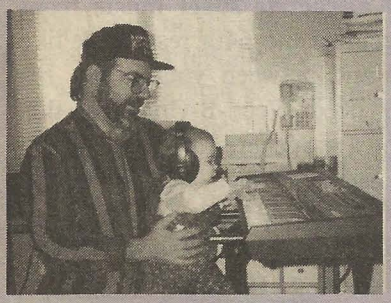
Transoniq Hacker

The Independent News Magazine for Ensoniq Users

The Late Nite Top 13:

The 13 most common MIDI Fallacies

Pat Finnigan



Greetings and salutations, fellow loopers: this month we disprove the 10 most common items of MIDI errata ever to hit the musical scene. As veteran hackers, we've probably divulged some of these secrets already to our less fortunate brethren. Now's the time to amaze your friends with reckless abandon. Working with sound at this microscopic level you, too, can now drop phrases like "wave-particle duality" and quote Heisenberg's Uncertainty Principle as lifetime members of the Quantum Mechanics Union. Working with sound and audio at the subatomic level, let's dispel the methane with a fresh breath of covalent oxygen reasoning. So from our home office in Silver Springs, Nebraska...

(13) General MIDI ain't. Come on now, the only thing General about GM is the drum map on channel #10. The rest is horsefeathers. Au contraire, you say? Have you *ever* heard a Sound Canvas GM file sound the same on any other product? It might "kinda" map out, but I've *never* heard a GM file sound perfect on anything but the machine it was written on. Any of you gamers out there heard the same background music in *Doom* or *Duke Nukem* on your soundcard as when you selected "Sound Canvas" as your music card? Calling it "MIDI Muzak" isn't being kind: the word "charitable" comes to mind...

It's a great idea in theory: transportable music. By the time you've massaged a GM file to work on your Ensoniq (or any instrument out there), you could've sequenced it from ground zero. And if the song used those "Variation" sysex messages (as compared to the "Capital" tones) you are up the proverbial creek without a paddle. The GS and XG subsets are just plugging up the MIDI pipe unless you're native to those platforms.

(12) Middle C ain't. You poke the middle C on your keyboard and it's either MIDI note 47 or MIDI note 73. Folks, Middle C is MIDI note #60, and unless you've got an 88-note engine, you're prodding a C either an octave above or below Middle C. This kinda

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falls into (1) above, when you furiously start transposing parts up or down an octave (after you've spent the better part of an hour remapping patches to tracks to get them to sound like the instruments described). Nothing quite sounds as realistic as a "Slap Bass" patch an octave or two above its register, does it?

(11) "Channels Become Tracks." I positively *love* this one. Cakewalk prides itself on this, and does an excellent job of yanking MIDI data on one channel of a type 0 SMF onto a separate track. CAL macro's automate this process, and it's really quite cool to see the "notes" boxes fill up with numbers as quickly as you can press the "return" key. Then begins the fun and frolicking merriment of (drum roll, Anton), "Track Identification!"

Okay, now, let's see: there's DRUM info on track 16? Must've been an old Yamaha 'board used to sequence this loser. Let's see now, select Track #16, select "Piano Roll Notation" in the "View" window, enable the "Speaker" icon, and *now* we can click on the keys on the "Keyboard" to see what kind of Mixolydian Drum map we have here. THEN we can drag-click the "Cabasa" notes down to the "Bass Drum" key they should trigger. One down, eight to go to finish this track. Oops, there's 9 more tracks to do? Wow, we're *really* making music now...

(10) "Offset Velocities." Gee, that Electric Piano sound doesn't have the same bite it did when I heard it on Uncle Fred's keyboard. Hey, I'll just offset the velocities up around +20 so they velocity switch my EP sample. Oops, not enough: I'll just offset them another +20. Oops, not enough; let's see, try this EP patch: Oops, *too* much velocity. Better scale that velocity back down -20. Ah, that's better: hey, doesn't that sound like what I started with?

In the business, we affectionately call this procedure "polishing a turd..."

(9) To quote an Owner's Manual, **"Connect the Cable marked "MIDI IN" to the MIDI "IN" of your keyboard, then connect the cable marked "MIDI OUT" to the MIDI "OUT."** This might have been true for the original Asian manufacturer of this particular game-port-MIDI dongle, but Creative Labs never bothered to mention how they've second-sourced these cables to a cheaper manufacturer in Taipei who labeled these cables backwards. Was there an errata sheet in the $40 accessory manual? Hey, Homer: DUH! I spent two hours troubleshooting a guy's config over the phone only to find this out.

(8) "Insert the disk with the updated driver into the A drive." Yeah, right. Find an updated Pro Audio Spectrum driver that's WIN95 compliant. Better still, find an updated MediaVision driver that'll work with 95. No, let's look in the C:/WINDOWS/CABS directory for an obscure or arcane driver. No, let's dismantle the computer, pull the soundcard, and change jumper settings for an hour. No, let's pull the modem and change its IRQ and I/O address so it doesn't conflict with the soundcard. Now let's restore the soundcard's original jumper settings and begin again. Are we making music yet?

(7) "Print accurate and attractive sheet music from your SMF!" Yeah: so accurate the 64th rests look like crabgrass growing under and between your notes. No more fertilizer, please? I need Weed-B-Gone for this chart. I'm a musician, not a gardener. No, I got it! I'll quantize to 32nd notes instead. Oops, I'll quantize to 16th notes. Oops, I'll quantize on input in real time. Oops, I'll quantize to 32nd notes on input. Oops, I'll shut quantize off. Hey, I'm back where I started...

(6) "No MIDI interface needed." There's a new sheriff in town, and he looks just like the serial port on a Mac or the mouse port on a PS2. There's a switch beside this port that's usually labeled "Mac/PC1/PC2/MIDI" that lets you connect to a Mac/PC serial port. Okay, you go out and buy the specific cable required to do this. Boot the PC, start your sequencer app, and hmmm: no playback. After you've repeated steps (5) and (6) inclusive for the following two and a half hours, you call the manufacturer who politely tells you you need a special driver to do this: "please feel free to download the following file: www.plug&pray.com/~drvrs/x5000/turbo.htm/ midi4/201.98.54.17/x5000.html/x5000.drv."

Cool! Finally! Upon being promised the light at the end of the tunnel you log on and mistype the URL 6 times, and finally get a "The connection was refused by the server — try logging on later" message.

We're having a *really* large time now...

(5) Do I own a "PC1" or a "PC2" computer?

(4) "Auto Configuration of Interface." This is such blatant unblushing effrontery don't even try to open the box near an exposed flame: extinguish all smoking materials. The manufacturer should be held liable and prosecuted for the omission of an "Explosive" sticker on the box...

(3) "Requires 386 or better, 8Mb RAM, 20 Mb hard disk space." I haven't seen a computer that doesn't meet that criteria since 1991. Gee, I guess I'll have to delete some of those Doom levels and *.wad files to make room for this whopper clock app...

(2) Active Sensing. "Hey, what's this FE every 300 milliseconds?" Drano. Some ingenious engineer back in the 80's decided it would be cool to send 3 FE's a second down the MIDIcable to see if it was broken. That way if the MIDI box on the other end of the cable didn't receive these FE's on a regular basis, it could tell MIDI transmission was interrupted and return a "MIDI ERROR!" message. As if the absence of any sound from our keyboard wasn't enough of a message to figure something was rotten in Denmark. Rocket scientists: "Let's put *more* data into this already crowded pipe so we can tell if it's become disconnected." You bet. When a pipe breaks in my house it ain't FE's that spill under the sink...

And The Number One Top 13 MIDI Fallacy...
(tom roll, Anton):

(1) "Windows 95 Plug & Play Compatible!" (cymbal crash). I speak from experience: I *personally* guarantee nothing is quite as refreshing as the "Windows 95 has detected new hardware and is installing the software for it" dialog box after it has just identified your new soundcard as a modem...

And you thought Ensoniq hastily throws together an OS? Au contraire, loopers. If you survive any/all of the above I guarantee you'll discover a newfound respect for Ensoniq keyboards. As a matter of fact, and I know this is pretty unbelievable... You just might even hear music coming out of them. How diabolic... ▬

P.S. Pat's wife just had a 6 lb. 8 oz. baby boy. During all the hoopla she claims she vaguely recalls receiving System Exclusive messages from him, but that was months ago.

Front Panel

RND (♪♪♪)

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...And that was just Monday. A letter to our on-line Interface had us chasing down a rumor that Ensoniq was no longer producing the MR keyboards. Turns out to be true. (!) They're concentrating their efforts toward getting PARIS out the door. **(PARIS should be shipping today, Thursday, October 23rd.)** The DP Series is also no longer in production. The musical instruments that Ensoniq is currently producing and shipping (to the best of our knowledge) are the ASR-X, ASR-10, E-Prime, and some TSs in a special build for Russia.

The entire keyboard market is presently a very saturated, competitive, razor-thin market. Ensoniq is evaluating just what their plans are for this market and we should have more information in future issues.

Well, what does all this mean for the *Hacker*?

This market has made the last couple years fairly tough for anyone producing keyboards and that affects all of us little guys riding on their coattails. At least until we know more about what Ensoniq's future in the keyboard market is going to be, and what our role with PARIS is going to be, we're going to have to do some tightening up around here.

Next month we plan on changing over to a newsletter format. We have to cut our page count in order to save on printing and postage. We plan on going to a smaller type size to cram more onto each page and make up for some of the difference. We're also going to have to do some major cutting on the Interface — we'll try to pick out the most general interest (or zin-

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giest) letters, but as it stands now, it's been running around 12 pages. It could use a little editing... This will probably be cut about in half.

Since space and postage aren't really relevant on the e-mail version, we plan to include the entire column in eTH. (If this is a good reason to convert over to the e-mail version, then GREAT! Just let us know and we'll get you going. You can also read the Interface on-line at our web site. Close to 15% of our readers now get the e-mail *Hacker* and many get both. This is the direction the world is going.)

These changes should allow the *Hacker* to continue on a more healthy basis. The current printed format just isn't appropriate for the size of market that we're serving. When we know more about where keyboards, Ensoniq, and PARIS are going, we'll know more about where we're going. Right now, we don't know if this change is going to be permanent or temporary. (And the printer is standing there waiting for this as we write it...)

We'll always have ten times more Ensoniq coverage than any other magazine. And it's not all bad — the actual appearance will probably be a little spiffier, the content may get a little bit spicier, and we'll continue to offer support for the entire line of musical instruments — whether they're in production or out.

* * *

We'd like to congratulate Pat Finnigan on his new baby boy — *and* congratulate two other long-time *Hacker* folk, Sam Mims and Garth Hjelte on their pending babies (or "chick" as Garth says).

eTH — A Faster, Cheaper Hacker

If you can receive e-mail via the Internet, you can take advantage of avoiding the post office and get a faster, cheaper, e-mail version of the *Hacker*. The e-mail *Transoniq Hacker* contains all of the same information and advertising as the printed version, but it's only $20/year — anywhere on the planet. Plus, if you convert over from the printed version you'll get extra issues added to your sub. Interested? Just send a message to us at eTH@transoniq.com and we'll e-mail back complete subscription information. Let us know if you'd like a free copy of the current issue and we'll send one along.

HYPERSONIQ
NEW PRODUCT NEWS

Rubber Chicken Software Co. announces three new products for Ensoniq samplers, the *Internal Zip Drive Kit*, the *SL SCSI Interface* for the Original EPS and 16-Plus, and the *ASR-X Tools for Windows* program.

The *Internal Zip Drive Kit* contains a modified ZipDrive that physically replaces the Ensoniq floppy drive within an ASR-Series or 16-Plus rack or keyboard, and cables and instructions. The drive is connected into the SCSI chain within the Ensoniq itself, using the included custom cables. No soldering is required — this is considered an "intermediate project" for do-it-yourselfers. The operation removes the floppy drive, so operations with the Internal ZipDrive must be with an additional Ensoniq ASR-Series or 16-Plus, or better yet, a PC or Mac running the appropriate software. $219.95 for the kit, $49.95 for the cables and instructions only.

The *SL SCSI Interface* is a user-installable SCSI interface for the Original EPS and the 16-Plus. Includes termination and termination power, which means the SCSI interface permits flawless ZipDrive performance from a 16-Plus without any external peripherals. $147.00

ASR-X Tools is a disk editor, parameter utility, and translation software for ASR-X sounds, drives, and disks. Using *ASR-X Tools*, you can edit any parameter of any wavesample on any layer of an ASR-X sound, which you cannot do from the front panel. Also includes EPS (DD) or ASR (HD) translation feature, where you can take any former EPS/ASR sound and convert it into ASR-X format. Also supports EPS/ASR SCSI drives and CD-ROM's. Lots of other special features too. $59.95.

All products include Rubber Chicken's customer service and best-in-the-business guarantee. For more information and ordering, contact Rubber Chicken Software at 1-800-8-PRO-EPS, 320-235-9798, or at their web site at www.soundcentral.com/~chickeneps.

Creating an Arpeggiator on the ASR and EPS

Sam Mims

After being killed by the advent of modern-day digital sequencers, arpeggiators are — like many of their analog counterparts — coming back into vogue. While they offer nothing close to the flexibility and programmability of sequencers, arpeggiators are just plain fun. And they offer a spontaneity that sequencers can't compete with — just hold down some keys, and you're off and running. Change notes, and the arpeggiator changes accordingly.

