Transoniq Hacker

The Independent Ensoniq User's Newsletter

SAMPLEWARE DISK REVIEWS

By Erick Hailstone

Well folks, this time around we have disks from SAM-PLEWARE. I reviewed their first entree a few issues back and was wondering what had happened to them - so I was quite pleased to find these on my doorstep one day.

SAMPLEWARE DISK #2

BANK 1
UPPER & LOWER

Latin percussion sounds - Low conga (C - C#1), Low conga slap (D1 - D#1), High conga (E1 - F1), High conga slap (F#1 - G1), Sleigh bells (G#1), Cowbell (A1 - A2), Go go bells (A#2 - E3), Whistle 1 (F3 - A3), Whistle 2 (A#3 - D4), Castanets (D#4 - C5), and Shaker (C#5 - C6)

This is similar to Ensoniq's Latin Percussion (Disk #16). The only sounds that are the same are the congas, but Sampleware's are tuned much lower - making it useful to have both. The high conga sounds more like a muted conga to me, with a very quick decay. All of the sounds are good representations with acceptable ranges. The only one I don't feel comfortable with is the castanets - and that may be because I'm least familiar with the real thing.

L2 and U2 take advantage of the mix mode to combine sounds to give variations and some new sounds. The congas combined with the slaps give different characteristics and slightly different resonances. How 'bout sleigh bells with a cowbell attack? Go-go bells with a cowbell attack give a slight metallic echo quality. How about Whistle with castanet attack? Shaker/go-go bells? These are all pretty swell combos.

L3 & U3 are combinations of the first two programs with chorusing and a few slight alterations.

L4 & U4 - These are L1 & U1 with the filter closed down and some resonance added to give them all a dark wispy flavor.

BANK 2
UPPER & LOWER

L1 & U1: Maracas (C1-A1), Rachet (A#1-G2), Gourd (G#2-F3), Boing Box 1 (F#3-D#4), Boing Box 2 (E4-C#5), Tambourine (D5-C6).

These sounds are all quite good, as well as self-explanatory. Boing box 1 & 2, on the other hand, are something new. I love both of these sounds. The first one sounds like a large drop of water in a cartoon. O.K., how about this, anyone out there old enough to remember flubber? ("The Absent Minded Professor"). This is the sound his car made when it flew. The second boing box is also cartoon-like, the sound of an arrow being shot from a bow. Actually, I think this is made on a Brazilian instrument that resembles a bow. These boing boxes are GREAT!

L2 & U2 : Again, clever use of the mix mode gives us maracas/rachet. A lower tuned gourd with boing box 1. I thought the first boing box was great but this one is tuned lower and it's Killer! Tambourine seems the same.

L3 & U3: Again with the chorusing. Slighlty different, no new ground.

L4 & U4: Same type of variations as Bank 1.

BANK 3
LOWER: MARK TREE

L1: This is a chime tree, kind of like wind chimes but tuned side by side. You play up or down and they sustain into each other giving an ethereal oriental kind of sound. You usually go one direction or the other. When you play this sound on the keyboard, perform it the same way. Up or down.

L2- Uses maximum chorusing (detune 33) to achieve more shimmer in the chimes. They seem slightly brighter.

L3- Uses the LFO (31 & 32) to give a liquid wiggley texture to the sound.

L4- Has a slow resonant filter sweep which adds an airiness to the sound. These are all good variations.

UPPER: CHIMES

U1: These are orchestra chimes. If you haven't heard these before they're like Big Ben only not so radical. I was doing a recording a few years ago and searched high and low for a set of these. I really could have used this.

U2: Chorusing adds a new dimension here and the funda-

mental tone in U1 has been removed, all and all, yielding a different set of chimes.

U3: Adds vibrato to U1.

U4: Adds vibrato and closes down the filter (Parameter 36) to give a softer sound.

