

TransonIQ Hacker

The Independent Ensoniq User's Newsletter

REPORTS FROM THE FIELD:NAMM '86

By Clark Salisbury

Twice every year, the National Association of Music Merchants engages in a collective bit of lunacy known as the NAMM show. The NAMM shows are an industry showcase and hype-fest dedicated to introducing the new products which, over the course of the coming year or so, we consumers will find we just can't live without.

The biggest news at this year's NAMM Winter Market (held January 17th-19th in Anaheim, California) should surprise no one; The techno-weenies shall inherit the Earth. Electronic hardware and software manufacturers had descended en-masse on the Anaheim Convention center, intent on dazzling and tantalizing the convention attendees with all manner of gizmos and widgets. And dazzle they did. I'd venture a guess that there were more blinking LEDs and glowing computer monitors there than Stevie Wonder has hit songs. And you may not be surprised to hear that the biggest deal of all the big deals at this year's show was digital sampling.

A number of companies introduced sampling machines at NAMM, trying to win back at least part of the market that has clearly been dominated over the past year by Ensoniq and E-mu systems. Roland, Korg, Sequential, Akai, and even Casio all had sampling devices to show.

Sequential's Prophet 2000, although previously released, made its NAMM debut at this show. It's been updated to include 512k of memory, and has 3 selectable sample rates. It was joined at the show by the Prophet 2001, a rack-mount version. Retail price for the Prophet is \$2599.

Akai introduced its new sampler, the S-900. It's a rack-mount unit featuring 750k of memory with a 40kHz sample rate, yielding about 18 seconds of sampling time. The unit also features 32 sample points, extensive signal processing capabilities, and eight individual voice outputs. Retail will be \$2495.

The DSS-1 from Korg is yet another digital sampling keyboard. It's an eight voice unit, sporting 128k of memory and 12 bit processing. Sample rate is 32kHz, and the keyboard is both pressure and velocity sensitive. Like the Mirage, it uses a two oscillator-per-voice configuration to facilitate layering effects, as well as extensive signal processing using standard VCFs, VCAs, and envelope generators. I understand it should retail for around \$2500. Also new from Korg is the SG-1 Sampling Grand, a 76-note touch sensitive keyboard with four multisampled acoustic and electric piano sounds stored in memory. A fifth preset resides on a changeable ROM card.

Not to be outdone, Roland introduced two new samplers at the show. The S-50, retailing at about \$2500, is a sixteen voice machine with 512k of memory and three sample rates available. At 32kHz, (its highest sample rate), up to 17.2 seconds of sample time is available. Voices can be outputted in a number of ways through the four jacks provided; 16 voice mix out, 8/8 voice out, 8/4/4 voice out; 4/4/4 voice out, and 4/4/4/4 voice out. A full complement of VCFs, VCAs, LFOs, and envelope generators is included. One of the most interesting features of the machine, however, is that software is stored in ROM for parameter and wavesample editing, setting sample rates and recording levels, keyboard assignment, displaying and drawing of waveforms, envelopes, and loop points. One simply plugs a standard monochrome or color video monitor into the jacks provided and viola! Instant VES. Rolands S-10 sampler is a \$1300 dollar version of the S-50. It has a four octave keyboard and up to four seconds of sample time. Eight voices and three keyboard split points are available. The S-10 has software stored in ROM that is similar to the S-50, but without the envelope and waveform displays.

In the cheap-tech arena, Casio introduced its digital sampling keyboard, the SK-1. It has miniature keys, auto accompaniment, a built-in microphone, and four voice sampling (no multisampling) with 1-1/2 seconds of limited bandwidth, but at a retail price of \$99 it should be a great seller anyway. Casio also introduced a sampling drum machine, the RZ-1. It has a number of standard drum sounds stored on board, along with four slots into which you can sample your own drum sounds (if you can squeeze that many samples out of its 1-1/2 seconds of sampling time). It is not a particularly high bandwidth machine, but at \$595 it's sure to interest some of you die-hard sampling fanatics.

A couple of new technologies made their debut a NAMM. Among them was Roland's structured/adaptive (S/A) synthesis, a proprietary technique developed by Roland which is rather closely related to re-synthesis of sampled waveforms. Roland has utilized S/A synthesis to produce stunningly realistic sounding electronic pianos and piano modules. The RD-1000 features an eighty-eight key, touch sensitive, weighted action wooden keyboard. On board sounds include three acoustic pianos, harpsichord, clavichord, vibraphone, and two electric pianos. Level, equalization, chorusing, and tremolo are all programmable, and MIDI in, out, and through jacks are provided. It will retail for about \$3200. It is joined by the Mks-20, a 19-inch rackmount version which will retail for about \$1700.

Another new technology showed up in Sequential's Prophet VS. Utilizing what Sequential calls Vector Synthesis, up to four waveforms can be dynamically mixed to create new timbres, and manipulations can be performed in real time using a joystick. A minimum of 128 waveforms are digitally stored, and new waveforms can be constructed and modified. The Prophet VS is expected to retail for about \$2500.

Ensoniq made quite a splash at the show. It seemed as though half the demos of MIDI systems that I saw were utilizing Ensoniq's new rackmount multi-sampler. As you know, the new rackmount is simply a Mirage without a keyboard. And speaking of Mirages, Ensoniq had plenty of the new units on display. The new keyboard feels great - too bad it can't be put into older units. The update kit for earlier Mirages should be available by now, though. If you haven't looked into it yet, I strongly suggest you do. The extra 12dB of noise reduction it provides, along with the expanded frequency response make it well worth the \$19.95 plus labor that you'll have to shell out to get it.

Ensoniq introduced two new products at the show. The SDP-1 is a digital multi-sampled piano featuring 76 weighted, touch sensitive keys. The keyboard can be split to provide for left hand bass playing. Ensoniq hadn't completely made up their minds about which sounds would ultimately be burned into the piano's ROM, but I heard a variety of acoustic and electric pianos, some mallet-type instruments, and electric and upright bass. The unit should sell for around \$1250. The show stopper for me, however, was Ensoniq's new ESQ-1 synthesizer. I know, I know, just another (ho hum) synthesizer. But listen to this. Three digital oscillators per voice, each with 32 complex waveforms. Four eight-part envelope generators. Touch sensitive. Whole, dual, and split keyboard modes. Tons of signal routing and modulation capability. On board eight-track sequencer with auto correct, auto locate, different MIDI channels assignable to different tracks, stereo mixing capability, and a capacity expandable up to 10,000 notes. Multi-timbral (up to eight different sounds at one time, accessible over MIDI. It sounds great, and the price - a measly \$1295. Take a number...

The gauntlet Casio threw down when it introduced its remarkable (and remarkably priced) CZ-101 has been picked up by Yamaha. The new DX-100 features the same basic FM synthesis system as Yamaha's popular DX-21, but in a miniature key version that will retail for around \$450. And Roland has taken another swipe at the price point for digital drum machines. Their new TR-505 features standard PCM drum kit sounds, as well as a number of Latin sounds, and will retail for \$295. And as if that weren't enough, Alesis has introduced the Midiverb, a stereo digital reverb featuring 63 presets (no user programming), 10kHz bandwidth, and MIDI capability for a price of (get this) \$399. And speaking of digital reverb, Yamaha introduced its new SPX-90 digital effects processor. It has 30 presets and 60 user memories into which a number of effects can be programmed, including reverb, chorusing, echo, etc. It will retail for \$695.

Roland is continuing its popular Juno series of synthesizers with the new Juno-1 and Juno-2. The Juno-1 is a four octave, non touch sensitive, single oscillator per voice synthesizer which will retail for \$695. The Juno-2 is a five octave, touch sensitive version for \$1095. Both synthesizers feature Roland's new Alpha dial - a large wheel which is meant to make programming of sounds easier by allowing a number of related parameters to be controlled simultaneously.

Need a place to store a bunch of data? Well keep your eye on Optical Media International. They have introduced a CD-ROM (compact disk read-only-memory) unit for the Emulator II. The unit allows for Emulator sound files and performance presets to be read from compact disks. The first disk available contains every single factory sound available for the Emulator II, some 536 floppy disks worth. The CDS3, as it is named, runs about the same price as a Mirage, but not to worry. It's just this sort of thing that tends to become more affordable as time goes on.

Contrary to what you may be thinking at this point, keyboards and related gear weren't the only things at this year's NAMM show. This was also the year of the guitar synthesizer, with a number of new products making a debut.