To get the ASR or EPS to mimic an arpeggiator takes some tricky programming, but it can be done in a number of ways. I chose to use a repeating spike-shaped envelope to control the volume of the sampled note, then added layer after layer doing the same thing, changing the pitch and delaying each layer by the appropriate amount. (On the EPS Classic, there is no Layer Delay function, so the delay has to be built into the envelopes.) Here's how I did it....

For starters, let's create a straight square-wave inside the sampler itself. This will give us a sound that is both tiny in memory and transposes well across the keyboard. With no instruments loaded in the sampler, press Cmd/Inst and scroll to the CREATE NEW INSTRUMENT page. Press the Enter button, and the display will read SELECT UNUSED INST=1; pressing Enter again will create a "blank" instrument that makes no sound.

Now, we must create a blank layer within that instrument. Press Cmd/Layer, and scroll to CREATE NEW LAYER; press Enter to complete the procedure.

Finally, press Cmd/Wave, and scroll to the CREATE NEW WAVESAMPLE page. (A shortcut: Press Cmd/Wave/0 to go directly to this page.) Press Enter, and you've created a square wave from nothing. Now you should hear sound when you play the keyboard.

Our next step is to make this single note play on and off rhythmically as a key is sustained. To do this, we want to set up Envelope 3 as a repeating envelope, playing a short percussive blip. Press Edit/Env 3/0 to get to the ENVELOPE page, and select REPEAT TRIANGLE by using the data entry slider or the Up/Down arrows. You can now hear the sound pulsing as a note is sustained.

We'll want to change this default envelope in a number of ways. First of all, to give the sound the right amount of silence between notes, and to make each note sound more percussive, enter the following envelope values: HARDVEL=0 99 99 0 0 and TIMES=0 4 19 33 0. In the TIMES values, the second number (the 4) represents the sustain time, or how long the note lasts at full volume, the next number (19) dictates how long it takes to decay to zero, and the fourth number (the 33) represents the time between notes. Next, we need to remove the ATTACK TIME VEL and the SOFT VEL CURVE from the envelope, so that no matter how hard we play a note, it will arpeggiate consistently. So, set these values to 0 and OFF.

At this point, we can mimic an arpeggiator, by playing several notes in succession, and sustaining the keys. This creates an "infinite delay" sort of effect. But we want our arpeggiator to work by holding down a single key.

The trick to making this happen is to now copy the layer multiple times, and then program each layer to trigger a different note at a specific time. My example uses all eight layers, to create an 8-note arpeggio, with each layer delayed 100 ms after the previous layer. To create other arpeggios, it's simple to adjust the note pitches, but it will take a bit of fiddling to get the timing worked out just right. The two parameters that you will want to adjust are the fourth TIMES

parameter in Envelope 3, and the Layer DELAY times. Tweaking the second and third Env 3 TIMES parameters to adjust the shape of the notes will also affect the timing of the arpeggio, so be sure to set these beforehand.

To proceed in our example, press Cmd/Layer/1 to copy our single layer. Press Enter once, then again in response to TO INST=UNNAMED INST. Make sure the next display reads COPY=PARAMS ONLY (if not, scroll up or down until it does), then press Enter again. You should be rewarded with LAYER 2 CREATED.

To hear our new layer, press Edit/Inst, and make sure that layers 1 and 2 are selected. In fact, go ahead and select all 8 layers at this time, since we know we will need them all.

Now, let's program Layer 2 to play a different note after the note from Layer 1 sounds. (EPS Classic users: Ignore the Layer DELAY times, but set all the other parameters.) Press Edit/Layer/6 to adjust the DELAY to 100, then press Edit/Pitch and adjust the ROOT KEY to D4. Hold down a key, and you should now hear a two-note arpeggiation (except on the EPS Classic), with a fair bit of space between cycles.

From here, it's a simple repetitive process. We simply copy this layer to create yet another one, add 100 ms to the DELAY time, and adjust the root key to add a new note to the sequence. Here are the values I used to create this example (EPS-16 and ASR users should ignore the last two columns):

Playing low notes sounds a lot like Pink Floyd or the Alan Parsons Project; higher notes sound more like a pop music style.

While playing a single note gives the clearest demonstration of the arpeggiation, playing multiple notes is a lot of fun, too. Striking two notes simultaneously gives a two-note chord arpeggiating around; try this playing fourths and fifths. It also sounds way cool to strike two notes not-quite-simultaneously; this creates an effect that sounds like The Who.

Playing multiple notes together can exceed the polyphony of the sampler, which can actually be pretty cool also. What happens is that some of the notes get left out of the arpeggio sequence, leaving an interesting and unexpected variation. An EPS-16 drops out when three notes are played together, as this will exceed the 20-voice polyphony. (Remember, each key pressed down uses eight voices!) On an ASR, the arpeggio will play normally until you play four notes at once.

One rather distressing discovery is that the sampler is not exactly rock-steady in its timing. Remember, we are not using the sequencer here; we're using the envelopes to control the timing and make the machine do things it's not really designed to do. When taxed in this way, something suffers, and since the envelope timing is rarely critical in a sample, it pretty much gets last priority with the CPU. When played on an ASR, ARPEGGIATOR lost its timing gradually; this was especially noticeable when holding down multiple notes, as they soon lost their sync with each other. On

Layer	Layer Delay Time	Root Key	ENV 3 HARDVEL (EPS Classic Only)					ENV 3 TIMES (EPS Classic Only)				
1	0	G4	0	0	99	0	0	0	0	21	33	0
2	100	D4	0	0	99	0	0	13	0	20	30	0
3	200	C4	0	0	99	0	0	21	1	18	28	0
4	300	G3	0	0	99	0	0	25	2	19	23	0
5	400	D3	0	0	99	0	0	30	0	19	14	0
6	500	C3	0	0	99	0	0	33	0	19	3	0
7	600	G3	0	0	99	0	0	35	0	16	2	0
8	700	C4	0	0	0	99	0	37	0	5	0	0

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an EPS-16, multiple notes were always in sync, but the overall tempo tended to drift noticeably. And the EPS Classic version tends to sound noticeably different each time a note is struck. Hey — this really is a good simulation of analog gear!

One final trick I applied to this instrument was to use the mod wheel to actually change the arpeggiated notes. The first six notes go up, while the last two notes go back down in pitch. So let's program the mod wheel to raise the pitch of the last two notes, resulting in an up-only arpeggiation. On Layer 7, press Edit/Pitch, and set PITCH MOD=WHEEL * +62. Now, you can hear that rolling the wheel forward raises the seventh note in the sequence.

The last note is a bit trickier. Selecting Layer 8, do the same tweak and, with the mod wheel forward, try to raise the pitch of the last note to be higher than the preceding note. You can't get it more than just slightly sharper than note 7, even with the PITCH MOD parameter maxed out at +99. The reason is that we have the nominal tuning of this note set much lower than that of Layer 7; the pitch modification we're applying now has to therefore be much greater to make it sound higher than note 7. Scottie says that's all she's got, Captain Kirk says he still needs more.

We can get more, but only in a rather convoluted way. The answer is to use the LFO, set to a square-wave, and with a speed of zero. In essence, the oscillator doesn't oscillate this way. Controlling it with the mod wheel simply adds steady (non-oscillating) modification to the sound, and that's exactly what we're after.

On Layer 8, press Edit/LFO, and set the WAVE= SQUARE SPEED=0. Also set LFO DEPTH=0 DELAY=0, and LFO MODE=RESET ON (this makes sure that the LFO starts its cycle at the high point of the square wave). Finally, set LFO MOD=WHEEL * +99, and turn the RATE MOD to OFF.

Now, on the Edit/Pitch page, adjust the LFO AMOUNT upward until the last note of the sequence tunes up. A setting of +2.5 seems to be the magic number. It's a rather strange way to get there, but it works!

You can easily alter ARPEGGIATOR to fit different tunes, by adjusting the timings, note pitches, and even the number of notes used in the sequence. And at only 14 blocks in size, it won't take up much disk space to store a multitude of variations. Have fun! ▬

This article is based on an earlier version in Syntaur Productions' *Sonic BOOM!* newsletter.

Author's bio: *Sam Mims is the owner of Syntaur Productions, and will be a proud daddy in November. Expect new sample disks of baby sounds to flood the market soon.*

Back Issues

Back issues are $2.00 each. More than 10: $1.75 each, more than 21: $1.50 each. (Overseas: $3 each.) E-mail copies of back issues are available for all issues since #118: $1 each (anywhere). Orders for e-mail issues should be sent to: issues@transoniq.com.

Issues 1– 40, 61, 67 – 74, 77, 79 and 82 – 85 are no longer available. Permission has been given to photocopy issues that we no longer have — check the classifieds for people offering them. A free back issue index is available which contains the tables of content for all issues since #43.

ESQ-1 coverage started with Issue #13. **SQ-80** coverage started with #29, (although most ESQ-1 coverage also applies to the SQ-80). **EPS** coverage got going with #35 (and also applies to the **ASRs**). **VFX** coverage (which also applies to the **SDs**) got started in #48. The **SQs** got going in #63. (SQ articles also apply to the **KS, KTs, & E-Prime.**) **DP/4** coverage started in #88 (much of which also applies to the **ASRs,** and most of which also applies to the **DP/2 & DP +**). **TS** coverage got going with #98 but owners should also check out sample reviews for EPS/ASR sounds. The **MR-Series** coverage really started with #136 – but earlier sample reviews may also be useful.

Current Ensoniq O.S. (Disk/EPROM)

EPS	2.49/2.40	SQ-2 32	2.03
EPS-M	2.49/2.41	SD-1/SD-1 32	4.10/4.10
EPS-16 PLUS	1.3/1.00F	DP/4	1.15
MASOS	2.0	DP/4+	2.05
MIRAGE	3.2	DP/2	1.02
ESQ	3.5	KS-32	3.10
ESQ-M	1.2	ASR-10	3.53/1.5
SQ-80	1.8	ASR-88	3.53/3.50
VFX	2.30	KMX-8	2.00
VFX-SD	2.1/2.00	KMX-16	1.50
SQ-1	1.11	TS-10/12	3.10
SQ-1 32	2.03	KT-76/88	1.62
SQ-1 PLUS	1.15	SDP-1	1.70
SQ-R	1.20	MR Rack	1.5x
SQ-R 32	2.03	MR-61/76	2.10
SQ-R PLUS	1.15	ASR-X	1.12
SQ-2	1.2	E-Prime	2.01

MR-61 and MR-76:
Delta Quantization and the Idea Pad

Robby Berman

As I've said before, the MR-61 and MR-76 contain bits of technology that border on genius. Oh, what the hey — they grind the border into dust. The most obvious innovations are the Drum Machine and Idea Pad. But there's another, more subtle treat hidden down deep in the machine: delta quantization. Though it's also in the ASR-X, when used in conjunction with the MR's Idea Pad, it's nothing less than ground-shaking.

Join Me in the Laboratory

Oh, what a dull name for such an astounding little feature! When it was first explained to me by the engineer who came up with it, I listened carefully, trying to follow his tech logic (and doing my best to not look stoopid), and a dim sense of what he was saying slowly started to form in my stegosaurus mind. As I began to comprehend what delta quantization could do, I got more and more excited. Phrases like, "Are you saying what I think you're saying?" burst from my mouth. I ran (I was in Malvern at the time) over to the marketing gurus and we spent hours trying to think of a more descriptive name for this wonder, but to no avail. There's only so much room on a display for cutesy names, and "delta" quantization it remained.

So what is delta quantization? It's a new form of quantizing that allows you to take those will o' the wisp "what'd I just play?" ideas and make them rhythmically perfect, even when you pulled them straight from thin air without even playing along with a rhythm or metronome of any kind. Songwriters such as myself have dreamed of a feature like this since Hector was a pup (my grandmother used this phrase, and I have no idea what it means). Or at least since sequencers came along.

Traditional quantization works with a grid, where each successive point on the grid is a quarter note, eighth note or whatever it was you selected as the quantization value. The notes on your track, when quantized, are merely pulled over to the nearest grid point. This is fine if you're a robot, but if you fall behind the beat during recording of the track, for example, quantizing yanks your notes to increasingly ridiculous grid points. This is true even if — maybe especially if — what you played felt good and had an internal rhythmic consistency, which is to say that it fell progressively more out of sync with the grid. You wind up having to try and re-capture sparks of accidental magic by studying them and attempting to re-play them along with a metronome reference in order to quantize them.

Delta quantizing is smarter than traditional quantization. Its name comes from the measurement of the spaces between notes, called "deltas." What delta quantization does is to start by reasoning (if I may be so bold as to anthropomorphize), "Well, I'm looking for this particular quantization value (1/16th notes, for example), and the tempo of this sequence is such and such. So I can tell that the space, or delta, between notes at this quantization value would be this size." Next, it measures the time between the beginning of the track and the first note you recorded and guesses approximately how many deltas would fit in there. It then pulls the entire track forward or back to actually accommodate precisely that number of deltas between the beginning of the track and the first note. What this means is that the rhythmic integrity of what you played after that first note is intact, it's just that it all now starts perfectly at a multiple of the selected quantization value. So what? Here's the magic: taking that first note as the basis for a brand new measurement, it repeats the same process for the second note, again yanking the rest of the track be-

hind it. By going through all the notes in the track in this manner, one by one, your performance is preserved and your timing is magically perfected. Understand? I know, I know; it's hard to explain. If you're confused, see if the delta quantization diagrams in the MR-61 and MR-76 *Musician's Manual* help.