SAMPLEWARE DISK # 3

BANK 1
LOWER : SOLO CELLO

L1 cello from (C1-B2). This cello is darker then the cello on Ensoniq disk #14. It has a light vibrato which is fairly appropriate. If you play in a staccato manner you won't notice it. If you play sustained notes the vibrato is quite natural. For more expression you can reduce Parameter 32 (LFO DEPTH) to 0 and control this function with the Mod Wheel. This is a very good sample. I find it different enough from Ensoniq's to be complementary. In multi-track recordings you could use them both together for greater realism because in fact you would have 2 different instruments. The loop point in this sample is seamless.

L2- THe initial attack drops in volume quickly and then sustains. I found it more useful for choral arrangements than single notes and for that reason I preferrred using the Mod Wheel over the preset vibrato.

L3- Has a bit of chorusing as well as vibrato lending to ensemble type playing. It is also a bit darker.

L4 - Has a longer release time so when you take your finger off the key it lingers a bit longer. There is also a slight filter sweep (wah) after you release the note. These types of changes give a more synthesized sound adding a new wrinkle.

UPPER: SOLO VIOLIN

U1 - From (C3-C6) - this sound worked best for me in its first octave and the more staccato, the better. Yes it's a violin, but if I were this violinist's teacher I would suggest a new violin. It has a very thin edgey sound. I reduced Parameter 37 (resonance) to 0 and this helped a bit.

U2- Drops in volume the same way L2 does. The initial attack of the bow is a bit more aggresive than U1.

U3- Uses the same parameter variations as L3.

U4- Uses the same parameter variations as L4.

BANK 2
LOWER: LOWER STRINGS
UPPER: HIGH STRINGS

L1 & U1 are ensemble strings. The accompanying sequence shows them at their best. The notes release shortly after releasing the key. I was surprised to find the detune (33) and LFO depth (32) both set at 0 meaning that the vibrato and the chrousing were part of the sound that was sampled.

Although you can hear the looping in the upper range it is well hidden when playing in an ensemble fashion. These are softer, less aggressive strings than Ensoniq's.

L2 & U2 have longer release times and a slight filter sweep as the note decays.

L3 & U3 decay the instant you take you fingers off the keys. This is a strange sensation when playing stings, almost like a tape playing backwards or being turned on and off.

L4 & U4 have a very long, high resonant filter sweep and a long, long release time. This sound could have been made on an analog synthesizer. It has a sort of spacey vocal quality to it.

BANK 3
LOWER : ANALOG STRINGS

L1 from (C1-F#3)- what can I say? ANALOG STRINGS, you bet, and in some ways my favorite on this disk. I felt the detune effect a bit intense so I moved it from 9 to 3 (Parameter 33). I also found the sound useful up an octave (Parameter 67).

L2 is quite a bit brighter then L1 and has a very light chorusing.

L3 is much darker with along release time.

L4 has a moderately quick filter sweep and a coordinated drop in volume with an immediate volume cut-off when you release the keys. This sample is a great place to go crazy with the analog parameter. There are many useable variations waiting to be created.

UPPER: PIZZICATO STRINGS, TREMOLO, & GLISSANDO

U1 from (G3-B4)- pizzicato is a technique where the violinist plucks the string. It makes for a very short staccato note and this sample is a good representation of that sound. The tremolo is produced by creative looping ranging from (C5-E5). Don't over-use this sound. You know, a little goes a long way. The gliss is a one octave major scale played so fast that it takes place in the space of a single note. It seems to be played by several violins in unison. All of these techniques are displayed effectively in Sequence #3, a catchy little tune that will leave some of you wondering, "Whatever happened to Martin Landau?".

U2- All sounds have a softer, less aggressive attack.

U3- The detune parameter (33) is set at 46, which, with this quick decaying sample, is not as radical as it seems - giving the sample an ensemble quality. The tremolo has been given a VERY long release time.