The Synthe-Axe from England is a guitar controller system which bears little resemblance to traditional guitars, save that it uses a guitar-like neck and strings. Its function is strictly as a MIDI controller. Notes can be activated by plucking the "strings" (actually a special set of sensors), by pressing a variety of buttons, or simply by fretting the instrument's neck. The "whammy bar" can send signals to control a number of parameters besides the traditional pitch bend, and controls for program change and the like are provided. At a list price of around \$10,000 for a fully loaded unit, I don't imagine you'll be seeing a lot of these babies showing up at the local jam sessions (at least not the ones I go to).

Ibanez was also showing a new MIDI guitar controller. Retailing at around \$1500, it supports multiple MIDI channels, pitch bend, program change, and so forth. Charvel was showing a similar system with a price tag of about \$1700.

Kramers Pitchrider 7000 system is another MIDI guitar system, but without the guitar. For \$995 you get a pickup that sticks onto your guitar with special adhesive, and a rack-mount unit that takes the pickup's output and turns it into MIDI data. The Kramer unit supports multiple channels of MIDI information, as well as a variety of other MIDI functions.

Then from K-Muse comes the Photon guitar, a MIDI guitar that uses infrared light to convert string vibrations to MIDI signals. The Photon guitar system also implements M-NET, a new high speed data transmission system which supports 96 simultaneous channels and SMPTE time code. I never did find out what M-NET hooks up to, though. Anyway, retail is \$1995 for the guitar system, \$1795 for bass.

Obviously, there are a number of products I haven't mentioned here. I intentionally tried to keep to new products utilizing new technology. Of course, it was impossible to see everything, even in the three days I was there. And the most obvious omission of all, software, is omitted with good reason. After looking through the 200 plus pages of information I collected on software I gave up. Maybe next time I could just download the whole show into my MIDI word processor...

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We Have Met the **Sound Lab™**, and Wish it was Ours.

by
Duane L. King

When I first started to use **Sound Lab™ 1.0** by Blank Software, I had the idea that it was a do-all, be-all kind of program that would solve all of my sampling problems. Well it isn't a do-all, be-all program, and it doesn't solve all my sampling problems. What it does is amplify the capabilities already present in my Mirage. This article won't tell you about all the features of the program. It also avoids repeating information that is already available in the form of ad copy and a review in the January 1986 issue of **Keyboard** magazine (page 126). I'm going to tell you the things you really wanted to know, like, "Is it worth \$400?" and, "Is it really as good as the ad hype says it is?"

The idea behind **Sound Lab™** is very simple. Simple ideas often yield powerful and sophisticated tools. And this is definitely the case here. In computer science lingo, "powerful" usually means resource-hungry. **Sound Lab™** is no exception. You must have a "Fat Mac" (a Macintosh computer with half-a-million bytes of memory), a MIDI interface for the Mac, and a Mirage. The **Sound Lab™** manual says that a second disk drive for the Mac is optional. So is a rear window defroster, but why live without one?

I hooked my Mirage up to my Assimilation MIDI Conductor interface, loaded a custom version of MASOS (MASOS-M) into the Mirage and booted from the **Sound Lab™** disk. Then I double-clicked on the **Sound Lab™** icon to start the program. By this time I was already breathing heavy. A real catchy graphic image appeared on the screen and I waited. Then it hit the disk a few times and I waited some more. Eventually I got control of the program. (My point here is that you better get used to waiting. You're going to get to do quite a bit of it. There aren't any long waits once you initially get control of the program, only lots of short waits.) I looked at the screen and pulled down all the menus, like all veteran Mac users do with new software. Nothing was really intuitive yet, so I opened the manual- always a last resort. I was too excited to read the thing, so I skimmed over it and stumbled on **A Guided Tour**. Some of the text was in **boldface**. Great! So I read only the boldfaced text. (You probably never get this excited about software.) So there I was trying to run this program, and read, and turn pages, and operate the Mirage simultaneously. I managed to fly thru the guided tour in about 15 minutes while my wife waited-tapping her foot, jingling her keys and clearing her throat. We were supposed to go out to dinner, only I wasn't quite ready yet- "Just another minute dear, and I'll be ready." Why am I telling you about my personal life? Because I made a big mistake with this program and I don't want you to waste your time making the same mistake I did: I assumed I would understand it immediately because I already knew how to

make samples from the Mirage's keypad. **Wrong!** Oh sure I got thru the guided tour and all that but I didn't learn anything about the **Sound Lab™** program.

Read every page of the **Sound Lab™ Reference Manual**, starting with the front cover and don't stop until you get to the back cover- and read for understanding. Then and only then are you ready to start using the software. Even then you will still refer to the manual from time to time. No, it's not complicated. It's sophisticated. The Mirage forces you to do everything with parameter numbers and values you enter from the keypad. Remember how long it took to get adapted to that? Well now you have to unlearn the keypad habit. **Sound Lab™** does everything with pictures. Once you start thinking about parameters and wavesamples in terms of the icons and pictures that **Sound Lab™** uses, you will lose all desire to touch the Mirage's keypad. However, those of you who initially learn to make samples with **Sound Lab™** are somewhat handicapped. Us keypad hackers know how the Mirage works. We already understand loops, and all the other stuff. The **Sound Lab™ Reference Manual** is much easier to understand if you are already a veteran sampler.

After I read the manual from cover-to-cover I made some of the critical connections between the icons and pictures used by **Sound Lab™** and the parameters in the Mirage. But first I must digress a bit. When **Sound Lab™** starts, it presents three windows on the screen; the overview window, keypad window, and the waveform window (see Figure 1).

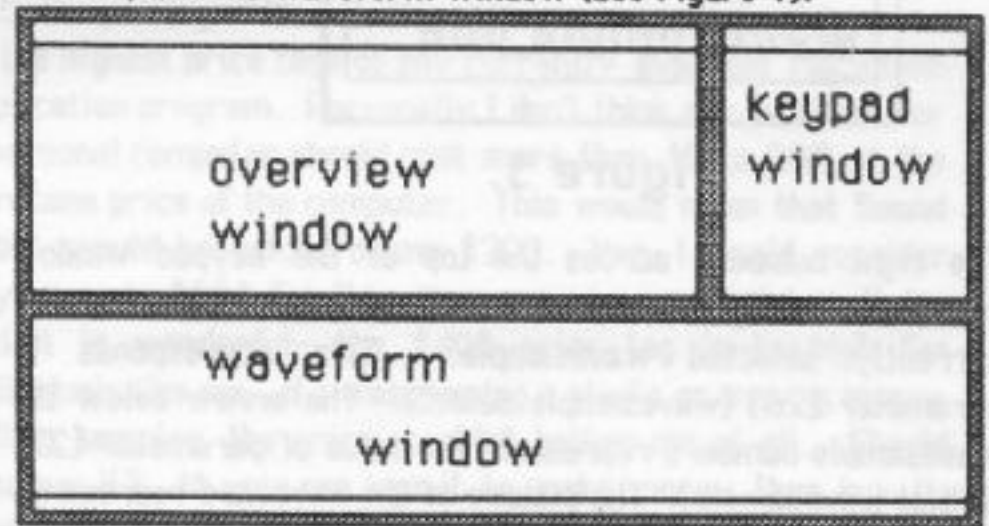


Figure 1.

The keypad window allows you to select which keyboard half, program, and wavesample to work with. The overview window controls what you see in the waveform window as well as controlling four of the waveform parameters. Now if you will check out Figure 2, you can see that the two pointers on the vertical memory allocation bar control the wavesample start and end values (parameters [60] and [61]). The two arrows at the bottom of the overview window control the loop start and end values (parameters [62] and [63]).

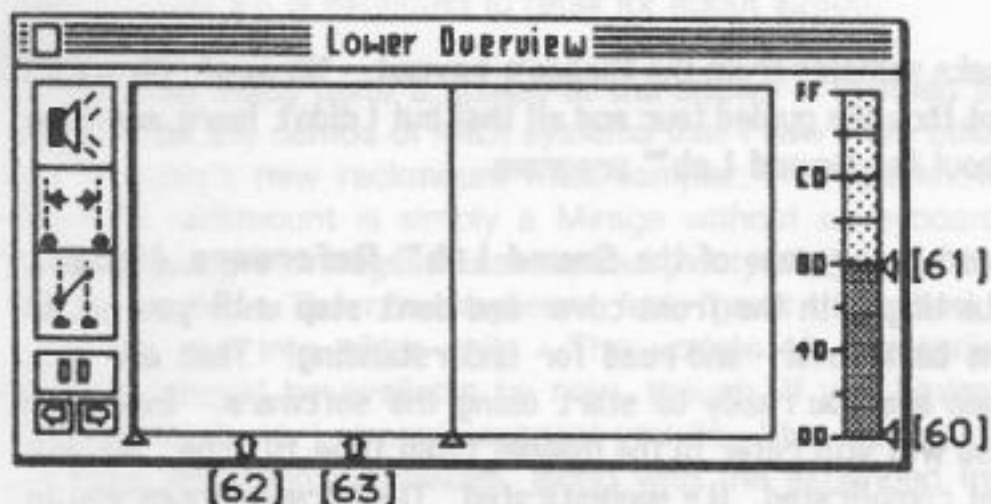


Figure 2.