The Impressive Demo

Okay, that's the theory. Let's use it in tandem with the Idea Pad to see what's so exciting.

Start by rebooting your MR, just so we're all starting from the same place. The sound that comes up is ConcertGrnd (suitable for all percolators). Play something — anything — based on 16th notes on the keyboard. Don't worry about playing to a metronome or rhythm; that's the whole point. We're talking freedom here. Try and keep your time reasonably steady, but you don't have to be a freak about it. If you're the shy type, play something based on quarter notes (if you're catatonic, try whole notes).

Once you've got something you think is reasonably musical, press the Recall Idea button in the Idea Pad to listen to it. Study it a bit to get an approximate sense of its tempo. Try tapping along on the front panel of the MR.

What we want to do is move your idea over to the 16 Track Recorder so that delta quantization can do its thing, but we want your idea to arrive at close to the right tempo. When you feel like you can tap out the idea's tempo, press the Idea Pad's Start/Stop button to stop playback, and tap out the tempo on the Song Editor's Tempo/Tap button. After a few taps, the Tempo display will show the tempo of what you've been playing. Hold down the 16 Track Recorder's Record button and press its Play button. Don't play anything on the keyboard. A beat or so after the countoff, press Stop. This locks the tempo you've been tapping into the current sequence.

Got back to the Idea Pad, and press the Send to Track button. If it isn't already selected, choose Send To = Current Song and press the first track button in the 16 Track Recorder. Answer Yes to "Replace contents of target track?" After you do this, you can press Play to listen to your idea in the 16 Track Recorder.

Here we go. Press the Quantize button and turn the Parameter knob clockwise one tick to get to the "Quantize To =" page. Turn the Value knob to select 1/16 (or, if you were shy, 1/4, or catatonic, 1/1). Turn the Parameter knob one more tick to get to the "Method =" page, and set this to Delta. Press the Enter/Yes button. That's all folks. You'd think that with all the calculating going on, this would take a few moments at least. Jeez.

Press Play: your free-floating idea should now be rooted in the rhythmic bedrock. If it isn't, press Undo and try some other Quantize To value. At worst, go back to the Idea Pad, listen to your idea some more, and do the tap thang again. Delta quantization is really pretty forgiving, so the tempo doesn't have to be tapped perfectly. You shouldn't have too much trouble getting your idea straightened out and flying right.

Pretty amazing feature, huh? Okay now, what would you call it? ▬

Bio: *Robby Berman is a musician living among the dazzling autumn colors of New York's mid-Hudson Valley. His latest opus is* "Rings and Rings."

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Nine-and-a-Half Tips for Playing Vintage Ensoniq Boards

Joe Travo

In the nearly ten years that I've been playing my VFX (and a year and a half for my EPS) I've discovered that many of the things one can do with these boards isn't covered in the Musician's Manual. Whether it's a totally new twist on playing live, or simply an easier way of managing a function, we Hackers can often come up with some really useful tips. Here are a few:

1. An article in the Hacker about eight years ago (by Craig Anderton, if I remember correctly) described the process for wiring up a junction box to enable you to use one CV pedal to control two Ensoniq keyboards. For the electronically- and solder-challenged, here's a different trick, using two footswitches (FSW-1) to control one Ensoniq keyboard. WHY? you ask. Since I play live very frequently, I keep my gear packed and ready to go, including the piano-style two-button footswitch, but my EPS is usually set up in my home studio. Since I have a single button footswitch with each of my keyboards, I simply plugged both of them (each has a mono jack) into a stereo "splitter" jack (two mono plugs with a tip ring/sleeve-type jack). This gives you a very serviceable two-button footswitch. It doesn't look or feel as cool as the piano-style model, but it works just fine.

2. Although the drum kits are a bit lacking, a VFX GM implementation (for playing those sequenced Standard Midi GM hits) is relatively simple. I did a Hacker article on this back in '94 or '95. I don't know if there's a specific utility for doing this setup, but basically it boils down to just assigning the patches that sound right (don't be deceived by names) to the INTERNAL bank for LOCATIONS 1-60 and to the CARTRIDGE for LOCATIONS 61-120, with BANK SELECT commands if necessary for LOCATIONS 121 to 128. Dump the sounds to the INTERNAL bank, move them into the appropriate GM spots, save, do the same for the CARTRIDGE bank. The VFX DRUMS are somewhat lacking since there are only six sounds per kit, but layering 3 kits with judicious use of patch select buttons and KEY ZONES is a workable solution.

3. Cleaning that disk drive on the EPS Classic: REALLY works! For less than drastic problems, a "wet-work"-type of 3.5" disk drive cleaner "diskette" works quite well. For really dirty drives, see the recent Hacker "how-to" article on removal and cleaning.

4. For effects, try a PEDAL. Not a VOLUME pedal (you should use the CV PEDAL for that) or one of those Leslie-type pedals, but a guitar or bass effects pedal. (If you get a bass pedal, it won't work on higher frequencies, and the reverse is true for a guitar pedal.) The choice of effect, (I use a "STEREO" FLANGER [1 IN/2 OUT]) is a matter of personal taste, but the use of a dedicated effects pedal positioned on top of the keyboard allows real-time control of parameters, for example: ON/OFF, RATE, DEPTH, TIME and FEEDBACK, also INPUT MODE: "1 DRY/2 WET" or "MIX 1+2." I use this on drawbar organ patches and various synth-type sounds. It works especially well when used in tandem with built-in effects on keyboards like the VFX family and followers, and the samplers from EPS 16+ forward because of the "effects2" theory, that pumping one relatively good effect through another gives a result that is seriously more than the sum of the parts. Try it — you'll like it.

5. You need a surge suppressor and more than likely multiple electrical outlets for your gear. An excellent solution is the "Power Director" or Power Switching-type units sold for computers. Although not rack-mountable like their music-exclusive counterparts, they do have a few benefits in common: surge suppression, multiple outlets and (on the unit I have) outlets that are positioned vertically so that the "wall warts" fit OK. A couple of advantages that the computer units have over the rack-mount units: price (about 1/3 of the cost) and INDIVIDUAL on-off switches (mine are also illuminated when they're in the "on" position). This last feature is VERY useful for gear that doesn't have a POWER (on/off) switch. In my home studio, I like the fact that all those DC power supplies aren't on when I'm not using them.

6. With the amount of memory available on the newer samplers from Ensoniq, I guess memory management has gotten to be less of a priority, but I have an EPS Classic with the 2X expander, so I'm always looking for ways to do more with less memory. One of the setups that's worked really well for me in both sequenced and live playing situations is to load a really good sample (a 1500+ block piano, for example) in INSTRUMENT 1, and a bunch of "small block" sounds to make up the difference in INSTRUMENTS 2-8. I make these the best "match" for the big block instrument as well as for each other. For the piano example I might use a relatively small block group of strings, and maybe some synth horns, a marimba, an electric piano, a funky clav, a vocal-type synth sound and an acoustic guitar, then stack them as needed to get the sound(s) I need for a specific tune. The combinations are potentially limitless, but you get the idea.

7. Ever get that sickening ERROR message (either the "KEYBOARD FAILED" on the EPS or "ERROR 127 — RECALIBRATE?" on the VFX) that keeps the keyboard element from actually activating the sound-producing (synth or sampler) module? Most of the time the "TRY AGAIN?" message is simply a formality — it still doesn't calibrate and work the way it should. You can STILL USE the sound-producing module, if you know how.

Here's how: You need another MIDI keyboard (any MIDI capable unit, preferable velocity-response will do — you DO carry a spare, right?) and a MIDI cable. Plug the cable into the MIDI IN of the somewhat disabled VFX or EPS (that another hacker writer so appropriately described as "a huge, inconveniently laid-out tone module at this point") and the other end of the MIDI cable to the MIDI OUT of the (you guessed it) other MIDI keyboard and make sure the transmit and receive channels are matched up, and there you go. For some reason, the patch select buttons and the CV pedal on the EPS still have control over the sounds using this method, but that's not the case with my VFX (both Classics). I've had to do this twice (not bad considering I've been playing my VFX for ten years and my EPS for one and a half) playing live, and while it's not my favorite activity, it works, especially when your show depends on specific synth sounds or samples.

8. Always, *ALWAYS* turn off your amp BEFORE turning off your keyboard, but more importantly, always, ALWAYS, ALWAYS turn ON your amp *AFTER* you turn on your keyboard. Depending on volume levels, speaker and/or hearing damage could result from failing to follow these instructions.

9. For AMPLIFICATION: Use a STEREO POWER AMP with some kind of small mixer or other pre-amp or EQ-type device to get the full sound of your instrument. Here's why: If you don't you can lose vital frequencies and harmonics to things like "hot" Preamps and notched-out frequencies — things that are vital to electric guitar and bass sound but are unsuitable for your keyboard, especially the VFX, which has pretty hot LINE OUT signals — it makes my old Kustom amp just scream, and not in a good way. Phase cancellation, although not as common, is also a possibility when pumping certain stereo patches through a single-channel amp.

9.5 Headphones can be deceiving. (For just how deceiving, check out the concepts and techniques in my upcoming sequel: "Deceived by Headphones — The Amp Story.") Use a good stereo amp, as in Tip #9. ▬

Bio: *Joe Travo (still the LizardMan) lives in Visalia, which is in Central California, where he plays keyboards with SUSHI BLUES, a blues/rock band, and AUGUST, a Latin/funk band. Friends say he is both electric and eclectic.*

One of our most common requests from new subscribers (new owners) is for more basic tutorial information. We've all been there. Unfortunately, the *Hacker* is usually "there" when a new instrument first makes its appearance — and then we move on. While back issues can answer many questions, not all are still available and they do represent an additional expense for the new reader. Hence, *"Hacker Reinitialization"* — yup, old goods in a new wrapper. We feel a little funny about the whole reprint thing — so we're going to keep it small. In some cases minor updates have been made to include newer instruments.

How Sounds Work

Part Ia: B-3

Making Your SQ/KS/KT/E-Prime Scream Like a Tonewheel Beast!

Mark Clifton

Now I may be young, but I feel that I've had the opportunities to experience some of the finer things in life — namely power analog, down-and-dirty Rhodes and the mighty Hammond B-3 organ. All of these came before my time, but good luck has allowed me to get to know each of them (especially the B-3), and turned me green with envy for all you old-timers who were around when they ruled supreme. I've spent many an hour pounding on the old Hammond C-3 (identical to the B-3 except for the addition of chorusing and a lovely oak cabinet) at my church, and know for a fact that there's nothing like crankin' up the old Leslie speaker, yankin' out all the drawbars, and pummeling its keys into oblivion. Its classic grungy sound and wobbling Leslie have made it a staple in jazz and rock n' roll since its inception. There's just something about that unique, almost organic sound that draws people to it. It's an instrument that you can't cheat or lie about your musicianship on. To play it requires a certain brutality that you would never use on other instruments. You can't be a whimp if you want to play the B-3.

Okay, enough romantic rambling (the B-3 just has that effect on me). It's time to tell you how to get a nice simulation of this bliss on your SQ-1. If you don't want to haul around the genuine article (which weighs a good four hundred pounds), or pluck down the few thousand dollars for a used one, then your SQ should work nicely. So far, there hasn't been a synthesizer in the world that can reproduce the sound of the B-3 with total accuracy, and the SQ-1 is no exception. I find that the B-3 simulations on the SQ lack the grit and high-end scream of the real thing. This is a fault in the raw waveforms and too-clean output of the SQ (yes, 21-bit D/A converters do have their curses), and can't really be helped. Still, I guarantee you'll be surprised at how gutsy your SQ-1 can sound.

Sound Generation

The B-3 generates sound using 96 electronic tonewheels that each create a (somewhat imperfect) sine wave in a specific harmonic. Drawbars above the B-3's two 61-note manuals control the volume of each harmonic. There is a set of nine drawbars for each manual, making them both separately "programmable." Drawbars can be pulled while notes are sustaining, which gives a level of realtime control that is hard to achieve on a synthesizer. There is a way to match the same effect on the SQ, but I'll cover that later.

The layout of the drawbars is as follows:

Drawbar	Interval	Equivalent Note
16'	Sub-octave	C2
5-1/3'	5th	G3
8'	fundamental	C3
4'	octave	C4
2-2/3'	12th	G4
2'	15th	C5
1-3/5'	17th	E5
1-1/3'	19th	G5
1'	22nd	C6

There is also a set of three drawbars for the pedals which are the same as the first three of the manual drawbars. Each drawbar is marked with the numbers 1 through 8, which are used as increments with 1 being the lowest volume for that harmonic and 8 being the highest (0 is off). These numbers are also used to code drawbar combinations (ex: 888508700). The corresponding SQ-1 volume vale is roughly 12 increments for every 1 on the B-3.

It is possible to create excellent B-3 sounds using additive synthesis, which builds sounds out of harmonic sinewaves exactly the way the 'B does. But this seems fairly impractical with the SQ's three-oscillator structure which would only allow three sinewaves to be used at once. You could create a string of sounds, each with a different set of harmonics, then assemble them into a preset, but this would severely limit polyphony. Another solution is the "1 + 2 Harmonics" waveform, which is actually two sinewaves playing in unison an octave apart. If you look at the harmonics that the B-3 drawbars produce, you'll notice that they are nothing but consecutive sets of firsts and fifths, with a seventeenth (major third) thrown in. By substituting the "1 + 2 Harmonics" wave for any harmonics that lie an octave apart in a certain drawbar combination, you can create bigger additive B-3 sounds while still saving polyphony.