U4 -The filter (Parameter 36) is opened up to make these sounds much brighter and the resonance (Parameter 37) is set high to give an edge to them.
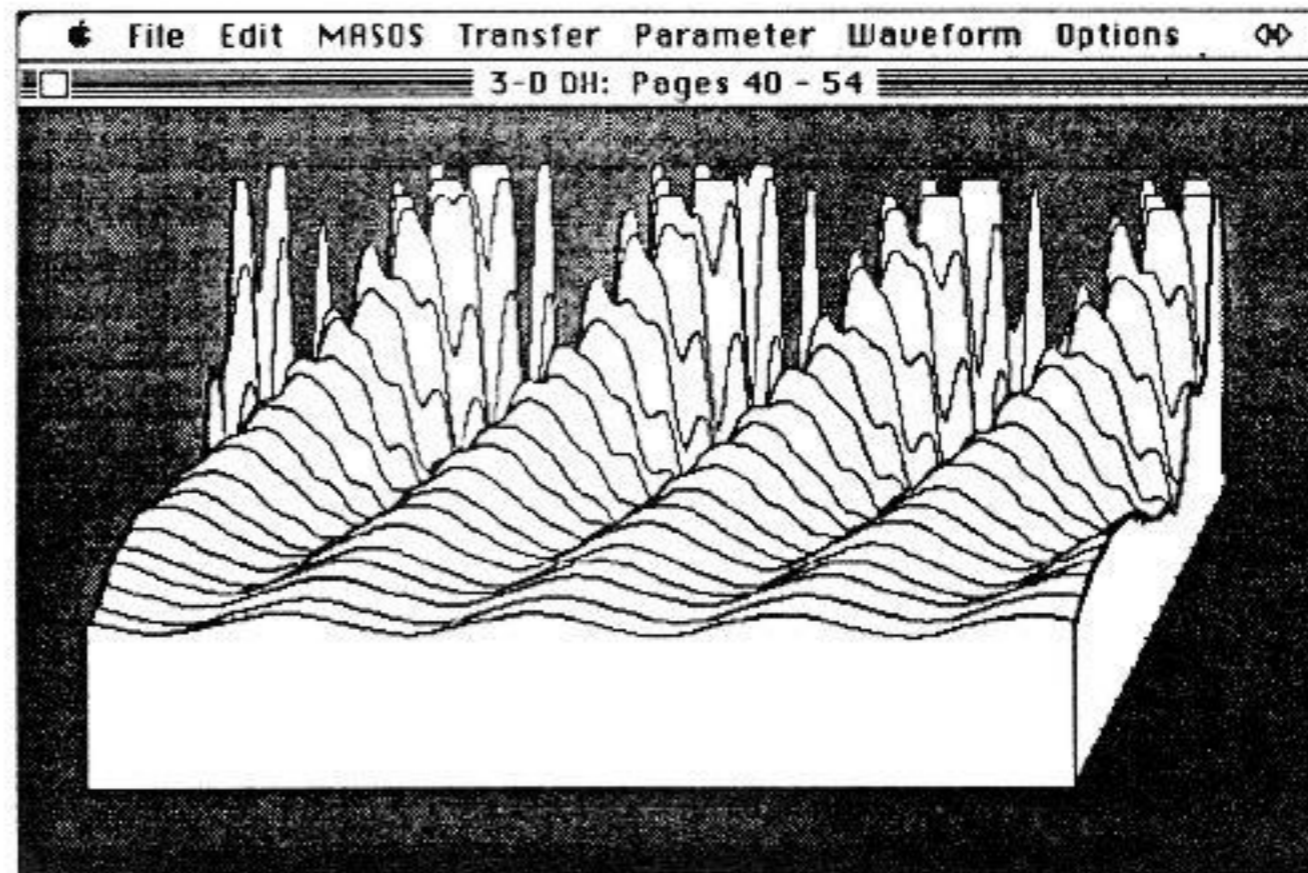
With the exception of the solo violin I found this disk quite useful and can see how it might be used in lots of strong combinations with other samples.