The pointers on either side of the arrows are called the sound cursors. The wavesamples that are between the sound cursors may be displayed in the waveform window or operated on by a number of commands. They don't control any Mirage parameters. Now look at Figure 3.

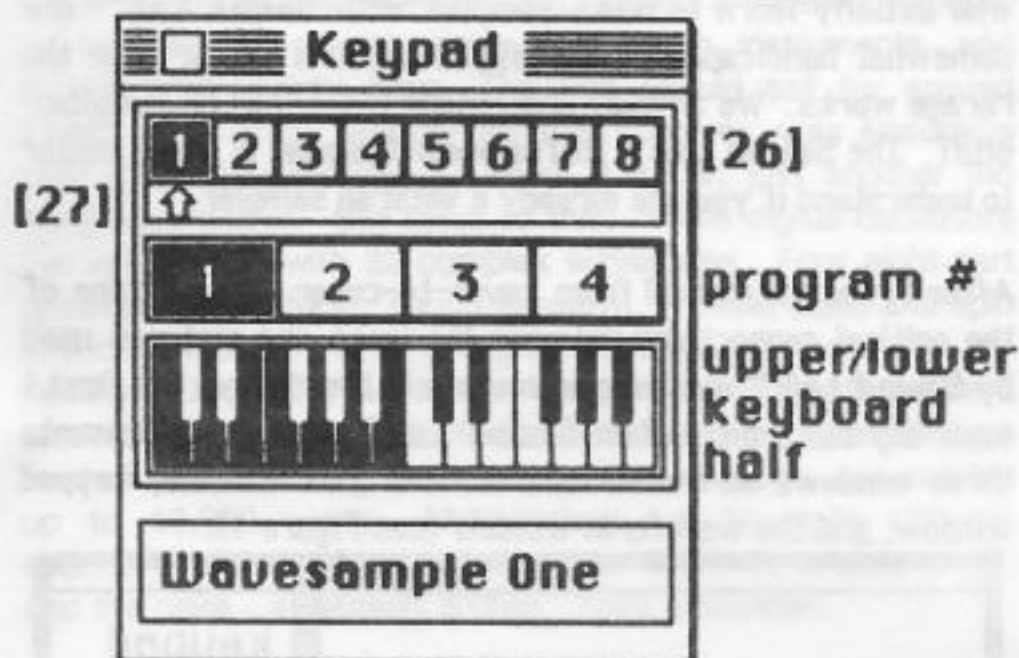


Figure 3.

The eight numbers across the top of the keypad window represent the eight wavesamples. The number in black is the currently selected wavesample. This corresponds to parameter [26] (wavesample select). The arrow below the wavesample numbers represents the value of parameter [27] (initial wavesample). The picture of the keyboard represents the upper/lower program selection and the four numbers above the keyboard represent the currently selected program for that keyboard half. **Sound Lab™** allows you to name every wavesample. The box below the keyboard is the name of the selected wavesample.

All the reviews of **Sound Lab™** tell you how great the loop editing feature is, and how easy it is to use to make loops. Sure it's hard to make loops from the Mirage's keypad, but I've always had more trouble understanding how the amplitude and filter envelope settings and all that velocity sensitivity

stuff work. I've never really gotten used to adjusting 10 parameters to make the filter envelope do what I want, and then have to adjust 10 more parameters in an attempt to produce an acceptable amplitude envelope. This has been especially difficult for me to understand because I know that the two envelopes interact with each other. Figure 4 shows my favorite window- the program control panel.

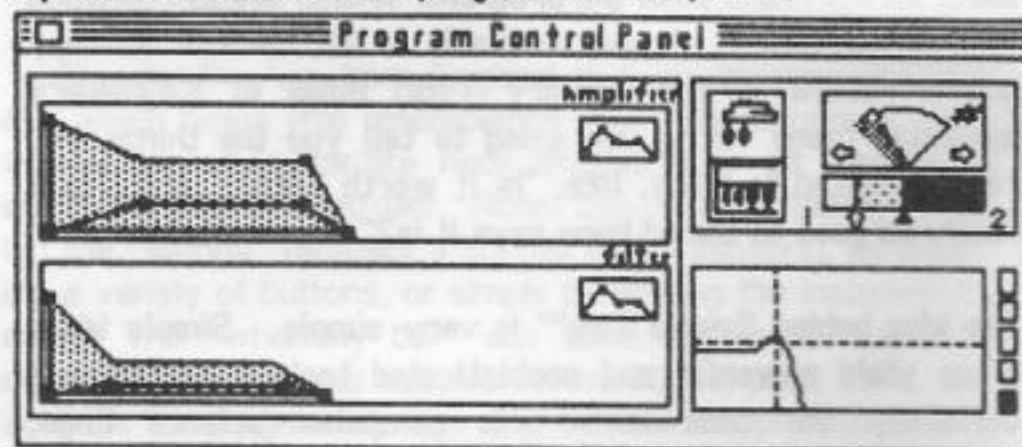


Figure 4.

The left two-thirds of this window is dominated by the amplitude and filter envelope diagrams. The shaded envelopes represent the shape of the amplitude and filter modulation envelopes at maximum key velocity. The other envelope shapes (inside the shaded part) represent the unmodulated amplitude and filter envelopes. The little envelope icon in the corner of each envelope box controls access to the envelope or modulation parameters for that particular envelope box. If you click in the envelope icon in the amplifier envelope box, the icon will become shaded and the little squares will jump off the amplifier envelope and onto the modulation envelope. If you want to change one of the envelopes, click on one of those little squares and hold the mouse button down while you drag that part of the envelope up and down and left and right to change its shape. When you release the mouse button, wait a few seconds, and then you can play the Mirage to see what you did. If you didn't like it, drag the envelope around some more! The mixer icon (to the right of the amplifier envelope box) toggles mix mode (parameter [28]). The mod wheel icon (below the mixer icon) toggles oscillator mix velocity sensitivity (parameter [35]) between zero (mod wheel controls the mix) and whatever that little white arrow on the horizontal bar to the right of the mod wheel icon is set to (key velocity controls the mix). The triangle cursor under the horizontal bar controls oscillator mix (parameter [34]) and the little white cursor controls parameter [35]. The thing above the mix bar that looks like a Volkswagen gas gauge controls oscillator 2 detune (parameter [33]). The thing in the bottom right third of the program control panel is a graphic representation of the filter cutoff frequency (parameter [36]) and filter resonance (parameter [37]). The taller the hump, the higher the resonance. For higher cutoff frequencies, drag the vertical cross-hair to the right. This

arrangement is nice, but it is difficult to independently change the cutoff or the resonance without affecting the other parameter because they drag together (you have to put the mouse cursor at the center of the cross-hair). The five blocks to the right of the filter box select the five settings of parameter [38] (filter keyboard tracking). The bottom box is the zero setting and the top box is the highest setting. The program control panel contains controls for 26 Mirage parameters. You can radically change the way a particular set of wavesamples sound with just a few clicks of the mouse- providing you understand what all the weird little symbols mean. This is why you have to make yourself read the manual.

Now what about sampling? Thought you'd never ask. You pull down the parameter menu from the top of the screen and select "Sample...". You get Figure 5 on the screen.

Sample Configuration

☒ Multisampling OK

☐ Mic ☒ Line Cancel

☐ External Filter

Rate: 29412 Hz Filter: 7492 Hz

Tone Frequency: 114.89 Hz

Note: Bb Sample Time: 2.2 Sec.

Sample Threshold(0-63): 24

Figure 5.

First select multi or single sampling (parameter [77]), then select mic/line (parameter [75]), and the external filter (parameter [93]) if you have one. Then set your sample rate (parameter [73]) and input filter frequency (parameter [74]). Finally set the sampling threshold (parameter [76]). Now comes the part I really like- click on the tone button to make the Mac emit a tone for tuning the sound you want to sample. If you can tune precisely to the test tone, one page loops will always be in tune with the rest of the sample! Click on the tone button again to stop the test tone, click on "OK" to exit the sample configuration box, and now you can make your sample. I know you're not going to believe it but you have to use the Mirage keypad to make the sample...

I haven't even covered half the features of this program. You must get a demonstration of it! Even if you don't have a Mac you still need to see this thing. It's pretty awesome. It doesn't turn the Mirage into a Fairlight, but it's the first step in that direction. Digital synthesis is next...