The SQ-1 also contains four "Organ Variation" waves that cor-

respond with certain drawbar combinations. I don't know how the waves were created, but it's a pretty good bet that they're either samples of a real organ or additive recreations. After doing some lengthy comparisons, I've matches the drawbar combinations to the waveforms that they correspond with:

Organ Variation 1:
(C2 – Ab5) 878070030, (A5 – C6) 878070000*
Organ Variation 2: 888000000
Organ Variation 3:
(C2 – Ab5) 888830030, (A5 – C6) 888000000*
Organ Variation 4: 878070000

* Multisampled, probably eliminating the higher harmonics to avoid beat frequencies.

The results aren't completely accurate, but are extremely close. By chaining together these waveforms with sine and 1 + 2 Harmonic waves, you can recreate almost any drawbar combination.

The B-3 can produce only a straight, continuous tone, so envelopes should be set to full.

Key Click

Key click is a short electrical pop that sounds on attack and release of the B-3's keys. Despite Hammond's attempts to eliminate this "defect," it became an integral part of the B-3 sound, and many musicians did all they could to enhance it. Programming a short envelope release time of about 03 seems to produce a sufficient pop at the end of the sound. You can also get a pop at the beginning of the sound by programming an attack value of 99, but this pop is slightly whimpy. If you have an extra oscillator on hand, you might want to use it to produce a more pronounced key click. Just take the "noise Loop" wave, feed it through a 3Lo/1Hi-Pass filter with FC1 Cutoff = 073 and FC2 Cutoff = 80, and set the Amp Envelope for the minimum possible decay value. That's it — pathetically painless.

Key Percussion

Key percussion was an effect added to "smooth out" the B-3's sound. It is basically a single sinewave whose pitch can be switched between an octave ("second") and an octave and a fifth ("third") above the fundamental. There is a switch for selecting either "normal" or "soft" volume and another one for selecting either a slow or fast decay. Fast decay lasts about one second while slow decay is about a second and a half, after which the sound dies away, almost like a bell. The key percussion disables the 1' drawbar when it's activated, so any sound with key percussion should not include that harmonic. The effect is only single-trigger, so the previous key must be releases before the percussion will retrigger. The SQ-1, even with its multiple glide effects, can't simulate this, so I just leave it alone and let the effect trigger normally.

Chorus and Vibrato

The vibrato on the B-3 is controlled by a rotary knob that lets you select between three different types. The vibrato that is produced is a complex sinewave, and can be turned on or off separately for each manual.

Chorusing is present only on the C-3 and other "B" models, and is controlled by the same rotary knob that controls vibrato. There are three chorus/vibrato combinations offered. The chorusing effect can be achieved by slightly detuning the oscillators of the SQ.

Both effects are fairly subtle, so it is hard to give an accurate formula for reproducing each one. You'll just have to do some close listening and program them to taste.

Leslie Speaker Effect

One of the main components of the "classic" Hammond sound is the Leslie rotating speaker. The SQ-1 has an excellent "Rotary Speaker + Reverb" effect that approximates this sound. The reverb can be programmed to taste, but there are certain sets of parameters that seem to create the closest simulation of the Leslie speaker. "Slow Speed" should be set to 10 and "Fast Speed" to 99. "Rotor Center" should be at 50 and "Rotor Depth" can be anywhere between 24 and 32 depending on the characteristics of that particular sound. The "Speed Mode" parameter is used to judge the way that the effect will speed up and slow down in accordance to the controller that you assign to the "Modsrc" parameter. For a truly accurate representation of a Leslie, "Speed Mode" should be set to "Switch." As for the controller, I find that the modwheel or modpedal works best — or maybe even the dread timbre slider. The modwheel offers the most realistic operation since its position corresponds to the position of the slow/fast toggle switch on the B-3.

Now, before I go, a performance tip: To simulate the pulling out of drawbars, assign the volume of a harmonic or group of harmonics to be controlled by a controller such as the modpedal. That way, moving the modpedal will bring those harmonics in and out in realtime. Cool, huh?

I hope you have fun hacking these B-3 sounds. Now, before I fall into a B-3-induced psychosis, where did I put that Prozac?!

Special thanks to *Keyboard Magazine* for being an invaluable reference source for this article. ▬

Bio: Mark Clifton is a player and composer of Jazz, New Age, Orchestral and Rap (yes, Rap!) music and an aspiring Cyberpunk writer who also wouldn't mind going into sound design or film scoring.

J.D. Ryan's Collected Compositions 1997: Hypnotherapy

Tape: *J.D. Ryan's Collected Compositions 1997: Hypnotherapy*
Artist: J.D. Ryan
Contact Info: P.O. Box 964, Ocean View, DE 19970; Email Bros-Ryan@dmv.com; Website: http://home.dmv.com/~brosryan.
Equipment: Ensoniq EPS-16+, Sequential Six Track, Sequential Drumtracks, AKG 330 BT, boss SE-50, Mackie 1202, Peavey 600S spring reverb, Tascam 424, Kenwood 8050, AKG 330 BT, Steinberg Cubase (Drum Tracks), Sequential Circuits DrumTraks (percussion effects) ,TrapKat by KAT (Emu), various sampled instrumentation by Syntaur Productions and Rubber Chicken Software.

It's almost that time of year — another installment from The Bros. Ryan, or more accurately, J.D. Ryan. We last reviewed J.D.'s work in the December 1996 *Basement Tapes*, where no less than 31 compositions were squeezed through the wringer. J.D. seems to be slowing down, including only 10 official tracks on this year's tape plus five "bonus tracks," bringing the total to fifteen compositions.

Regarding the intent of his basement tapes, J.D. writes: *"I guess these recordings are only rendered for entertainment (in the case of the humor pieces) and personal expressions of 'the minds ear' in the many original instrumental compositions. Sometimes I hope others may pick up a thread in a piece and create something else from it. At one time I had thought that these efforts might help me earn a living."* Well, don't give up hope yet, J.D., 'cuz there's gold in them thar tapes...

J.D.'s *1997 Collection* is similar to his past tapes: there are some instrumental noodlings that seem to be simply experimentations with a particular patch, there are your political salvos fired tongue-in-cheek at our nation's most deserving politicos, silly nonsense songs, the odd assortment of trancey hypno-trax (ergo the title of this compilation), and the one "standout" track. Let's take a listen...

1. Spaghetti Western — This instrumental features a sampled acoustic guitar played out of range (low) in a repetitive minor key downward progression, in that faux flamenco style adopted by many an old Western soundtrack.

2. Moss — More sampled guitar, minor-key noodlings providing a bed on which an accordion (?) sample romps. Very short.

3. You Done Do'd It — J.D.'s inimitable vocals propel this quasi-ragtime piece full of dissonant piano chords. Lyrically, the point seems to be to make an observation that a certain individual has blown it, made a mistake, pulled a boner; couched in terms general enough to apply to any number of unfortunate blunders: a relationship faux pax, presidential buffoonery, political high jinks, or even spilt milt. Joe Ryan is credited with the "drums" — but I wouldn't brag about it...

4. Rip Sawz — Stealing chord voicings from *"Spaghetti Western,"* this is a demo of an overblown mondo distortion patch (just what is being distorted is anybody's guess). I would wager that this short track shares its name with the dominant keyboard sound.

5. The Rest of the Story... — (Acoustic piano patch) Continuing the minor key theme, minor piano meditations play furtively over an unidentifiable bass-type patch.

6. Back Bedroom — Minor key rag-blues piano progression supports (as in life support) a cheesy sax solo (make that Velveeta). I make no efforts to hide my feelings about most sampled sax usage. This tune is mercifully short.

7. Goofball Interlude — While this title could apply to any number of J.D.'s pieces, it starts with a wonderful percussive B-3 sample, then weaves in vocal "aahh" sampled pads around the trademark acoustic guitar diddlings. J.D. notes that he thinks the B-3 is from the *Joey de Francesco Signature Series*.

8. Puff — This short excerpt plays like the intro to a circus nightmare, then abruptly fades, once again using organ and acoustic guitar samples.

9. Sequence 777 — The theme to *"Secret Agent Man"* is played on (surprise) an acoustic guitar sample. I love this one solely because this was the first guitar riff I ever played (thirty-one years ago) and now I have a greater

sense of compassion for what my parents had to endure: merciless repetition of the same lick over and over and over and over and over and over..... Perhaps there really is justice in the world.

10. Hypnotherapy — A pulsing eighth-note drone backs percussive plucked string instruments playing the melody in this brief episode of East Indian snake charmer music. As a previous practitioner of hypnosis in therapy, I can tell you that this track could indeed induce a trance, but only in the type of person who enjoys "getting right to the point" without any, well, foreplay.

11. Untitled — In his trademark whimsical style, J.D. replaces the vocal line with vocal scats. He does this with so much personality and humor, you can almost imply the missing lyrics.

12. Unbustable Bill — The Paula Jones affair is apparently the target in this brief but biting lampoon. J.D.'s editorial wit is as sharp as ever.

13. Dock of the Bay — J.D.'s cover of this classic sounds like Otis Redding is drunk and leaving out every other phrase in the lyric lines. A most soulful rendition, with brother Joe again playing the TrapKat.

14. Untitled — This track rises to the surface and shows J.D.'s vocal and lyrical genius. The simple phrase "You used to love me but you don't" is given a depth of humor and meaning that conveys what I think of as "the blues attitude" but in more of a rag style. In my humble opinion, if J.D. is searching for a niche to concentrate his energies in, this would be it.

15. Untitled — In this final track, a frustrated vibes player competes with the pianist over who can dominate in this chromatic pound-fest in a generally bluesy free-form free for all.

J.D. Ryan's *"Collections"* appear to be like file cabinets for storing his musical projects. It is interesting that there is always a standout or two on each of these compilations. This is not to call all of the other tracks "throwaways"; far from it. They all contain at least a kernel of musical, sonic, lyrical, vocal or compositional genius. But in one or two tracks per compilation, all the elements seem to come together and focus J.D.'s intense musical and emotional brilliance into a prime candidate for "commercial" release.

There is a lesson for us here: document all your flashes of genius! Keep at least one cheesy little tape recorder always at the ready, so you can record whatever epiphanies pass through your mind or soul. It may be one little piece of a lyric line, or a riff for a guitar solo, or a chord progression, or an entire song.

I used to take long walks every day, and would carry a small Walkman-type tape recorder with me. Many times I would get my inspiration for a tune during these walks, and I know that ninety percent of those brief flashes of artistic genius would have been lost within minutes if I had not had a means of recording them on the spot. I would rush back to my studio and quickly pound out a sequence for easier documentation and retrieval. A number of full-blown songs emerged from this potpourri of musical skètches.

J.D. Ryan seems to be a musical packrat: he keeps everything. Themes resurface time and again in his music, in slightly different forms, and once in awhile the elements all coalesce into an organic whole that simply "feels" like the convergence of all the right musical things.

One of the beauties of music is that each artist runs "life" through his or her own wringer. There are really only so many universal human themes: love, relationships, the quest for meaning, venting of pain or joy. But there is an infinite number of ways of expressing the emotions that attend these experiences. J.D.'s trademark is not his sounds, or even his somewhat predictable chord progressions, but his attitude: laugh at what sucks.

I encourage you to visit J.D.'s website at http://home.dmv.com/~brosryan for some downloadable sound clips of his work, lyric sheets, and miscellaneous humorous commentary and advice on topics ranging from the presidency to computer gear to the political cause behind why it takes five trips to True Value before you can fix your toilet plumbing. Guaranteed to make you smile. ▬

If *you* want your tape run through the wringer, err, Hacker, just mail it off to: Basement Tapes, *Transoniq Hacker*, 1402 SW Upland Dr., Portland OR 97221. Please include your e-mail address!

Bio: Steve Vincent produces demos and CDs at his home-based Portent Music, and can be reached via email at vincents@harbornet.com, or at his website at http://www.kspace.com/vincent.

Ensoniq CDR-5: L.A. Riot Volume II

Britton Beisenherz

Product: CDR-5: L.A. Riot Volume II
For: ASRs, EPSs, TSs, MRs
Price: $199.95.
From: Ensoniq Corp., 155 Great Valley Parkway, Malvern, PA 19355,
Phone: 610-647-3930 (voice), 610-647-8908 (fax).

When composing music nowadays a lot of musicians consider almost any sound byte "source material." With the ability to twist and shape the sampled waves to exact specifications... why not sample everything... and use it. One of the most obvious sources for sampling has always been prerecorded music. How nice it is to be able to grab a measure of a great drum beat, without having had to record the drums.. or even find a drummer. The ability to take portions of melodies, licks, beats, even whole grooves, from music that already exists in recorded form... and use them in our own music is one of the many things samplers offer us. However, I do believe there is a line between sampling and stealing. This line has been tested throughout the years, and stretched to a fairly generous degree. And for that I am actually very thankful! I am glad to be able to safely mask a groove for use in my tune, or take a half a sentence out of context. But how far should it go? What is sampling and what is stealing? These are all questions I have considered for years, and most recently a great deal more since I took on the assignment to review *CDR-5 L.A. Riot Volume II*. And I still do not think I have quite come to a conclusion.

