS - SPECIFY FORMAT
MAKE CHEQUES AND MONEY ORDERS PAYABLE TO D. WHITE

PO BOX 114, STATION C
KITCHENER, ONTARIO
CANADA, N2G 3W9
VISA/MC 519-745-0021

TRANSONIQ HACKER
1402 SW UPLAND DR., PORTLAND, OR 97221, (503) 227-6848

BULK RATE
U.S. POSTAGE
PAID
PORTLAND, OR
PERMIT NO. 11

ADDRESS CORRECTION REQUESTED

SUBSCRIPTION MATERIAL
DATED MATERIAL - TIME VALUE

Postmaster: Please return Form 3547 as soon as possible so we can change our records. This is a monthly publication.

Publisher: Eric Geislinger
Editor: Jane Talisman

Our (somewhat regular) illustrious bevy of writers includes: Craig Anderton, Robby Berman, Barry Carson, Mark Clifton, Gary Dinsmore, Dennie Edwards, Rob Feiner, Anthony Ferrara, Pat Finnigan, Charles R. Fischer, Gary Giebler, Jim Grote, Garth Hjelte, Bryce Inman, John Loffink, Alan MacIntosh, Daniel Mandel, Sam Mims, Gary Morrison, Michael Mortilla, William Pont, Jeffrey Rhoads, Brian Rost, Clark Salisbury, Tom Shear, Joe Slater, Kirk Slinkard, Bob Spencer, and Jack Tolin.

Copyright 1993, Transoniq Hacker, 1402 SW Upland Drive, Portland, OR 97221. Phone: (503) 227-6848 (8 a.m. to 9 p.m. Pacific Time).

Advertising rates: Please send for rate card.
Rates for authors: Please send for writer-info card.

Subscriptions: 12 monthly issues. US: $23/year, All others: $32/year. Payable in US funds.

Transoniq Hacker is the independent user's news magazine for Ensoniq products. *Transoniq Hacker* is not affiliated in any way with Ensoniq Corp. Ensoniq and the names of their various products are registered trademarks of the Ensoniq Corp. Opinions expressed are those of the authors and do not necessarily reflect those of the publisher or Ensoniq Corp. Printed in the United States.

Who says you have no RESONANT FILTER?

The ASR-10 and EPS-16 PLUS can now go "Bwaaooww."

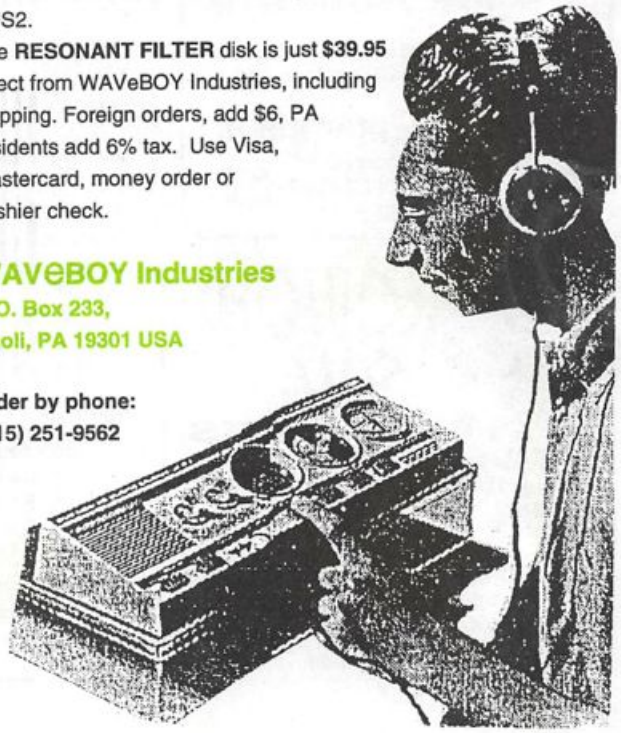
The **REZ FILTER** algorithm is a striking re-creation of an analog synthesizer, the classic Minimoog. A four-pole low-pass resonant filter is coupled to a lightning- fast ADSR envelope generator. The filter's resonance control (also known as emphasis, bandwidth, or Q) gives it that distinctive analog sound by creating a sharp peak in the frequency response. This peak is swept by the envelope or any modulation source. It does things you can't do by sampling an analog synth.

To demonstrate some applications of **REZ FILTER,** the disk comes with a collection of raw Minimoog samples that come to life when they hit the resonant filter. But what *you* want to do is warp your own sounds, and you can— you'll quickly be transforming your entire library of clean digital samples into fat and juicy *dweeps, bwops and damns.*

The **REZ FILTER** effect algorithm also incorporates some of WAVeBOY's trademark **parallel effects:** both **chorus** and **reverb.** Other fun features include a choice of single or multi-trigger modes on the envelope generator, and a sample-and-hold.

But wait... ***there's more:*** this disk includes another algorithm that does *frequency modulation* (FM.) Again, an example sound is included that sounds terribly much like the DX-7. But The DX-7 used only sine waves—you can go further. This algorithm allows you to modulate any sound with any other sound! The results can be unpredictable: really crazy, really fat, and sometimes really grungy. Like **REZ FILTER, FM+FX** includes chorus and reverb which can be added to the FM output or used for other sounds on BUS2.

The **RESONANT FILTER** disk is just **$39.95** direct from WAVeBOY Industries, including shipping. Foreign orders, add $6, PA residents add 6% tax. Use Visa, Mastercard, money order or cashier check.



WAVeBOY Industries
P.O. Box 233,
Paoli, PA 19301 USA

order by phone:
(215) 251-9562