What didn't I like about **Sound Lab™**? (I'm sure you could tell that I like it.) The first thing I noticed about this program is the price. I don't like the price. This is a nice program but it ain't worth \$400! The second thing I noticed is an error in the loop editing window. If you keep trying to scroll the loop beyond the loop end point it kind of wraps around and makes funny looking squigles in the window that do not represent the wavesample. Nothing happens to your wavesample though. Just close the loop editing window and open it again and everything will be ok. The third thing I noticed is all the tiny little pauses. The program and the Mirage talk to each other quite a bit. That's what all the pauses are for. The big disappointment was the lack of support for making long loops. If you are looking for a begin and end point for a long loop you have to search page-by-page and write down the page numbers of likely candidates. Then you turn on the loop switch and set the loop pointers for the longest of your candidates. Always work the loop end from the highest page number down to the lowest of your candidate page numbers- it's slightly less confusing that way. Leave the wavesample end address alone! The only advantage I've found from using **Sound Lab™** to make long loops is you can see what you're up against. All those phase and amplitude changes that make a sample interesting are the very things that make long loops so difficult to make. Does all this sound picky to you? If I'm going to pay out \$400 for something that is odorless, colorless, tasteless, and weightless, I want it to be perfect and I want free updates for 1 year! Of course you must remember that I am comparing the price of **Sound Lab™** with the pricing of Macintosh programs in general. It has one of the highest price tags of any currently available Macintosh application program. Personally I don't think any program for a personal computer should cost more than 10 to 20% of the purchase price of the computer. This would mean that **Sound Lab™** should be priced below \$200. Yes, I would consider paying up to \$200 for this program. As wonderful as it is- and it is wonderful- the \$400 price tag is too high for individuals like me. If I was running a studio or making money selling samples, the price wouldn't bother me at all. Should you buy it? If you can use it to make money then buy it, otherwise wait. Competing products are sure to rise up. Then you can compare and pick the best- or cheapest one for your needs. Well, I'm going outside now- maybe someone left \$400 in the mailbox...

Duane King is an engineer currently working for Boeing in Huntsville, Al. Duane has programming experience in several languages and is presently working on adding computer control to his synthesizer collection. This article was hacked on his Mac.

MIRAGE-NET

The following people or organizations have agreed to help with questions:

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

Sounds - Martin Smith, Lavitae Contrar Studios. Pacific time zone (Vancouver, BC). Business hours. (604) 255-1025.

MIDI & Sequencing - Leslie Fradkin or Elizabeth Rose, MIDI-MAX Studios. Eastern time (NY). Calls between 10am and 9pm. (212) 628-5551.

MIDI & Sequencing - Markus McDowell. Any ol' time. (805) 987-9932 (Calif.)

Mirage hardware & firmware - Scott D. Willingham. Eastern time (NY). Days. (716) 477-8089.

Mirage Operating System - Mark Cecys. Eastern time (NY). Days. (716) 773-4085.

MASOS - Pete Wacker. Mountain time (AZ). 3 pm to 10 pm. (602) 937-1177.

If you're interested in being listed on the Net, please give us a call. (503) 245-4763.

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Sonic Access has announced a couple of major improvements to their SONIC EDITOR (reviewed in Issue Number 9): They've added a ZOOM function which allows you to zoom out from the page being edited to view multiple pages on the HI-RES screen. ZOOM also allows you to view multiple pages around the loop point. The ZOOM function is unlimited - every time the "Z" key is pressed, the viewing window is moved farther back and more pages are displayed. Pressing any other key returns you to the current page. Also added: Send MIDI Note. Pressing "M" in EDIT MODE will now send a NOTE-ON command to the Mirage. The Mirage will sound the Top Key note for the current wavesample being edited. This feature is essential for testing loops and patches if you own the rackmount Multisampler. Both of these updates (Version 2.0) are available to owners of earlier versions for \$10. (Send your receipt.) Sonic Access, PO Box 4024, Santa Clara, CA 95054.

* * *

Digidesign (920 Commercial, Palo Alto, CA 94303) is planning on coming out with SOUND DESIGNER for the Mirage. It'll run on the Macintosh (like the Sound Lab), but it will allow you to work with three sounds at once and features digital equalization and synthesis (creation of artificial sounds). Sound

files will be interchangeable with other versions of Sound Designer for other samplers - so you'll be able to swap samples between the Mirage and the Emulator II or Prophet 2000, and vice versa. Release is scheduled for March.

* * *

More info on the SYNTHASSIST (VES for the IBM-PC) mentioned here last month: Release is scheduled for mid-April. Price is \$299. An introductory version (upgradeable) is available now for \$149. Northeast Visions, 68 Manor Dr., Glenmont, NY 12077. We're still looking for reviews on these new software packages. Meanwhile, another VES being developed for the IBM by Turtle Beach Softworks (see their ad under "Announcements" in our classifieds) is being expanded to include waveform synthesis functions. This should turn out to be a powerful way to create sounds with no aliasing noise, clicks, pops, and other problems that plague sampled sounds.

* * *

Just in from a reader - there's a bug in VES (Apple IIe) that makes it hang up if you try to draw a waveform on certain pages (4F is one, there may be others). Ensoniq is also aware of the bug and is planning on replacing all of the old disks. Contact Ensoniq or a dealer if you're having a problem.

VDS SYSTEM

A Visual Display System and Waveform Editor for the Commodore 64/128 and the Ensoniq Mirage

- HIGH RESOLUTION GRAPH OF SAMPLED WAVEFORMS: QUICK ACCESS TO ANY PAGE OR SAMPLE OF THE MIRAGE MEMORY
- EDIT MIRAGE WAVEFORMS
- SYNTHESIZE WAVEFORMS USING ADDITIVE OR FM SYNTHESIS
- LOAD AND SAVE MIRAGE WAVEFORMS TO THE COMMODORE DISK DRIVE
- PARAMETER DISPLAY: ALL PARAMETERS
- FOURIER ANALYSIS OF WAVEFORMS

V.D.S. System Requirements:

- COMMODORE™ 64/128 COMPUTER WITH DISK DRIVE AND MONITOR
- ENSONIQ MIRAGE™ SAMPLING KEYBOARD WITH MASOS™ OPERATING SYSTEM
- PASSPORT™ OR SEQUENTIAL™ COMPATIBLE INTERFACE

send check or money order for \$100 to
ENHARMONIK PRODUCTIONS
 P.O. BOX 22243
 Sacramento, CA 95822
 (916) 456-6243

California residents add 6% sales tax
 Also Available: Patch libraries for Yamaha DX/TX™
 Oberheim X-Pander™ and Matrix-12™ Synthesizers

DISK REVIEWS

By Erick Hailstone

Disk #13

Disk 13 is what I would call a performance disk. As a musician I do a lot of freelance playing. You know, you get a call Friday to do a wedding Saturday. You get to the gig with your trusty Mirage to find out that you're the bass player as well as the keyboard player. Low budget stuff, huh? Well, this disk is just what you need. All of the lower samples are bass sounds (for every occasion) and the upper samples give a variety of fundamental sounds to cover the meat and potatoes of most gigs. I must admit this is an instance where I really wish the Mirage had separate outs for the two samples. Both sounds suffer a bit by not having the ability to E.Q. each channel, and if you want to use digital processing of the upper sounds - goodbye bass. Might as well get my shots in now. Forget that sustain pedal on piano. Bass players don't have one.

On to the good stuff.

Disk 13

Sample 1

Lower 1

L1 is an electric bass ala Fender. It is my favorite of the bass guitar sounds I have heard for the Mirage yet. The initial attack is bright and plucked a little hard for my taste but very good for most modern pop music. You can soften the attack by lowering parameter 36 down to about 14. It's kind of like the difference between old strings and new ones. The sustain is a bit long but this allows you a lot of control by how long you hold down the note(s). Can't be afraid to customize these sounds.

L2 is slap bass. Pluck it hard and let it fly. It's like the string just snaps back against that neck. This sample has a pretty quick decay which a string will have when it hits the frets that hard. This is a good sound, but I cannot imagine playing this through an entire song. I would want to alternate between this sound and L1. Wait!! This could be another column.

L3 = L1 with a softer attack (the filter is at 0.1) and chorusing. This is a good usable sound. I mean you guys know how sick of chorusing I am, but this is kind of nice.

L4 - The filter has been lowered, the attack has been softened and the decay quicker than L1 but not as quick as L2. Of this group of sounds this would be low on my priorities but it is a good usable sound.

Upper

U1 is an acoustic piano. This is not as good as any of the other disks. The reason for that is they have to use less samples. The previous piano sounds have many samples overlapping to give the appropriate sounds and textures. On this disk the idea is to have a lot of fundamental sounds available quickly.

In fairness I've got a DX-7 sitting next to me and 1,000 patches to pull from and none of them rival this sound.