It is probably not difficult to guess (if you did not already know) that the *L.A. Riot* disks (Volumes 1 and 2) are aimed at the Rap, Hip-Hop, & Acid Jazz creators and producers of da world. Unfortunately, I do not have *L.A. Riot Volume 1* available for a comparison. *L.A. Riot Volume 2* is 597 megabytes in size and contains six root directories: Dope Trax-1, Dope Trax-2, Drum Loops, GTR+ BASS, DRUMS, and Vocal + FX. The material on this disk is best defined by understanding each root level directory, which, with the exception of the dope trax section, are fairly self-explanatory.

Now, for those of you (like me) who did not know what Dope Trax were, here is the description of the section exactly as it is given in the sleeve: *"Dope Trax are interactive construction Kits laid out across the keyboard. All the necessary parts to make a track are loaded on a single patch with a common general layout."* What that translates into is hours of mindless entertainment ...stitching together pre-made loops, grooves, licks, and phrases like, "Here we go" and "grab the mic." The patch selects in this section allow high pass, reversed, and full reverb variations of the Dope Trax... nice, but that is just about the extent of the artistic decisions you will have to make with these two sections. Definitely fun, however, I would not call any one of the many grooves I easily constructed with the Dope Trax my own. It is a bit like interactive TV or something. The two Dope Trax sections constitute a large portion of the *L.A. Riot* CD and while these sections are fun to play around with, they are not what I look for in a sample CD...sometimes I am too lazy to build my own sounds for every tune, but I still enjoy making original music from the sounds...

The rest of the CD is at least a bit less helpful in making your music for you. That is especially the case with directory 3: Drum Loops. This section of the CD-ROM contains about 350 drum loops, ranging from 66 BPM to well over 135 BPM. For the most part, I found the loops to be very good. Tasty grooves and variations, great sound quality, lots of variety...But, a problem arose when I tried to make sense of the loop BPM layout (i.e. what tempo each loop was, and how these loops were laid out over the keyboard). Again here are the words that appear in the sleeve regarding drumloops: *"Drum loops are mapped in sequence on the first octave and then spaced out allowing for pitched samples on the rest of the keyboard."* Hmm. I thought I knew what that meant until I tried actually working with the loops. After searching for quite a while to find some logical BPM scheme hidden within the keyboard layout, I gave up and found myself to be satisfied purely with the quality of the loops themselves. I know the original tempo of only about half of the drum loops I use anyway...no big deal, and perhaps I am just missing some-

thing. Overall, I would say that the Drumloops, as well as the drums section of *L.A. Riot* was the most useful in my application for sampled sounds. Not too many tricks, or too much sample material, just useful drums with many applications (especially for dance, rap, and hip hop styles).

The Bass + Guitar directory, as well as the Vocal + FX directory both struck me in similarly, so I will just say a few things about these two and then move on. These sections of the CD gave me flashbacks from the Dope Trax sections. Basically these directories contain some of the single Bass, Guitar, Vocal, and FX tracks that were combined to make up the Dope Trax sections, as well as many more that are reminiscent of the same. As I said of the Dope Trax section, some things should be left to the musician. My other main concern with these sections of the CD was that most of the licks and vocal hooks provided are pretty cliched at this point. I mean, c'mon, how long are we gonna use the TR-808 while comping funk chords and sprayin' out samples like "hit the joint"?

I figured I would end on a good note, and say a few things about the other directory of the two that I found to be useful. The drums section of the *L.A. Riot* CD-ROM, especially when in combination with the prerecorded loops, can be of great use to anyone. Most of these drum samples are the originals from which the loops were made, making it easy to add to a pre-existing loop, or create a fill to perfectly match a loop you like. These samples are just as useful for creating drum loops from scratch. I was pleased with a great many of these samples, and find myself going back to this CD for mainly the drums sections.

Overall, I must say that the Ensoniq *L.A. Riot Volume 2* CD-ROM is the first of the Ensoniq CDs I have heard that I do not see myself throwing down the $200 to take home. It may just be that I have a different application for sampled sounds than others, but I do not know many musicians who care to take such a passive role in their music making. And for as many good drum loops and sampled sounds as I found on the *L.A. Riot Volume 2* CD-ROM, I found just as many that made me wonder what the difference between a sample CD and an Audio CD was. ▬

Bio: Britton Beisenherz is a student finishing his degree in Synthesis at a school of music in the dreadful Northeastern portion of America. Britton has been writing, recording, and producing music for many years.

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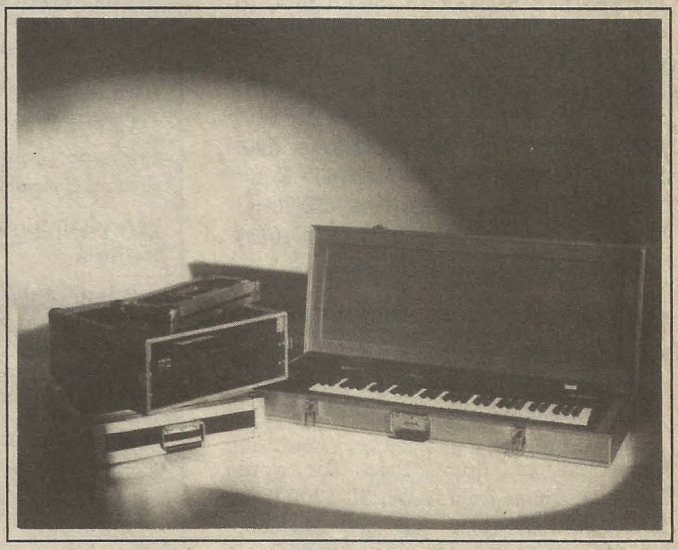

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Four unopened Ensoniq CD-ROMS for sale: CDRs #11 (keyboard), #12 (drums), #13 (percussion), and #15 (L.A. Riot #1). All for #320. Call Mike, 805-492-0224.

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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 6:00 pm EST Monday to Friday. 610-647-3930. Ensoniq's Fax On Demand line, (1-800-257-1439) can also be used to retrieve specs, OS info, hard-drive info, and the like.

All Ensoniq Gear – Electric Factory (Ensoniq's Australia distributor). E-mail address: elfa@ozemail.com.au; their web site at http://www.ozemail.com.au/~elfa; or e-mail their resident clinician, Michael Allen, at mallen@geko.com.au. Phone calls, Business hours – Victoria. (03) 480-5988.

All Ensoniq Gear – The Electric Factory in New Zealand, phone (64) 9-443-5916, fax (64) 9-443-5893, or e-mail geoffm@elfa.co.nz (Geoff Mason).

TS Questions – Pat Esslinger, Internet: pate@execpc.com, Compuserve: 74240,1562, or AOL: ESSLIP.

TS, VFX, and SD-1 Questions – Stuart Hosking, stuh@ozemail.com.au.

MIDI users and ASR-10 Questions – Ariel and Meiri Dvorjetski, Internet: s3761921@techst02.technion.ac.il, or dvorjet@techunix.technion.ac.il. You can also call Sincopated BBS at (Israel country code: 972) 4-8776035, 24 hours, 28.8K Modem. Please Login as: ENSONIQ, Password: MIDI.

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

VFX, SD32, and EPS-16+ Questions – Dara Jones, Internet: darajones@juno.com or call 214-361-0829.

SD-1, DP/4, ASR-10 Questions – John Cox, 609-888-5519, (NJ) 5pm – 8 pm EST weekdays. Any time weekends.

SQ-80, VFX Questions – Robert Romano, 607-898-4868. Any ol' time (within reason) EST.

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

EPS, EPS-16 PLUS, & ASR-10 Questions – Garth Hjelte. Rubber Chicken Software. Call anytime. If message, 24-hour callback. (320) 235-9798. Email: chickenEPS@willmar.com.

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

EPS/MIRAGE/ESQ/SQ-80 M.U.G. 24-Hour Hotline – 212-465-3430. Leave name, number, address. 24-hr Callback. Email: G4Prod@aol.com.

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.

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

ESQ-1, MIDI & Computers – Joe Slater, (404) 925-8881. EST.

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 - Internet: interface@transoniq.com. In many cases a quick answer can be obtained by posting to our interactive, on-line Interface at our Web site (http://www.transoniq.com/~trnsoniq/interface.html) or calling Ensoniq CS at 610-647-3930.
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 Pat Finnigan (PF). Letter publication is subject to space considerations.

Dear Hackers,

I've been subscribing to your excellent mag for a couple of years now. It's great, helpful, and kinda funny.

Now let's focus on me for a bit. I have my trusty old **ASR-10**, a brand new computer (Gateway 2000, Pentium 2, 233 MHz, 64 ram, 6.2 gig), a new MIDI Translator PC, and new Audio Logic 2.5. I have everything hooked up right (so I think) but Logic doesn't want to control the ASR. (Why can't we all just get along?) Sometimes it works (by the way I'm using the Tutorial song) for a while then it just quits. Sometimes I can get it to work by logging off of Logic and running the Opcode diagnostic a few times until it plays scales. Then when I reboot Logic it may or may not work. Powering down and up the ASR and computer doesn't seem to work with any consistency. I checked with Gateway and the printer port is not inverse IRQ. Sometimes when I try the Opcode diagnostic program it makes a sound (like there's a bunch of MIDI notes stuck inside just waiting to get to the ASR). I think I should have an awesome set-up if I could just get started. Please send help. Thanks.

Signed,
Clueless in Madison
(Dave)
Radtz@aol.com

*[PF – Dave: I've heard of this kind of behavior with Gateway computers. One of my friends bought a Midiquest MQX-32 for his brand new (at the time) 486DX2/66 hotrod so he could stripe SMPTE to tape, but it wouldn't stripe, record, or playback. Issue was, get this, the VIDEO driver software. It seems Gateway called some nondescript video acceleration software *.sys in his config.sys file. We didn't find this out until after he gave up after a month and bought a pair of ADATs...*

I'd highly recommend contacting Gateway about this problem. Not to point an accusing finger at them (or anyone, for that matter), but it IS their box. They are supposed to have a terrific tech support group as well since they've expanded their sales base to ALL over the country (three just opened here in Indy), and I trust they'll untangle these MIDI woes you're experiencing...]

[Radtz@aol.com – Dear PF, thanks for responding. It turns out that I had a printer driver fighting for control at LPT1 and I had the port configured in BIOS for "bi-directional," it needs to be set to "compatible." I got rid of the printer driver (I will try an alternative one) and all works great. You were also right about turning off all of the ASR's MIDI controllers too. By the way, the guys at OPCODE guided me through. As he put it, you only want one brain in the MIDI studio. I guess I should feel a little slighted since he was referring to Audio Logic. Thanks again for responding. I really appreciate it.

As a side note, how about more articles tips for the ASR 10? Keep up the great work.]

[PF – Radtz: Ah, those pesky EPP ports...]

Hi there!

I am carefully reading the ads in the TH, only to discover that if I don't have something with a floppy disk connected to it, I can kiss third party sounds goodbye. Why isn't someone making sounds for the **MR-Rack**? I thought that since the MR series is made up on the same basis, the sound making should be somewhat the same? Not?

If I am mistaken here, please correct me. Can the Unisyn editor make use of any of the sounds available or just Ensoniq's? That is: Do I *have* to buy a $1.000 EXP-card (Norwegian taxes....) or a $100 Data card (1 – ONE available(!))? Please enlighten me!

PS: I would very much appreciate some decent brass sounds. I have an old Roland JV-80, and it have excellent brass sounds compared to the MR-Rack. But I supposed that today the sounds ought to be even better? With 44.1kHz, Insert effects and everything...

Bjoern Tore Paulen
Norway
Bjoern.Paulen@item.ntnu.no

*[PF – Bjoern: The Unisyn editor works with ALL MR-series instruments (both keyboard and rack). If you want to sysex *.wav or *.aif computer audio files into an MR-series instrument, yes, you need an expansion board to load these samples into. The data cards store parameter info, not wavesample data. Think of the data cards as parameter information that point to the internal sounds of your MR.*

I hear this gripe all the time: "My old XXXXX keyboard had better XXXX sounds than the MR does." That's one of the reasons the FLASH memory expansion board exists. You can load up to 4 Mb of your favorite sounds into this expansion board. More often than not, you can create a VERY reasonable facsimile of the sound your looking for by either judicious editing of a similar patch in the MR, or build a new sound to your liking from scratch.

The MR was designed to be the most flexible and powerful sound engine in the Ensoniq lineup. Yet people either can't or won't edit the sounds to their liking. I remember talking to Roy Elkins about this last year. He so much as said that

click on a track button and the sound under it will play along with your selected sound. Go ahead and double click an additional instrument track button, and now you've got three instruments playing.

Also, explore the "Presets" section of the Musician's Manual: lotta goodies there. You just might want to request the MIDI External Command Specification document (the SySex Bible, in Hackerspeak) directly from Malvern to assist in programming the 1600 to automate button presses and other heady ASR operations via sysex.]

Th –

I have an **SD-1** as my slave unit, a Proteus 2XR sound module and the E-magic Logic 2.0 sequencer for the MAC.

I can not get the sequencer to recognize the Ensoniq and do program changes in the banks of sounds on the SD-1.

I also want to use both the Proteus and Ensoniq together, but it does not seem to work unless I make elaborate template patches for the Ensoniq in its performance page; i.e. MIDI or Ext for the Proteus.

Can you help?
Russell harbottle
RBHPRoductions
rbhprod@iaw.on.ca

[PF – Russ: Do you have program change enabled in the Master pages? This is kind of a hidden menu in that it's a coupla button presses down in the hierarchy. To select different sounds in different banks, program changes 124 thru 128 must be invoked to change banks, then followed by a program change command as well. See page 6-11 of the SD-1 Musician's Manual for the scoop.

Be sure to enter this info in the appropriate track in Logic.

As far as making elaborate templates to get the SD and Proteus working happily, what MIDI interface are you using? I used to use one of those "extension cord" interfaces with a 1-in 3-out hardwired config, then I discovered a MIDI Time Piece. It was WAY cool, but a little too pricey for me, so I settled for its little brother, the MIDI Express. Beauty of it (as well as the MTP) each in and out port (4-in 6-out) can be isolated to one instrument, i.e., one out to the Proteus, another out to the SD-1, with NO MIDI crosstalk (drum info on Out 1 Channel 10 doesn't appear at Out 2 when defined) whatsoever. Yeah, the multiple outs don't do you any good unless you can map them.

Or pick up a used MTP in the used market – highly recommended.]

TH –

We have two Ensoniq **ESQ-1s**, with one having software version 2.2, and the other with software version 3.5. Is 3.5 the most recent version, and is 3.5 or the newest version still available?

Marshall Diakon II
DiakonII@aol.com

[PF – Marshall: V. 3.5 is indeed the latest and greatest for the ESQ-1. Available from our Malvern brethren...]

*[TH – We've just today heard from Ensoniq that they're discontinuing *technical* support for these older machines. This may affect your results here... better hurry. If it's too late, they've probably just turned it over to someone else. Syntaur would be our first guess.]*

TH –

I'm trying to get my **ASR-10** to work with the following items. I've tried the obvious many times over (cables, Id's, order, turn-on seq, etc.).

ASR-10
2ci Mac 7.6
External CD 300 Apple. (Parity connected, power termination connected.)
Zip 1 gig. Mac format.
Quantum LP240s Ensoniq format. (It's in a Club Mac case – all jumpered as bought except I took out resistors.)

The ASR-10 will not recognize Quant and CD together, but will individually. Also, the ASR-10, Quant-Zip and Mac will work together. When I put the CDrom in the chain – nothing.

Any help would be greatly appreciated.
Jeff E
JLEpperson@aol.com

[PF – Jeff: I don't know this for a fact, but I'd disable the parity on the CDROM reader. The ASR doesn't use parity for any of its memory addressing chores, nor does the Mac. HOWEVER, a few ci's (maybe 1500-2000) were made WITH parity to comply with GSA specs. I've heard of these Macs but never seen one. Supposedly there's a chip near the SIMM slots to identify this, but it's been SOOO long ago I'm very fuzzy on it.

But I think the problem here is the parity jumper on the CD drive. Disable parity

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and try it out.
Ping me back with the details...]

TH –

I am the owner of the first model **VFX-SD**, and I am having numerous problems with the unit. I see from Ensoniq's web page that they no longer support older model units, and was referred here.

I am not a professional player, and the unit has less than 1000 playing hours, but it freezes a lot and I would like to get it fixed. Or, if there is a software fix, I'd like to know. Can you help?

Thanks,
Greg

[John Seboldt (rohrwerk@newton.pconline.com) – No longer supports? Well, I dunno about that. Did you get the keyboard fix? This was a factory freebie (though done at your local shop), and entailed bypassing a connector between two boards with hard wiring. It was a very common fix, and it solved all my problems when I had one.]

[PF – Greg: Ensure your VFX]-SD is using OS V. 2.1, and the ROM version is 2.00. If you don't have either (or both) of those, get with your Ensoniq dealer to order this latest version ROM. It's about $35 installed. OS is free.

Once your VFX-SD is established at the above revisions and still gives you problems, ping us back here and we'll go over a few suspect areas.]

[TH – Ensoniq is going through some changes in their level of support for the older instruments. We're waiting for some clarification on just what's involved and will post the news in the Hacker.]

[Ensoniq – Ensoniq does not do that repair in warranty any longer. The VFX-SD can still be serviced though. The OS upgrade is $49.95 suggested retail and the installation charge depends on the service center's bench rate.]

TH –

I recently purchased an **SDP-1** keyboard (vintage 1986) which sounds pretty good with a single exception. In the second octave above middle C, when in the piano A3 mode, the notes sound "tinny" like an old honkytonk piano. Two questions – is there a way to tune or adjust the sound? And, are manuals or kits available for reconditioning these keyboards?

Thanks for your attention to these questions,
A & D Johnson
AugandDaleJohnson@classic.msn.com

[PF – Augan: Nope – you've found the infamous split point where the two adjacent samples are so dissimilar it's assumed something is wrong. And there isn't (anything wrong). You're looking at an 8-bit piano sample burned into ROM – there's no way to adjust its attack, decay, pitch, filter cutoff. No parameters are available to edit at the wavetable level. That's the price one pays for the convenience of a wavetable: no load time (like the samplers).

There IS an adjustable FX board in the SDP-1, but its only parameters are chorus depth and speed. I suppose you could go poking around in there, but it's not going to address this specific issue. And as SDP's are pretty scarce, I'd leave it alone. If you want a more authentic piano sound, MIDI up an EMU Proformance or similar piano module to it...

But I'm glad to hear folks are still using them...]

[GNormand@aol.com – I made a lot of money playing that old beast. I used the split keyboard and took advantage of the unique +1 MIDI channel for the bass. This allowed me to slave a module to the right hand, mix it with a foot pedal and have the world at my fingertips.]

Hello:
My name is Horacio Hernandez. I am an Argentine musician and I have an old sampler Ensoniq **EPS**, model 1988. The 3-1/2 floppy disk drive is broken. The trouble is the Argentine official Ensoniq Technical Support in Buenos Aires can't offer a solution for my EPS.

I want to know:

1) If you have the original EPS disk drive.
2) What is the price, including the shipping?
3) How can I pay for it?

Please, answer as soon as possible.

Best wishes,
Horacio Hernandez
ricardo@intercol.cybertech.com.ar

[PF – Horatio: Hola: que tal? Actually, there're two ways to replace your disk drive. One is to get a replacement from Ensoniq for around $250 US plus shipping. The alternative is to purchase one from Rubber Chicken Software. Visit their website at http://www.soundcentral.com/~chickeneps. They sell drives for around $60 US plus shipping. I'm sure Garth'll be happy to get a new drive out to you as soon as he hears from you.

Hasta la vista!]

[Garth Hjelte – Horacio called us from Argentina – you can sense the desperation! Good time to bring this up. The floppy drives for the Ensoniq DS/DD only models – this includes the EPS, the VFX-SD and SD (everything pre-ASR/TS pretty much) – are not manufactured anymore. The best bets I can think of are: 1) Check with Ensoniq customer service themselves; but remember, they usually charge over $100 for floppy replacement, and that's if they have them. 2) Contact us – we are out-of-stock (we used to have them), but we are trying to get more in. And 3) the October Hacker mentioned a Techzam (805-520-9845) company that repaired the floppy. Also, most computer repair shops can clean out your floppy drive, and perhaps that's

all it needs. Try all those. For more information, check the RCS Tips page at http://www.soundcentral.com/~chickeneps/rcs_tips.html#EPSFloppyDrives.]

[Ensoniq – Ensoniq does not sell parts directly to end users, only to authorized service centers.]

TH –

I am looking for information, advice, or articles on how to connect an **ASR-10** to a Macintosh (Centris 650, internal CD Rom drive whose ID number has been changed to 4, not 3 as the ASR SCSI ID is 3, correct?) in order to load sounds from the CD Drive via SCSI to the ASR-10. Is this doable????

Thank you,
Robert Camacho
camach@sprintmail.com

[PF – Rob: You are indeed correct in shifting the ID of the Centris' CDROM to 4. Next, you need the appropriate SCSI cabling (correct gender, etc.). Then you'll need some wareS to do all of this from guys like Terje. Visit his site at http://fysmac04.uio.no/eps.html for the required software.

And finally, you may need to make a switchbox that switches b/w the D25 connector of the Mac and the D25 connector on the back of your Centris that doesn't switch termination power. The Hacker published an article on how to build this in a past issue (3-4 months ago). May or may not need the switchbox: you won't know till all the rest of the ducks are lined up. Recommend Terje's node VERY highly for Mac users...]

TH –

About 20 mins after boot-up, my faithful old **ASR-10** starts producing a nasty distortion at 44.1 kHz. The distortion can be heard when sampling at 44.1 kHz, playing back at 44.1 kHz, or using 44.1 kHz effects. It has done so for the last 18 months with no apparent other deterioration, as it continues to function perfectly at 30 kHz. Two visits to the repair shop have kept me away from my machine for weeks at a time, but both times, the machine was found to have other faults which were repaired, but the fault for which it was sent there still persists. Can anyone shed some light on this??

Panji Anoff
panjianoff@citycom.com

[PF – Panji: Have your tech people check out the output board. My (er, the National Guard's) EPS did this exact same thing intermittently. But once I left it on over a lunch break, came back and it wouldn't play a sound. Looked fine, display was normal, would load to and from floppy and SCSI disk, just no sound. They replaced that board and it's been sweet ever since.]

TH –

I have an original **EPS** which has not been used in over a year. I have misplaced the operating and sample diskettes – I fear they may have been erroneously discarded. Can you recommend where I might get another set and how much (estimate) it would cost?

Thank you in advance for any support you can provide,
Walt Talley
Walt.F.Talley@siemenscom.com

[PF – Walt: You can download the O.S. from http://www.soundcentral.com. Go to the Ensoniq pages. If that's a bother, contact Syntaur Productions at http://www.fatsnake.com/syntaur. They've got custody of the EPS wareS and other goodies...]

TH –

I'm a young producer starting out in this business they call hell... Oops, I mean music. I have the original **EPS** (sacred) and I recently acquired the JV2080, Pro Tools 4.0. I was wondering if the SCSI drive (for the EPS) could a play a part in helping me with my production. Could you give me some tips... some answers... heh heh... I beg of you. Great products.

Thanks,
Have a beautiful day,
Clement R Fanus
fanu0001@algonquinc.on.ca

[TH – Readers: Now, see, this is what happens when you don't subscribe...]

[PF – Clement: Uh, huh-huh-huh-uh, cool! The SCSI drive will work with ProTools, but you'll have to format it and connect it directly to the ProTools card. So you'll lose all your EPS samples. I wouldn't do it just because of the sheer time involved in making an EPS hard disk (directories, floppy loads, SCSI copies, etc.). Plus, SCSI drives are so cheap now (2 Gb externals are under $300 these days), it's not worth the bother. That is unless you've gone broke buying expansion boards for the 2080...]

TH –

I need to get the Windows 95 driver for an Ensoniq **VIVO 90**. It seems that Ensoniq does not support the board installed on my EPS computer.

BJHELTON@aol.com

[PF – BJ: Point your browser to http://www.ensoniq.com/mmedia/downloads/ensdrvrs.htm. You can pick any and all drivers (including NT 4.0 drivers!) from there. Ensoniq drivers only support Ensoniq sound cards. Then again, I haven't seen a Creative Labs driver support a SoundScape, either...]

TH –

Does anyone know how to sample an analog resonant filter sweep on the **ASR-10**, modulate a short loop by loop position or transwave to recreate the sweep, and not get a lot of popping at various points in the sweep? I've gotten very close, and it almost sounds absolutely fabulous, but there is always some popping. Is this possible? Or would a sampled digital recreation be

precise enough for the loop not to pop all along the length of the sample? Or should I be brave and haul my weighty, fragile Oberheim up on the stage?

Jonathan
saunders@memphisonline.com

[PF – Jonathan: I haven't tried this particular scenario on my ASR. When I need an analog filter sweep I just load the Waveboy Resonant Filter Disk. It's relatively inexpensive ($40), and a LOT cheaper than paying a tech to recalibrate/realign Oberheim oscillator boards...]

Hi all,

I can't seem to get my Ensoniq **ASR** keyboard/sampler to accept MIDI input from Cakewalk using an EWS64-XL soundcard from Terratec.

I can record to Cakewalk okay, so MIDI is working in the other direction, but I can't play back to the ASR sampler from the Cakewalk sequencer.

Are there any special issues to look out for with this card or with the ASR?

Do I need a special Cakewalk instrument definition for the ASR?

(Yes, I set the MIDI channels on both sides and experimented with the other MIDI settings...)

The EWS64-XL sound card has two MIDI in/out ports. I enabled them both and in both cases it is the same problem.

Any ideas?

Thanks,
Allan Brighton
abrighto@eso.org

*[PF – Allan: Ensure each track on the ASR has a specific MIDI channel # assigned to it. Then ensure each track is assigned *both* status. Most all of the Ensoniq instruments default to a "LOCAL" status – switching to "MIDI" allows the track to play ONLY from incoming MIDI data. If the track status is set to "BOTH" it will respond to both inbound MIDI data AND keyboard input. Lastly, in the master pages, ensure that MIDI Receive is enabled and set to "MULTI."]*

Hello:

I have recently found my floppies of Ensoniq **EPS** sequences... Is there a translator or any other keyboard capable of reading the format of these sequences? I want to use the sequences but I don't have an EPS anymore.

Thanks,
Robin
r.datta@sk.sympatico.ca

[PF – Robin: Rubber Chicken Software distributes the Giebler utilities. Request the EPS-SMF package. This will allow you to convert EPS-format sequences into Standard MIDI Files and vice-versa. URL is http://www.soundcentral.com/~chickeneps/. Great wareS...]