U2 - Hammond organ. Bingo! I've got one of these collecting dust in my garage and this is real acceptable to me. In my playback system there's a bit of distortion but the way I play my Hammond... there's always some distortion, so I think it just adds to the realism.

U3 - At first I thought this was sampled off a DX-7. The more I play it the less sure I became. Could be a Rhodes. At any rate it more than fits the bill when you need a chorused electric piano. It has a long sustain so you don't really need a sustain pedal, but it takes a little getting used to.

U4 is called voices. It's a beautiful sound. They've taken U3 and lengthened the attack and increased the speed of the chorused effect (detuning). This gives it a vocal-like quality. Very nice,

Sample 2

Lower

L1 is an acoustic bass. It seems to be the same sound from the earlier disk and is just as good as that one. I have performed with this sound and it's always fun to see the reaction of other musicians - shock and amazement.

L2 is more electric sounds. It has a quick metallic attack and a fast decay. Good funk sound.

L3 = L1 with a softer attack, chorusing, and after the initial attack a long sustain.

L4 - This is an analog synth sound ala Stevie Wonder. It has a pretty quick wah on the attack and responds nicely to velocity. I like this a lot. It's part of the pop music vocabulary.

Upper

U1 is a chorused Rhodes electric piano. It has a bright tine attack. Not much of a description is needed. If you've heard the theme from the TV show "Taxi" you know this sound.

U2 - This one is called strings. Again, these are compromise sounds so some allowances can be made but I won't be using this sound too much. It reminds me of a cheap Italian string machine. If you hold too many notes down for too long you get a weird beating and things tend to run into each other because of the long sustain.

U3 - Vibes. This will sound like vibes if you are careful to let go of the notes in time. If you hang on too long it continues to sustain into an organ tone. This gives you some useful options but you'll have to get used to it.

U4 - Flute. More of a flute-like sound. If you use the mod and pitch wheels to give the right nuances this might pass for a flute. It is an effective solo voice.

Sample 3

Lower

L1 - The lowest C on the keyboard is a bass drum. C# is a closed high hat. D is a snare drum. D# is an electric drum. Remember to use that pitch wheel if you want different tunings of these drums. The rest of the notes are an analog synth bass.

L2 eliminates the drums and gives a rounder analog bass.

L3 is more metallic and has a quick decay.

L4 has a softer attack and has a kind of reedy quality to it.

Upper

U1 - Hammond organ again only this time it has a more percussive attack. This is a common organ sound and is quite useful.

U2 - Electric piano ala DX-7. Since the introduction of the DX-7 this sound has more or less replaced the Rhodes. Given the size and weight difference I can't blame anyone for not wanting to haul it around. Of course with a sampler you can have either/or both and a lot more. (I should be writing ads for these guys.)

U3 - Jazz guitar. Once again this sound was originated on a DX-7 and is an effective voice. If you are careful how you voice your chords and slightly arpeggiate them you can get a guitarish effect. This doesn't hit the mark nearly as effectively as their nylon string guitar.

U4 - Here we have a synth brass ensemble. It is a very good sound I believe taken from a DX-7. Almost any good polyphonic synth will have a patch like this as it has become part of the modern pop vocabulary.

Some final comments on this disk. The sequence examples on the disk are like the worst lounge act ever. You know...the sorry sounds of the Apologetics. Whoever picked the drums on "The Girl From Ipanema" should have his sticks broken.

I like this disk a lot and hope there are more like this on the way. Some folks might find it a little disappointing because they already have a lot of these sounds, however, this is exactly the kind of format a lot of working musicians need.

Disk #15

This disk is performance oriented giving you lots of sounds available quickly using the mod wheel to move and mix between different samples.

Bank 1

L1 is a sharply attacked electric bass. If you rotate the mod wheel forward you have synth bass (mini-Moog). With the mod wheel in the middle you get a kind of hybrid. U1 mixes between chimes and organ with chimes. L2 and U2 mixes between pitched noise

and a staccato wooden mallet instrument. L3 and U3 are organs - moving the mod wheel forward is like pulling out the upper drawbars on a Hammond. Rocking the wheel in the center can give a Leslie effect.

Bank 2

L1 and U1 - Two electric pianos, the first having a hard mallet attack, the second brighter with a hard overtone. L2 and U2 - first cello-like sound (maybe synth - maybe natural), second an electric piano which is reedish like a Wurlitzer. L3 and U3 - first is a bright, aggressive sound (DX-7?) to a muted mallet-like sound. L4 and U4 - a bright filter sweep, chorused synth sound. Mod wheel adds vibrato.

Bank 3

L1 and U1 is first an electric piano again like a hard edged Wurlitzer. Mixes to a similar sound with a quick extra attack followed by a rounder piano tone; chorusing with the wheel centered. L2 and U2 - a mellow analog brass mixing to a brighter analog brass; chorusing when centered. L3 and U3 - a gritty piano sound mixing to a vibe-like sound. L4 and U4 are analog synth, medium attack, reedish with chorusing.

Disk #16

Bank 1

Lower	Upper
Vibraphone	Vibraphone

L1 and U1 sounds like vibes to me - Lionel Hampton, Gary Burton. These don't have as much high ring as the flesh and blood critters and have a bit of noise in the background but very useful if you take this into account when using them. L2 and U2 are very, very chorused. L3 and U3 have a quick delay, chorused and filtered to give a steel drum effect. L4 and U4 have a long attack and slow filter sweep which turn it into a lazy calliope.

Bank 2

Lower	Upper
Xylophone	Xylophone

L1 and L2 - a little grit but other than that they nailed this one. L2 and U2 double attack like the mallet bounced twice really fast. L3 and U3 - soft attack, chorused, longer sustain and slight fast filter. L4 and U4 chorused with infinite sustain.

Bank 3

Lower	Upper
Latin Percussion	Latin Percussion

There are no program variations on this one. From left to right on the keyboard there is: Conga slap, Conga, Bongos, Timbales, Agogo bells, Cow bells, Shaker, and Vibraslip. I've been waiting for this set of sounds and am not disappointed. These are great. I've got a friend who's a percussionist and he's gonna have to own a Mirage after he hears this stuff.

In the last issue in the letters section a gentleman named Kevin Kent, President of K-Muse, Inc. announced his lineup of new disks. I recently received a demo tape made with these new sounds. The quality of the recording I got makes it very difficult to tell you much. The music itself was fun and entertaining and my intuition tells me that this product is probably going to be pretty darn good. I certainly hope to get a few sample disks so we can give you a better idea of what they are offering. It sounds like they have a lot of disks in the works and it would be great to have more support in this area from outside vendors.

Erick Hailstone studied composition and arranging at the University of Nevada and at Berklee College of Music. He has been involved with synthesizers and related technology for the past seven years and is a partner in "The MIDI Connection," a Portland-based consulting firm. Primarily a guitarist, his orientation has been in performing and recording with these devices.

CLASSIFIEDS

USER GROUPS

Recording studio interested in contacting other Mirage owners in N.Y.C. and Westchester area to start user group, exchange sounds and info. Al Hemberger, LIPS MUSIC, (914) 961-9637, Bronxville.

NY, NJ, CONN - Tri-state area. Exchanging samples and ideas. Will consider mailing across country with honest and sincere Mirage owners. Any interesting and clean samples out there? Gordon G. G. Gerbert, G4 Productions, 622 Odell Ave., Yonkers, NY 10710. (914) 969-5682.

Would like to start users group in Seattle area. Call Loren at (206) 878-8097, or leave a message at (206) 575-0900.

Cleveland, Ohio (including Lorain county) area Mirage owners: Am interested in exchanging samples & technique. Please give a call - Mark: (216) 323-1205.

Interested in contacting other Mirage owners in the Detroit area. Joe Woeff, 16653 Fairway, Livonia, MI 48154.

SAMPLES

NEW SOUND DISK FOR MIRAGE with Sequential Prophet 5, "The Legend," best sounds and Fairlight "Breathy" voices. Recorded in 24-channel recording studio. Sounds guaranteed faithfully. Price: \$29.95. Please send check or international money order - account: Ljubljanska Banka Zagreb, Acc. No. 30101-620-42-727-70170-4298/99/. Address: DARANK DIGITAL, Davorin Chuvalo, Konjarska 21, 41040- Zagreb, Yugoslavia, Europe.

MIRAGE OWNERS. New from OASIS - A virtual sound effects library at your fingertips. 10 new disks, 24 effects per disk, \$19.95 each. Send \$1 for catalog or \$5 for catalog plus demo cassette (refundable with first purchase). To: OASIS SOUND LIBRARY, PO BOX 1006, FULLERTON, CA 92632.