[Uncle Viceroy (tesjuptr@Bayou.UH.EDU) – If you are using a MAC, Terje's EPSm will convert EPS sequences into General MIDI.]

TH –

I'm trying to find voice editing PC software for my **ESQ-1**. I would like a graphical editor if possible.

Thanks,
Robert Lanza
rlanza@ccs.lmco.com

[PF – Robert: Seems I remember surfing around one night and seeing that very thing, but I can't remember the URL. In lieu of shareware apps, the only one that comes to mind is Unisyn, which was recently ported over to the PC platform. MOTU has an ESQ-1 profile for it that ships with the package.]

Heeeeeeeellllllpppp !!!

My name is Sascha Klein and I am using EPSDisk v1.30 by Michael Chen to create my sample disks on a PC.

I have got one BIG problem... I want to use EPSDisk in batch-mode (thru MS-DOS-piping). Anyway, it does not work!!! But I need this soooooooo much!!! I know that the programmer of EPSDisk is Michael Chen and he programmed it (I think) 4 or 5 years ago, so I wanted to contact him – without success. His former email-address (as a student) does not work. Do you know his new address? Do you know where to get the source codes of EPSDisk? Or is there another program (MSDOS) that can select *.efe out of gkh-disk-images and back?

Please!!! Help!!!
Sascha
klein@gfi.ihk.de

[PF – Sasha: As I noted in a similar reply last month, did you contact Ensoniq and obtain his URL? He designed the Ensoniq web pages and they should be able to get you in touch with him.]

[Garth Hjelte – Don't those web pages look nice! (Ensoniq has a thing for pastels.) Our Ensoniq Disk Tools program has full .GKH (EPSDisk) support; it is a commercial program, though. (But then, EPSDisk is shareware – which you still have to eventually pay for.) If you are interested, contact RCS – or stay tuned for the upcoming Hacker review.]

TH –

I have an older Ensoniq **Soundscape** card (not Plug&Play) which retains the volume setting from Windows when I reboot in DOS mode. There is a DOS utility SSINIT.EXE which I can run to change the volume, but it requires mouse input to adjust the volume slider. Is there a way at the command line to change the volume setting back to the default value of 127?

---> Paul
Paul and Mary MacDougal
paulmacd@acm.org

[PF – Paul: SSINIT.EXE can use the "T" keys (the inverted "T"-shaped arrow keys) and the tab key to move between fields. I wouldn't think that full bore (127) is the default, but my PC is getting a new drive tomorrow so I can verify this. You SHOULD be able to tab and up/down to the volume field and adjust. Once accomplished, you can write a batch file to accomplish the same result.]

Hi,

I have an Ensoniq **Soundscape** 16-bit wavetable sound board. Serial number is 64677.

I am having trouble getting a microphone to work in the microphone plug-in jack. I have plugged two different microphones into it and when I try recording using "Say It" and other similar programs to record voice files, nothing ever records. :(

What could the problem be?

Thanks,
Brian Holt,
Orlando, FL
BHolt@bellsouth.net

[PF – Brian: Check jumper #4 (JP4) right beside the two rows of five 16V-electrolytic capacitors. It's labeled "Mic Power." If you're using a condenser mic this jumper may need to be on: default is off. If you're using a dynamic microphone or high-quality mic (say an SM57 or SM58 Shure low-Z vocal mic) this jumper should be off. If you're using a standard soundcard microphone, this jumper should be set to the "on" position.]

TH –

Subject: Converting **EPS** sample data to .WAV file

I've asked the Giebler folks... RC is "getting it ready..." but I found an AWAVE program that was missing some file or something... Could someone please tell me what is available to convert EPS samples to .WAV files in windows 3.1? Are the .WAV files comparable in size? What is the general state of the art for this platform?

"J.D."
brosryan@dmv.com

[PF – Brosryan: Sounds like you got a corrupted copy of AWAVE or it didn't unzip properly. Problem here isn't AWAVE, but how do you insert an EPS/16+/ASR-formatted disk into the PC without it telling you it's a bad disk ("The disk in Drive A is not formatted" message)...

Point your browser to http://www.sound-central.com/~chickeneps/ and plunk down $35 for the Sample Bank CD – it's got runtime versions of the Giebler utilities on it (.ede & *.efe files) as well as 300+ Mb of Ensoniq samples (not to include TX16/Mirage/others). This will also let you format Ensoniq disks in your PC as well.]*

[Garth Hjelte – The RCS Ensoniq Disk Tools has had this feature (converting internal EPS/ASR wavesamples into .WAV files) since March '97 – we "got it ready" a long time ago. Supports 8-16-bit, mono and/or stereo wavesamples – with batch features and data-editing available as well. We added AIF support in August. (I'm writing this in late September.) You can observe a demonstration version at the RCS web site.]

["J.D." (brosryan@dmv.com) – Ooops: DiskTools from RC just received. I'm delighted to have success with Rubber Chicken DiskTools v.2.1. which I only yesterday received (9/26). I'm curious to see about AWAVE also.]

TH –

I'm trying to find out what type of battery is needed for my **VFX** synth. And just how many batteries are stored inside this synth. I've only seen one and it seems to be soldered to the board. It's hard to get out.

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Please respond back ASAP.

Thanks a lot,
ERDanner@aol.com

[PF – ERDanner: Don't do it. Don't even think about doing it. I watched a guy who said "Yeah, it's no problem: give me about half an hour." He proceeded to unsolder the battery and pull out not only the plate-throughs between the upper and lower surface of the logic board, but lifted a few traces as well. Short story: the owner had to pop $300 for a new logic board.

But think of the money he saved? NOT! Take it to a FRIENDLY Authorized Ensoniq Repair Station and pay the labor rate (and the cost of a battery) and avoid the previous story I've just related. BTW, unless your VFX is giving you "low battery" messages, leave it alone...]

[Garth Hjelte – I have to agree. I just replaced one today, and it wasn't fun. But I did replace the original battery, which had aluminum plug contacts, with a slide-in socket – much better!]

TH –

1) Is there a box (or roll yer own project) that will SCSI switch a Zip between a **TS** and **ASR**? Or, what would happen if an ASR went to a Zip and from the Zip to a TS? Would some bytes get bungled? Would some silicon sizzle?

2) Any way to convert an optical out on a SONY home CD player to the RCA/S/PDIF (what's that S stand for???!?!) format, CHEAPLY?

My soldering station awaits...
DAHLDUDE@aol.com

[PF – DAHLUDE: 1) Don't know. I don't know if the TS generates its own termination power or not. I know the ASR does, but this just might work as long as BOTH devices don't try to access the Zip drive at the SAME TIME. I'd be concerned that the SCSI ID of the ASR and the TS would be the same (3) and lock the SCSI buss.

2) Nope. Packet size and specification are different, albeit the "S" in S/P/DIF stands for Sony (the acronym stands for Sony/Phillips Digital Interface). Optical vs. data SPDIF are horses of another feather...]

TH –

I'm trying to find resources for the **VFX-sd**. I caught your page. Can you help me? I need a manual. I also need cartridges.

B.T.W.
tomecaw@worldnet.att.net

[PF – B.T.W.: Magic URL is http://www.fatsnake.com/syntaur. Sam Mims has both.]

[GNormand@aol.com – If you want killer sequences, try LB Music (1-800-3LBMUSIC). I bought several hundred from them and only a couple throw-aways in the lot. Try to find a recordable cartridge if possible. It will give you more flexibility.]

TH –

I would like to be able to convert my **EPS** samples to .WAV format. Are there program(s) that will allow me to do this? If so, please tell me.

Thank you for your help,
Vinh Nguyen
vnguyen01@hotmail.com

[PF – Vinh: You want to download AWAVE. Point your browser to http://www.soundcentral.com/ and bag any and all goodies that pertain to your platform. Lotsa goodies out here...]

[Garth Hjelte – Oh, oh! It's another guy. Ensoniq Disk Tools performs this function also – including multiple files at once in a batch sequence. (No plug – just wanted to make sure it was known that there are other programs besides Awave that do this function.)]

TH –

All of the 44-kHz effects on my **ASR-10R** always produce crackling sounds when a note is played. Also, it will sometimes go "sssshhhhzzzZZZZZ-ZZWWWAAAAHHHH!" when switching effects, reaching decibels levels sufficient to cause permanent damage to my internal organs.

Medicate me,
Sean O'Donnell
sodonne@vm.temple.edu

[PF – Sean: Something is wrong in DSP land. Any and all adjustments/calibration to the DSP circuitry of the ASR should be performed by an Authorized Ensoniq Service Facility in order to prevent said internal damage to your (and the ASR's) internal organs. Get your pet to the nearest Ensoniq service facility ASAP before it knocks out the output board...]

Dear Hackers,

I just recently lost my 486 DX100 laptop which had my beloved Unisyn program and not to mention my other music programs. I am now using my Atari 1040ST which was semi-retired, but still full of life. Does anyone know a decent shareware or freeware editor/librarian for the **SD-1**? Any help would greatly be appreciated!

Also, I am writing an article on the use of the Anatek Wind Machine breath controller adaptor with the SD-1 and would appreciate any suggestions that other users would like me to include.

Thanx.
Chula Vista, CA
hostaff@carnival.com

[PF – Max: I've been away from the Atari platform since 1982 when the disk drive of my Atari 800 bit the dust. Any help, readers?]

Hi,

I have an **SD-1** and just purchased an ESI-32 sampler. To set up the Ensoniq as the controller and assign sounds from the ESI, I had to go MIDI Out from the Ensoniq to the sampler, and then MIDI In from the sampler to the Ensoniq. Can someone explain this to me – this is confusing to me.

In advance, thank you
Joanne Delgado
nrthilnd@nccn.net

[PF – Joanne: I don't understand why the ESI's MIDI out should be connected to the SD1's MIDI in, as that, by definition, is a MIDI loop. The MIDI out of the SD1 should be connected to the MIDI in of the ESI so that any notes/program changes/etc. generated by the SD1 are handed off to the ESI rack mount.

But connecting the MIDI out of the ESI to the MIDI in of the SD1 is just returning all that data back to itself. Weird things like double note-ons, sluggish response, reduced polyphony result as a byproduct of this MIDI loop. You want to disconnect the cable that connects the SD1's MIDI to the ESI's MIDI out to get rid of this MIDI loop...]

TH –

Does anyone know anything about a keyboard version of the **ASR-X**? Is it me or would a keyboard version of this piece be the coolest? I call Ensoniq but they are evasive, they hint that there may be something in the works. Someone must have an idea or at least an opinion.

Thanks.
Patrick Duff
psduff@mailhost.mis.net

[Chris Edwards (cedwards@shvp.sc.ti.com) – Patrick, My question would be "Why make a keyboard Version?" The ASR-X has everything the ASR-10/88 has from a sampler standpoint and the engine of the MR, this somewhat blocks the competition in on every side at this point. If they want to do something, introduce the additional effects for use with the other keyboards, specifically the ASR-10. For now, you have a box that competes with the SP12/1200 and the MPC60II/2000/ 3000. At this point in time I don't feel it would be economically feasible to introduce such a beast (keyboard version) into the market... Not yet anyway! Chris Edwards, ASR-10 Owner.]

[PF – Pat: I gave up trying to second-guess Ensoniq back in 1987 when they said there'd never be a rack-mount EPS...]

Fellow TH'ers,

I am interested in finding out other's experience with using PC computer sequencing software with the **TS-12**. Have there been any past issues (those not available electronically) addressing this?

I anticipate Pat F's valid response to this inquiry with "why would you want to use a pc sequencer with a keyboard which has a great built-in sequencer in it?" I know, I know, the TS series was designed to obviate the need for a PC sequencer, and I know first hand that it is a great sequencer to work with, BUT...

Among other genres, I compose techno-ambient pieces. To use the TS solely for this effort requires A LOT of controller manipulation, which seems to just suck up the available sequencer memory. Techno ambient requires heavily using the TS's modulators to create analog synth-like passages: pan sweeps, brightness fluctuations on high hat tracks, VCF effects mod tweaking, etc. I know I can buy more sequencer memory, but I am about to buy a honkin' 266, 64 meg RAM, etc PC, complete with CoolEdit Pro to be my primary electronic music workstation.

So I can have almost infinite sequencer memory, but I have questions about linking my computer to the TS-12, given some of the TS's "features." Here are my questions:

1) Only 12 MIDI channels available on the TS? Is this a problem for anyone? Can I get around it somehow? Will it pose limitations when PC sequencing? Why on earth only 12? what happened to the other 4?

2) SMPTE? How do I get CoolEditPro to time sync with the TS without buying the SMPTE add-on? Can I do it with just MIDI? I want the holy grail of electronic music creation: sequence load balancing – using the TS to sequence drums, bass etc tracks, and use CoolEdit Pro to handle my samples in time with the TS's sequenced tracks, and to play it all together now... OR I want a sequencer to handle it all, including wav samples I want to play with my sequences (like Cakewalk's four extra tracks for wav samples).

3) Off subject: how can I create a drum map where the drum wavesamples are REVERSED? You know, reverse snare, reversed open hat. I am trying to create wild drum maps to avoid using samples to make techno ambient muzik. Suggestions? Is it not possible?

As usual, thanks for the time to consider my questions.
Ted Bicknell
Bicknell@sprynet.com

[PF – Ted: (1) The TS has 24 tracks. The issue here is 12 sequence tracks and 12 song tracks. You can't get to the song tracks if you don't build a song of at least one sequence in duration.