I would be interested in trading or purchasing more usable samples with anyone in the Detroit metro or suburb area. Brian Caldwell, West River Rd., Grosse Ile, MI 48138. 671-1585 (around noon).

K-MUSE INC.'S "SOUND COMPOSER'S SERIES" The first comprehensive professional sound library produced by professionals. Simply the newest and best available! Set of ten disks: \$199 retail, 10% discount for COD or prepay. The first sets available: R&B, ROCK & ROLL, LONDON, NEW YORK, SPIRITUAL, CLASSICAL, and COMEDY. K-Muse Inc., 18653 Ventura Blvd., Suite 359, Tarzana, CA 91356 or call (818) 703-1562 for info.

WANTED: A clean sample of a DX-7 electric piano (Bell-piano...) with plenty of "metallic-bell" attack content. Please contact Mark Wyar, 1121 Middle Ave., Elyria, OH 44035 with price and info. Thanks!

Buffalo and Niagara Falls Mirage owners: Interested in exchanging sounds? Call or write: Chris Ott, 6871 Sy Rd., Niagara Falls, NY 14304. (716) 731-3752.

I am interested in exchanging sounds by mail. I have a good size collection of user-created sounds. I am also using an Apple II+ with Passport interface and software (in case you would like to swap sequences or programs). If you are interested, please send a list of your sounds/programs to: Paul Mattioli, 1106 2nd St., #335, Encinitas, CA 92024. I will forward a list of my sounds and programs.

SERVICES

Don't have MASOS? Don't want to hassle with arranging your sounds to give you all the patches you need for a whole song or set? I can custom design your disks for your specific needs - a must for live performance. P. Wacker, 4221 W Dunlap #250, Phoenix, AZ 85021.

EQUIPMENT

Mirage for sale. Still under warranty. Over 30 disks and Sampler's Guide. I'm upgrading. \$2000 firm. Yamaha CS 60 with all accessories: \$695. Cerwin Vega cabinet: \$165 or free with purchase. Gordon Gerbert, 622 Odell Ave., Yonkers, NY 10710. (914) 969-5682.

ANNOUNCEMENTS

Developing VES for IBM-PC. Looking for Beta testers. For further info, contact: Roy Smith, Turtle Beach Softworks, 1912 Alcott Rd., York, PA 17402. (717) 757-6344.

Anyone having a C-64/C-128, modem, Passport interface, and the new Sonic Editor from SONIC ACCESS, and who wants to upload and download sounds to your disk drive, call Tom at (803) 356-1597.

Would you void your warranty for 512k of RAM at a projected cost of \$300-\$400 (US)? We are developing a memory expansion for the Mirage that would allow for instant (one-button keystroke) access to 4 upper and 4 lower patches. It would be a hacker's kit which would involve installing a circuit board (easy) and attaching 5 or 6 wires to the existing Mirage circuit board (relatively easy for someone with HS level electronics knowledge or any service or repair technician). However, before we get involved in the setup for manufacturing we would like to get some idea for the level of interest for such a product. Please write to us offering encouragement, ideas, wish list. If you wish, we will attempt to consider such letters as reservations for the final product if it is viable. Please write to: MIRAGE UPGRADES, 2004 Fernwood Rd., Victoria, BC, Canada V8T 2Y9. Thanks!

SOFTWARE

Commodore 64 owners: The Data Dumpstor turns your 64 and 1541 drive into a storage device for MIDI system exclusive data from more than twenty Yamaha, Sequential, Oberheim, Korg, and other MIDI instruments. It can be patch data, sequences, drum machine patterns, etc. Send for a complete equipment list. Features include a 36k buffer and an Ultra-Fast MIDI file disk loading routine - loads 14k in under 10 seconds. Send MIDI data to several instruments at once. Perfect for MIDI studios, fast enough for live performance. Requires Sequential or

Passport compatible interface. Send \$59.95 for package, or \$10.00 for complete manual and demo disk. (Deductible from order.) MUSIC SERVICE SOFTWARE, 801 Wheeler Rd., Madison, WI 53704.

IBM-PC and Mirage owners! Software is now available. For information, write: DSKIS, PO Box 8303, Cherry Hill, NJ 08002.

FREE CLASSIFIEDS!

Well, - within limits. We're offering free classified advertising (up to 50 words) to all readers for exchanging or selling your sampled sounds on Mirage-readable disks. Additional words, or ads for other products or services, are 15 cents per word. (Unless renewed, freebie ads are removed after 5 issues.)

CHANGE OF ADDRESS

Please let us know at least four weeks in advance to avoid missing any issues. The Post Office will not reliably forward this type of mail. We need to know both your old and your new address.



Sampleware

Library for the Ensoniq Mirage

Now available! A new library of samples including:

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The Trip to Philadelphia Story

Ensoniq flies out TH-Editor and staff (ie, Assistant Editor) to see just who they are dealing with and vice versa.

By Jane Talisman

For nine months Ensoniq had been merely, albeit frequently, east-coast type voices on the phone. The time had come to meet. We wondered - will they wear suits? (We impress easily.) Is Ensoniq a company moving up or just hanging in there? Who knows what they were wondering?

The approach - it is a long, weird flight from Portland, OR to Malvern, PA. Unable to resist the lure of cheap airfare, Editor G & Assistant Ed. T. found themselves lurking about both San Antonio, TX and Atlanta, GA before actually deplaning in Philadelphia.

Ensoniq is located in an immense, low-slung, modern industrial park about 20 miles west of Philadelphia. The surrounding area is expensive, rolling hills Pennsylvania countryside. Exhausted and shaky (as usual) we were met by Rob Weber, Marketing Director of Ensoniq. The remainder of Day 1 was spent essentially meeting people we've been talking to for months, touring the manufacturing plant, learning the history of Ensoniq (see sidebar), and getting a preliminary introduction to two new products (announced in the last issue).

In lieu of descriptions of the Ensoniq people who we met, maybe a more general word or two about the whole feeling to the place, that is, the attitudes of the people we met is in order. In musical terms this is definitely an allegro type place to work - it's moving - fast. We met about 10-20 of the software, engineering, design, and administrative people and nearly to a 1 they were very familiar with the Hacker and appeared to be pleased with it. The group we met (almost all young, male, mellow-hip types) seemed to be enjoying themselves in their work and would say things like, "Oh yeah, I'm number 6" or "Hi, I'm number 14," referring to the order in which they were initially hired by the company. You get the feeling that these are folks who are working at full individual capacity, with heavy hours, doing stuff they love. Tom Metcalf, Sound Designer Extraordinaire, said "They give me equipment I need, build me wonderful toys, neat rooms, say 'sample away, young man' - and then they pay me, too! This is really Tom heaven."

A really quick word about Ensoniq's new electric piano. (See Clark's NAMM article in this issue for a quick look at their new synth.) Extensive reviews will be forthcoming in future issues. For now, I spent a few minutes playing this in Piano (acousticoid) mode. This is a very good mid-range acoustic sound. Ringing tones in the high end - very clear, strong bass. My basic feeling is that for piano players there might be some sense of disorientation (there was for me) in that it sounds extremely good but you start to become aware of a lack of acoustic feedback that is so essential to

classical pianists. Usually, with others' attempts at electronically duplicating a piano, I'm so distracted with things that are wrong with the sound and the feel of the keyboard, that I hardly even notice the lack of things like acoustic feedback. This one sounds and feels so much like a piano that things like no vibes makes playing it a little on the spooky side.

To close, our general impression of Ensoniq is that it appears to be a super lively young company that expects to be going gangbusters in the next year or two. This is a group of people who are intent upon solidifying a terrific introduction into the general electronic keyboard market.

The Ensoniq Story

Ensoniq was formed in September, 1982 by three ex-Commodore computer wizards: Bruce Crockett, Al Charpentier, and Bob Yannes. Bruce Crockett, president, headed world-wide manufacturing while at Commodore. Al Charpentier directed LSI design engineering and was responsible for all design aspects of the VIC-20 and the C-64. Bob Yannes played a key role in the creation of the C-64 and the Commodore synthesizer chip.

The company they formed was initially known as PVI (Peripheral Visions, Inc.). Their very first product was an interface that converted Atari gameplayers into rudimentary computers. The sale of this product to Atari (which never brought it to market) provided the capital required to fund their next product: an interface card that converted an Apple IIe to a drum machine. This gave them some experience with digitally-sampled sounds and put them in a good position for their next product: the Mirage.

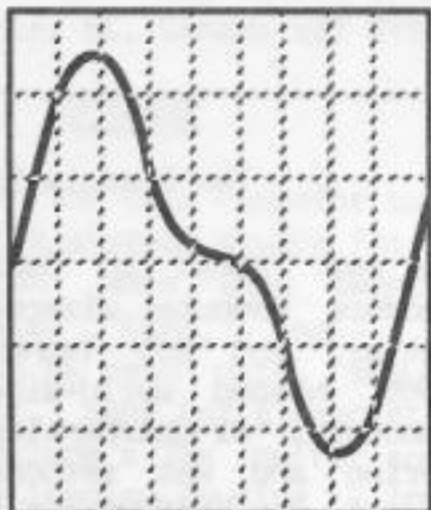
In January, 1984, they changed the name of the company to Ensoniq. By January, 1985 the development of the Mirage was complete and the instrument was formally introduced. Since the Mirage's introduction, Ensoniq has grown to nearly 100 world-wide employees. Ensoniq also just recently expanded their total floor space by about 70%. Almost 12,000 units were sold during its first year. The Mirage is presently manufactured at Ensoniq's Malvern plant and in Italy and Japan for the European and Asian markets.

In 1986, Ensoniq remains one of only about four synthesizer companies with the ability to do complete in-house design of custom VLSI chips. (And one of only two that actually use custom VLSI in their musical instrument product line.) However, Ensoniq does not expect this situation to remain for long and is rapidly transforming itself into a very market-oriented company. They expect to maintain and build on their competitive edge by carefully addressing the needs of working musicians. (ALL of their software engineers - and almost everyone else - are muscians.)

MIRAGE/COMMODORE OWNERS:

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THE INTERFACE

To Whom It May Concern:

I recently purchased a Mirage Digital Sampling Keyboard and have found it to be an astounding instrument with incredible, powerful potential. But even more amazing is the copy of Transoniq Hacker I found included with the keyboard. I found the articles on keyboard splits, and how to put 24 sounds on a disk very informative and helpful as I began building my own library of sounds.

Keep up the good work, and accept my subscription.....but please send me a new issue ASAP!!!

Also, I would be extremely interested in hearing about the Mirage's MIDI implementation as well as more on key assignation of samples.

I am a musician/composer currently engaged in doing soundtrack and commercial work. I use my Mirage as the master controller for a multisynth-computer-sequencer system.

Anyway, I find your newsletter both thoughtful and informative (certainly more informative than the owner's manual). You are doing all Mirage owners a great service, and we thank you.

P.S. Is there any way to assign different MIDI channels to each keyboard half?

With regards,

Denis Kephardt
Sight of Sound Productions
Monterey, Ca.

[Ed. - Unfortunately, there's no way to assign different MIDI channels to different parts of the keyboard.]

Dear Editors:

It's nice to know that Mirage users can now format their own disks but I seem to be having a problem booting up with them. When I do, instead of program 1 booting up, the window flashes "Fd" and I have to turn off the machine and load a factory-formatted disk in order to get a sound.

Also, when I use the MASOS disk and try using the reverse feature (Parameter 7), there doesn't seem to be any change in the sound.

Any assistance you could give would be greatly appreciated.

Thanks,
Michael Lande

[Ed. - Your boot problem is just the Mirage looking for its operating system. Disks formatted with the Ensoniq formatter will store samples - but they won't contain the operating system. (The Triton Disk

Formatter will also copy the Mirage's operating system.) Parameter 7 won't affect most sounds. It just flips the sample end-for-end. (Used sometimes when manipulating the data to find a good loop point.)]

Editors:

I have been unable to get the MASOS special functions to work either on my Mirage or on a Mirage in the shop where mine was purchased. I have tried both of my diskettes and two diskettes in stock at the shop. Can you offer any suggestions. Am I using the right procedure: Load Seq Key, No. key for selected function, Enter?

The keyboard instantly says "function completed," but there is no change to the sound. A friend of mine in the shop is trying to contact the Australian representative, but as of yet I have had no word. If you can offer any assistance I would be most grateful.

Yours faithfully,
A. Stevenson
Surrey Hills, Australia

[Ensoniq's response - The procedure you describe is correct. But, before you do this, make sure that you have all the parameters set properly and have a proper wavesample selected.]

Dear Sir,

I read in issue #5 about a program by SOUND LAB for the MIRAGE and a Macintosh computer to communicate. It seems to have all the features that I would like, and I wondered if any of your readers had any experience with this program (if it does, in fact, fulfill all expectations etc.). I already have the VES for an Apple II+ (I'm changing to a Mac) and find that it is a bit limited in operation (no overall picture of the sound etc.). I am hoping that the SOUND LAB program will overcome these problems.

If any of your readers have had any experience with this program, and would like to share that information with me, either by a letter to the below address, or through THE INTERFACE, I would be most appreciative.

Thanking you in anticipation of your reply,

Yours Sincerely,
R.D. Workman
26 View St.
Waverley, Sydney, NSW
Australia

[Ed. - We're including your complete address so people can respond directly to you. Since the time that you wrote, you've probably noticed our review of Sound Lab in Issue Number 9. Be sure to check out Random Notes in this issue - there's been some improvements to Sound Lab since the review was published.]

Dear Hacker,

Enclosed you will find a letter I recently sent to Ensoniq. The problem I have been having is clearly explained in the enclosed letter.

Have you ever heard of any such problem with the Mirage's keyboard? Have any other readers of the Hacker had a similar problem? An answer to this problem would be greatly appreciated.

Thank you very much for your cooperation and keep up your fine publication.

Very truly yours,
Stephen M. Kranick
Londonville, NY

Stephen's letter to Ensoniq:

Dear Sirs,

On December 30, 1985, I purchased an Ensoniq Mirage Digital Sampling keyboard from Ace Music Center in North Miami, Florida (Model DSK-8, Serial No: 01-15118). Upon receiving the Mirage, it was in factory fresh condition with no signs of damage. I was playing the Mirage and everything worked satisfactorily.

Then the problems began. After four hours of playing on the Mirage, a note on the keyboard didn't work (the E in the third octave). Then the note got stuck "on" and the note wouldn't stop playing. Also, one of the keys had a rattling in it (the C in the fifth octave). Please note the above problems were not present when I unpacked the keyboard from the box. The broken key contact and the rattling key appeared after playing the Mirage for several hours. I then proceeded to the nearest authorized service dealer for the Mirage (The Only Guitar Shop in Clifton Park, New York). He fixed both the stuck inoperable key (in which the silver key spring pulled from its holder and was resting on the metal bridge contact) and the rattling key (in which the lead weight became unglued). From that point, the keyboard worked fine. But on February 7, 1986, the same problems occurred during a live performance. This time, a different key (the D in the fifth octave) was inoperable and became stuck "on". Also, another key began to rattle (the D in the third octave). For the second time, I went to The Only Guitar Shop for authorized service and the problem was once again the silver key spring pulled out from its holder and an unglued weight. On the next day, February 8, 1986, I had another live performance. Halfway thru the performance, another key became inoperable! (the A in the third octave). For the third time, I went to The Only Guitar Shop for authorized repair, and again, it was the same problem.

As a professional musician, this type of reliability from a keyboard instrument is unacceptable. The Mirage has become the main keyboard during my performance and is a vital part of the character and sound of our band. When the instrument becomes inoperable, it spells disaster for our group (which it did two days in a row during live engagements).

In no way was the Mirage exposed to physical neglect. When I take the instrument out on the road, it is transported in a high quality case. It is never left in my van overnight between engagements. As soon as I arrive home, the Mirage is unloaded and brought into my house to avoid any adverse reaction from the cold and moisture. Incidentally, I've owned a Yamaha DX-7 for about a year and have had trouble-free operation with its keyboard.

As the Mirage stands now, I am very worried about performing with it. I would very much appreciate it if you could tell me what steps to take to find a solution to what I consider a very serious problem.

Since our band has a very busy playing schedule, a prompt response would be very much appreciated. Thank you very much for your cooperation in this matter.

Sincerely yours,

Stephen M. Kranick
Londonville, NY

Dear Hacker,

On February 10, 1986, I sent you a copy of the letter I sent to Ensoniq in which I explained a problem I was having with the Mirage's keyboard (i.e., the key contact springs kept breaking) and asked if any of your readers of the Hacker have had a similar problem.

On February 12, 1986 (2 days after I sent the letter to Ensoniq), I received a phone call from Doug Nestler at Ensoniq. Doug informed me that the problem with the Mirage's keyboard has occurred a few times in the past and a simple modification done by an authorized Ensoniq dealer would solve the problem. So I brought the Mirage to an authorized Ensoniq dealer in the afternoon and it was ready in the evening of that same day. I played my keyboard during two straight gigs the next day and the keyboard worked fine.

To say the least, I was very satisfied in which the way my problem was handled by Ensoniq. I was shocked by how fast a response I received from Ensoniq. It was only two days after I wrote the letter to Ensoniq that Doug Nestler contacted me by phone. Doug was polite and very understanding about my problem.