(2) MIDI Time Code (MTC)'s what you want. I know, it's a drag if your trying to chase video, but Ensoniq obviously felt the SMPTE omission was cost effective.

(3) As the TS doesn't offer sample editing like the ASR, well, find a friend with an ASR...

If you're seriously going after a rocket ship to push your MIDI data, throw more chores at it. As the TS CPU is pretty busy doing its thing, I'd use that 266 MHz box to do more than clock MIDI data. Bag a demo copy of Sound Forge to see what it can do; get a PCI audio card, siphon off some www.soundcentral utilities to torque those TS/ASR samples.

I mean, do you wanna use a Mac Plus for sound creation and then use a PowerMac 9600/300 to clock it with?

Go vice versa and use the horsepower for where it's needed. As the TS is a complete "workstation," you're decentralizing sound generation from sequencing using a computer-based sequencer. This is perfectly fine. But if you're looking to do heavy trance/indie/ambient, I definitely foresee a sampler in the crystal ball. But with a computer based sequencer, the option for driving a ROOM full of outboard MIDI gear is not unusual in the least.

It's just a lotta fun dragging it all to the gig – that's what the Ensoniq philosophy undermines. And don't get me wrong – I do a lotta session work where the MIDI consoles dwarf the Rupert Neve: Performer or Cakewalk usually runs the show. And as long as you don't have to move the show on the road, the scenario is idyllic...

Once we get TFT flat-screen 17" touch displays down to an approachable price, you'll see a LOT more movement in this area. Virtual mixing is cool, but try and move more than a fader at a time and you'll soon discover the limitations of new technology. I'm waiting for someone to do Digital Performer or Cakewalk on a PCMCIA ROM card – then palmtops/Pilots/Newtons/eMates will finally define what a Personal Desktop Assistant is all about. Hang Tough...]

TH –

I own an original (1986) **ESQ-1**, as well as an Alesis HR-16B. In the past I've used the ESQ-1's sequencer to drive the HR-16B as a sound module, up till now everything has been fine. Now, here's the thing that's changed it all. I recently got Cakewalk Pro Audio 6.0 hard disk recording software and I've connected everything up in the correct manner, but have the following problem:

Cakewalk is able to run the ESQ-1 on port 1 channel 1. I've connected the MIDI out of the ESQ-1 to the MIDI in on the HR-16B, and set the MIDI receive channel of the HR-16B to channel 16. Cakewalk is unable to run the HR-16B through the ESQ-1, as set up on port 1 channel 16. But, the ESQ-1 is still able to drive the HR-16B as a sound module, when started from the ESQ-1.

So what is the matter here? All of my connections are correct, everything is assigned correctly, but it appears the ESQ-1 is unable to pass along the MIDI data it receives from Cakewalk to the HR-16B. Can you help me with this problem?

Furthermore, the last software update that I did on this machine had to have been about 8 or 9 years ago. Are there any more recent updates that would make a major difference in my life?

Also, I've got this really annoying, ongoing problem. Just to give you a little background; the main board on this keyboard has been replaced at least 4 times, due to a variety of problems. The main, ongoing problem is that once the ESQ-1 gets warmed up after 15 – 30 minutes of use, it plays either straight or from the sequencer what I can only describe as underwater renditions of the programed sounds. It is really hard to describe this in words, as you can see, but this is a gradual progression from perfect sound to this underwater version of the programed sounds.

So there are the questions/problems. The most important to me presently is how I can get the ESQ-1 to pass along Cakewalk's MIDI data, any help would be appreciated.

Thank you in advance,
Jim Gardner
jgardner@nmc.org

[PF – Jim: Gee, I've never heard this one before. "I had the perfect setup, and then I threw a computer into the soup, and what was once broth is now gruel." Here's the solution...

(A) Ensure the ESQ-1 MIDI mode is set to "Multi."

(B) Connect the MIDI "THRU" of the ESQ to the MIDI IN of the HR16B.

Remember, MIDI THRU echoes MIDI in. If you want to control the Alesis from the ESQ, use the MIDI OUT. If you want Cakewalk to control the Alesis, use the MIDI thru.]

[GNormand@aol.com – If your sounds got dull, try tuning your filters. I forgot what two buttons to press, but consult your manual.]

TH –

I have a **TS-10** and using the "MIDI = Both" page I have no trouble multi-track recording with my seq software. However, there is no such page on the MR. You must go to the MIDI Out page which turns Local off to record something from the seq section, or go to Soundfinder to send out on the Base channel at which time nothing will be received by the seq of the MR. You have MIDI Out/Local Off or Local On and no MIDI receive. See my problem? Has anybody found an answer for this?

K Hunt
getout@bconnex.net

[PF – KHunt: The following is a response from DLeonard from our July eMail that explains your issue pretty well. The secret to using the MR with an external sequencer is to talk to the "Track" pages...

"I'm using the MR-76 with my computer system (Cakewalk) with no problems. It's just that you have to think a little differently about the MR than other synths. The synth is basically a local only synth. In order to send out the MIDI out port, you choose a "sound" called MIDI OUT. This allows you to specify a channel, bank and patch.

For my setup, I have a preset that uses the utility sound "Silence" as the sound for tracks 1-9 and 11-16. I mute track 10 because I use a DM5 for the majority of my drum sounds. Then for the soundfinder sound I choose MIDI OUT, set at

channel 1, bank 1, program 1. Cakewalk then remaps this with its MIDI Thru setting and sends it back to the MR.

The reason for the Silence sound on the tracks is so that I can change the FX assignments if I need to.

The drum machine is local only, but there's a work around here, too. Let's say I've used the MR sequencer to store a basic work version of a piece of music and I've used the drum machine for the rhythm patterns. I would like to be able to tweak the pattern a bit with some custom fills, or assign some of the voices to my DM5. For this I'll need to record the notes into my sequencer. Problem is the drum machine doesn't output actual note date through the MIDI OUT port. Solution is to change the sound on track 10 to the MIDI OUT sound, using channel 10. The bank and program settings aren't important. Set the sequencer to external clock, make sure your MR is sending MIDI stop/start messages, then record it into your sequencer. You won't hear anything, but the note data will be recorded.

To hear the actual notes, you'll need to find what drum kit the MR is using to make the sounds, and assign the bank and program number of that kit in your computer sequencer track. Do this by editing the drum machine kit. The "reassign drum kit" menu will tell you which kit is being used."]

Hi

I have a program (Recycle) that doesn't work with my **EPS**. The Recycle support says that I need the latest OS.... Well, I have RAM 2.49 but only ROM 2.00. Is it possible to upgrade the ROM? And if so how do I go about it?

Mauritsius
morten@medicallink.se

[PF – Morten: You want to order the EPS ROM V. 2.40 from your FRIENDLY Authorized Ensoniq Dealer. You can probably install the upgrade yourself, but I recommend having a tech install it for you. I'll only take a coupla minutes and you'll be current.]

TH –

I recently bought a 233 Pentium computer. Previously I had been doing sequencing on an Atari 564. I have a Roland MC303, **EPS**, PLANET PHATT, and a MIDIMAN 4X4 interface. I want to use the EPS as my controller as well as a sound source. I have been unable to get the EPS to be the controller despite using the manual to make a MIDI instrument. I have checked with Midiman and they say everything should work, BUT IT DOESN'T!!!! The interface seems to be okay when I go through the diagnostics. Yet I still get no activation. Please help!!!!! I'm using Cubase and Rebirth 338.

Thanks...
Gautam Bhakta
gsbhakta@pol.net

[PF – Gautam: Ensure each track on the EPS (once loaded) has its MIDI status set to "Both." Chances are you've loaded default EPS samples that are set to "Local." Select "Both" or "MIDI" and see what happens. If your MIDIMAN interface is a parallel port interface (the type that attaches to a printer port) change the port setting in the computer's ROM BIOS to something other than EPP. If the interface is an ISA or PCI card that is installed in your computer, just changing those MIDI settings on the track pages of your EPS will fix it.]

HELP!!!

Though I know that it is an rather old model, I'm still looking for a SCSI Interface for my Ensoniq **EPS-16+** sampler.

Maybe you could help me where to find distributors or information related to this subject.

Thanks,
a2667401@smail1.rrz.Uni-Koeln.DE

[PF – I'd call Ensoniq directly at 610-647-3930 for starters. If they're out, try Syntaur Productions (www.fatsnake.com/syntaur) or Rubber Chicken Software (www.soundcentral.com/chickeneps). If no luck, it's off to the used mail order places like www.ubgm.com, roguemusic.com, etc. Good luck!]

TH –

I would like to find out where I can get the Operating Diskettes to operate the **Mirage** DSK-1.

Thanks,
Greg Ybarra
gjybarra@gte.net

[PF – Greg: Contact Syntaur Productions at www.fatsnake.com/syntaur. They have both O.S. 3.2, and MASOS V. 2.0 as well.]

TH –

I have been trying to get my **SDP-1** to communicate with my PC thru the Ensoniq 16-bit Wavetable card. I installed MidiWorkshop and had problems recording. After hours of endless manual reading, I decided to see if the MIDI recorder program from Gateway (Voyetra Audio Station) would work. It did not

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record. I had my keyboard default to channel 1.

I called Gateway support. They were useless. They asked me if I could hear sounds (MIDI and wav). Gateway tried to tell me that a driver may be required for the keyboard. I doubt it. I checked my system properties (Win 95 OS). I enabled the external MIDI port.

Is the keyboard (SDP-1) usable without a dedicated driver? I have one cable (16 pin with a MIDI-in and MIDI-out 5 pin DIN connectors). Is there anything you could add?

Thanks,
Jeff Zak
JZ86vette@AOL.com

[PF – Jeff: What kind of gameport-to-MIDI adapter are you using? Some of these are known to be labelled backwards. Ensoniq stated differences between different adapters in an earlier Hacker issue this year. . .

No special drivers are required for the SDP-1 (or ANY MIDI input device, for that matter) to communicate with the PC card – only the MIDI interface or adapter is required. Once you've ensured MIDI output is enabled from the SDP-1 and the MIDI Out of the SDP-1 is connected to the MIDI In of your soundcard, Ensoniq is done. All other issues revolve around your software application and the PC.

Try another gameport-to-MIDI adapter. More often than not, these little gadgets are the culprit. And ensure you have the Soundcard MIDI In enabled in your application.]

[Jeff Zak – Thanks for the reply. I learned that I had everything connected and set-up properly. I called Ensoniq, they advised me to download upgraded driver files (auto installing) for the Soundscape VIVO soundcard. With my version, I guess there have been past problems with MIDI input to the card. The keyboard was sending info just fine.

The only thing I have left to conquer is connecting my Yamaha EMT-10 sound module into the loop. I guess that's beyond your scope. Thanks again. Please reply if you do have pointers.]

[PF – Jeff: So the issue was a VIVO driver. As far as inserting the EMT-10 into the loop, just connect its MIDI IN to the MIDI OUT of the SDP, then connect the EMT's MIDI OUT to your VIVO's MIDI IN. That should be all there is to it. Glad you're up and running...]

Help me!

I have a synthesizer Ensoniq **SQ-2** and computer 486DX4/100, 16 MB RAM, 540 HDD; MIDI interface LPT1: VP-11 (Voyectra). I work with the program CakeWalk 5.0. All works properly, but send SYS-EX is not in good order. Computer-to-SQ2 received all information properly, but SQ2-to-computer makes a mistake (error "Unexpected event ID=129") and sometimes erases all sequences. What can I do in this situation?

What programs can you offer and how can you help with the problems I'm writing about?

Sincerely,
Guntis
guntis-s@acad.latnet.lv
Latvia

[PF – Guntis: The Ensoniq synthesizers transmit QUITE a bit more SysEx data than your average bear. We've posted this fix so many times in this forum we point readers to the Cakewalk URL at http://www.cakewalk.com/html/tech.html. You'll have to add three lines in your cakewalk.ini file to allow for the 100 ms delay between the Ensoniq header byte and the data stream.]

TH –

I have a **Soundscape** card (1994) that was working great until I upgraded to Windows 95. Then I downloaded what was suppose to be an upgraded driver from Ensoniq (called Opus, I think) and now it won't play wave files. When I run the dmtest file it plays them but that's the only time it will. When I try to play a wav it loads, but won't play. When I activate Audiostation Dat it says "Disk Error" – no other explanation. I've tried everything. Can someone help me?

WLOCK96@AOL.COM

[PF – Wlock: Humm: it works in DOS with dmtest.exe, but won't work in Windows? I think it's safe to say you've got a Windows problem. Open the "System" icon in the Control Panels, select "Device Manager," and ensure the SoundScape Driver is selected (and loaded). It's here you can select "New or Updated Driver" and insert the Soundscape 95 driver disk. See the Ensoniq homepage at www.ensoniq com for the details. They have specific instructions on how to install the 95 drivers.]

Hi Folks!

I have a little query which needs some help. When the **EPS** was just falling off its "Hey Day" peak, there was a person who advertised in your classified section for some time who re-wrote the "book" for the EPS and sold it for around $25.00. My question is: Is there any way to scan (via computer) your "moldy" classified section to locate this person. Please tell me that all of your classifieds were kept on disk and retrievable!

Marcellus JP Armstrong
marcellj@ix.netcom.com

[TH – That was good ol' Gary Dinsmore. He still has a few copies left, they're $20 plus shipping, and he can be reached at gdinsmore@columbia-center.org. He wants us to mention that there're just a few left and that they're specific to the EPS Classic.]