It's refreshing to know of a company that cares and stands behind their product after you make the initial purchase.

I just thought I'd write this letter in case any other readers out there have a similar problem and not to worry, for there still is a company out there that really cares. Thanks again Ensoniq!

Sincerely yours,

Stephen Kranick
Londonville, NY

[Ed. - Thanks for keeping us posted on how this all worked out.]

Dear T.H.

I was very happy to see a Sound Lab developed for the Mirage and Apple Mac. However, since I just bought an Atari 520 ST (better computer, less money). I would be happier to see one developed for it. Mirage owner's - if you are planning on buying a computer check out the 520 ST, Amiga, and Mac, and tell me dollar for dollar which you think is better. Any one interested in a Sound Lab for the 520 ST should write to Blank Software 2442 Clay St. San Francisco, CA 94115.

Marc Hoppe
Las Vegas, NV

[Ed. - Hybrid Arts (11920 West Olympic Blvd., Los Angeles, CA 90064) has announced plans to release Sample Editor for the ST sometime this spring. We'll announce it when they do - and hopefully do a review.]

El Editor Senior,

Thanks again for your efforts. Truly this newsletter helps us Hackers immensely. There's something about being in touch with others in your own situation.

I'd like to pass on a sampling story, pose a question (regarding the DX-7), and wish a happy birthday to Naomi (2 yr) my daughter!

One of the nicest things I like about the DX-7 (which unfortunately I don't own) is the electric piano sound(s). Therefore, I've tried to capture it on the Miragola. After 8 or so frustrating hours, my only accomplishment is a wavesample that 1) does sound somewhat like this DX-7 patch, 2) fails to reproduce its richness post-loop & 3) contains MEGA NOISE. Granted the majority of my problems stem from a noisy X-15 tape machine, no input sampling filter, no V.E.S., no computer, and probably lack of patience.

I've had the chance to research Ensoniq's new disk with 24 synth sounds on it and found a DX patch similar to what I could use. Interestingly, with all their sampling sophistication I found that P 36 is all the way down to 0. Why? Because if you raise the bugger, aliasing and incredible dirt is uncovered. This makes me wonder if my only solution is to, yup, buy a DX-7. Short of this digital decision, have you any insights to offer?

Thanks in Advance,

Mark F. Wyar
Elyria OH.

[Ensoniq's response - Many Mirage factory samples do not use P36, but instead use envelope modulation of the filter for dynamic effects. If the filter was completely closed all of the time, you wouldn't hear any sounds at all. The filter is used to remove output aliasing and to act as a noise gate at the end of a sound. As you indicate, opening the filter up more than intended for a given sound can produce unwanted side effects. Both analog and digital

synths are better at generating their respective sounds than using sampled versions. These machines have no memory/bandwidth limit on generating their own sounds.]

[Ed. - Basically, we just haven't reached the point yet where one type of machine can do everything well. For some sounds, analog is still the best way to go.]

Sirs,

1) My Mirage sequencer has a problem - popping out of the sequence record mode while recording. I'll send it in if it becomes intolerable.

2) RE: Your review of Disk 3 Bank 1, U2 program - there is a difference. This adds a very usable, Mod wheel controlled, "Nasty" sound to the sax.

3) Wish list: To be able to load a wavesample from disk to any location.

4) Bay area user groups?

Thanks,

Tony Talbott
San Ramon, CA

[Ed. - Thanks for the note on Disk 3. Regarding your sequencer problem; the sequencer doesn't have a whole lot of memory (especially without the expander) - you're probably just running out. Make sure the mod wheel is against the stop. This thing is a memory hog. In some early Mirages, the "stop" wasn't REALLY the "stop," and the memory would fill up very fast even if it looked like the mod wheel was off. If you think you might have this problem, you should definitely take it in for service. Regarding wavesample locations; I don't know if this will ever be possible (at least on this particular device), but for now, the best thing to do is to pre-arrange your disks for specific needs. Steve Coscia's article in Issue Number 6 is a good place to start. (We're still waiting for his Part II on this.) There's also an outfit in our Classifieds that is offering to do this.

Dear TH:

Your magazine is great, and fills in the massive gaps in the MASOS guide very well. When I first got the Mirage, I was so intrigued by the sounds that it made from the factory disks and so befuddled by the MASOS manual and its method of presentation that it was several weeks before I really sat down and forced myself to wade through the manual. I now feel there is a lot of useful information in the manual, and the answers to a lot of the questions that have been asked in your forum are in the manual - they are just hard to understand the way the manual presents the information.

Once you wade through it a couple of times, it is obvious the level of work that has gone into the

preparation of the manual (even though in every issue of TH Ensoniq admits to even more misprints in ASG). It is important that you read the manual all the way through at least once, even though a lot will be hard to understand, because in every issue that I have seen of TH, questions are being asked whose answers are in ASG.

In reference to Erick Hailstone's review of the Triton disk utility, I have a couple of comments.

I also have tried to make a backup copy of this disk and have been unsuccessful. However, Triton sends a receipt to each purchaser of the product, and from the way they handled my order I would suspect that they are a very professional organization, and possession of the receipt would be enough to get another copy from them.

One important point that was overlooked in the review is that while both the Ensoniq disk and the Triton disk will format blank disks, the Ensoniq takes 3 minutes to do it, and the Triton program takes only 30 seconds to do the same thing. Just thought you would want to know.

Along a completely different line, here is a thought that I haven't seen in writing but I'm sure I'm not the first one to think of. This involves using the technique of "hiding" samples behind each other. Here is a simple way to have 15 different full keyboard (single sample) sounds accessible with a couple of keystrokes (no disk loads):

a. Set up lower wavesamples 1-7 with a topkey of 61.

b. Shift through them by increasing the value of lower keyboard Parameter 27 (first wavesample to be included in search). The value of this parameter is the first wavesample to be evaluated to see if it will be allowed to participate in tone generation. Increasing the value of this parameter causes those wavesamples numbered lower than the current value of this parameter to be ignored in the wavesample selection process. This will give you seven completely different sounds which cover the whole keyboard from the lower wavesamples.

c. Set up Lower Wavesample 8 with a topkey of 1, setup the upper wavesamples 1-8 with a topkey of 61.

d. Set Lower Parameter 27 to 8, set Upper Parameter 27 to 1, then all keys past key 1 will respond to the upper wavesample (once again, a single sample spread over the board). Cycling Upper Parameter 27 from 1-8 will give, once again, eight different sounds across (almost) the full keyboard from the eight upper wavesamples.

This may seem kind of hokey, but it works. For short wavesamples with short loops (as in samples of other synthesizers) this works very well, and gives you very quick access to 15 different sounds which cover (almost) the whole keyboard. Just a thought to share.

On a different subject, I seem to have trouble

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getting a MIDI clock signal out of my Mirage while the sequencer is running, and have not been able to resolve it. The clock seems to be there in all other modes, and the unit will successfully slave itself to another unit, just doesn't output clock while sequencer is running (I am running MOS 3.1 and MASOS 2.0) I think this is a serious problem. Am I doing something obviously incorrect?

I bought the Input Sampling Filter (ISF) sight unseen. My reason for purchasing it was not because of any compelling literature from Ensoniq telling me what it would do for me (I paid \$110 for it mail order, not \$50 as Duane King said in his article, and was told by my dealer that was an excellent price (did I get ripped off?)). Bob Moos recently wrote in Keyboard Magazine of the importance of the quality of the input digital sampling filters in the digitizing process. He stressed this point so strongly that I ordered the ISF to see if the quality of the samples it made were any different than the on-board sampling filters made. The fact that the ISF does not support mike level input is not a problem, since I had long since routed my signals through the board to set EQ and etc. I did do a series of comparisons, sampling taped material on the lower keyboard with the on-board filters and then sampling the same material in the same layout on the upper keyboard with the ISF. I was very pleased with the results. The ISF creates a sample with much more of the original texture of the sound intact, and the samples which have been made with the ISF will transpose farther and sound cleaner than those made with the on-board

filters. I am very pleased with the results of my experiments. and with the ISF.

Your forum is a great opportunity to share information, keep it up.

Sincerely yours,

Jim DuLaney
Corpus Cristi, TX

[Ensoniq's response - Got a few comments. First of all, Bravo! on the 15-sounds trick. We just recently discovered this ourselves. Regarding the difference in formatting times; our formatter performs a complete verification and testing of the disk and sets up basic parameters. Regarding the clock; the only time the Mirage puts out a clock is when the sequencer is running (which precludes running under MASOS) or a clock is inputted via the sync jack. If MIDI Out is working at all, clocks should be coming out.]

BACK ISSUES

Back issues are available for \$2 each. Some back issues are no longer available in their original printed form and a photocopy will be substituted.