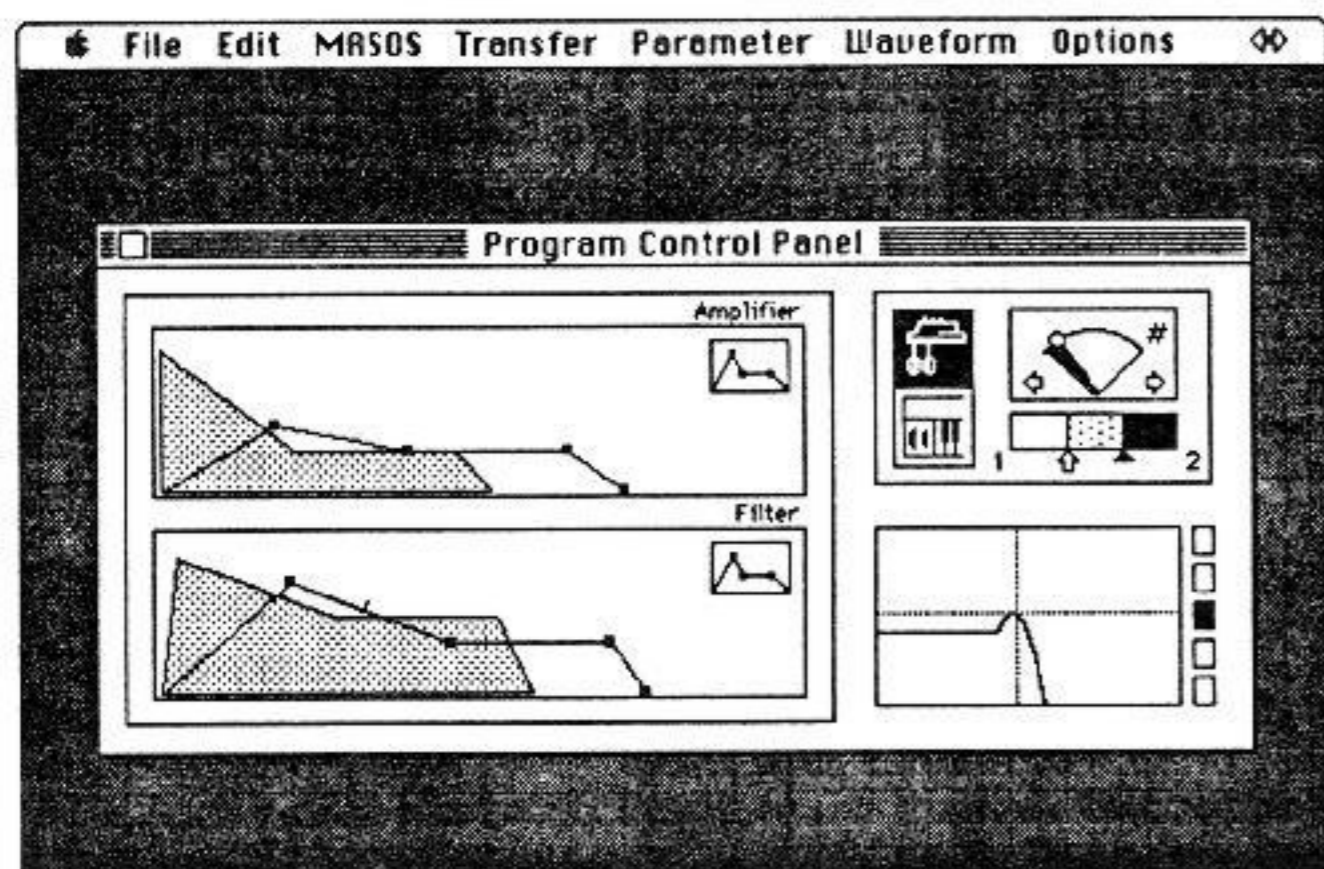
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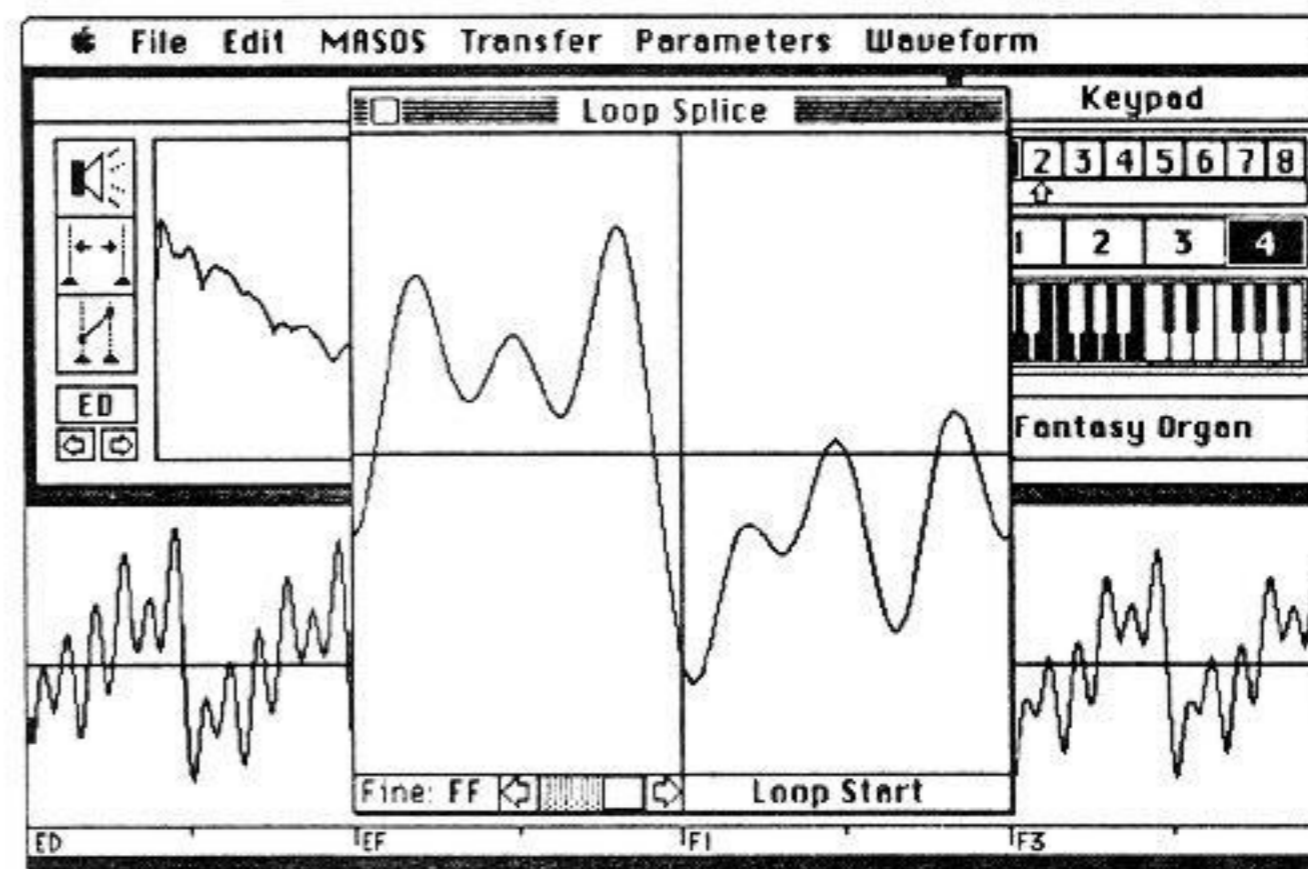
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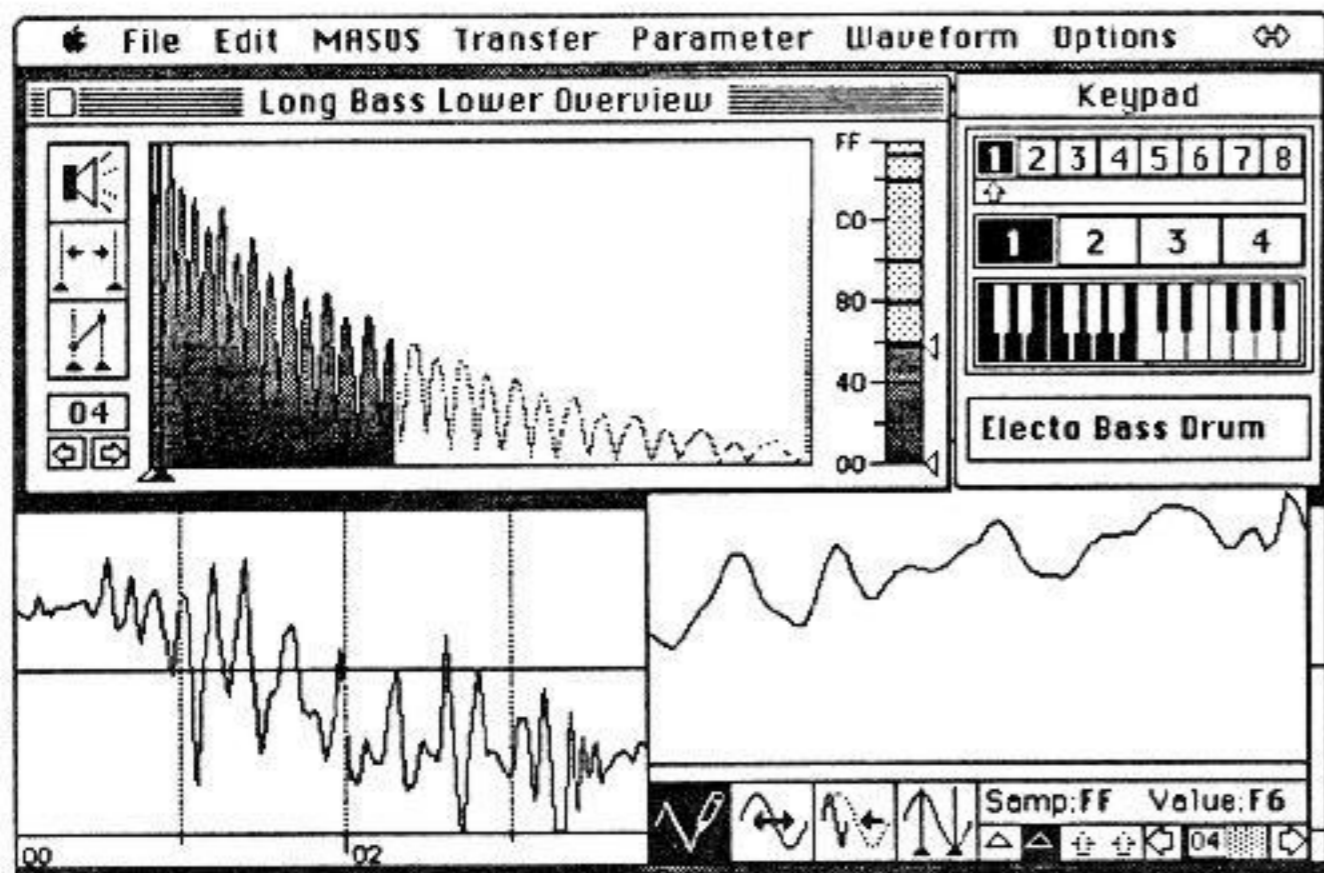
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ESQ-TIPS

PROGRAMMING THE ESQ-1

By Clark Salisbury

What I'd like to do this time out is take a look at the specific voice architecture of the ESQ-1 in order to gain a solid foundation for understanding the programming of the machine.

Let's take a look at the ESQ-1 program titled "Basic." It's located in bank 2 of the internal program memory section of the ESQ-1.

"Basic" is a sort of a scratch program that uses only one oscillator to produce its sound. All the settings for the filter and amplifier sections are programmed to fairly straightforward settings; nothing fancy going on. The idea is that this program can function as a "template", or as a starting point for other programs.

Press the button labelled "OSC 1" and check out the display. What you are seeing is a display of all the parameters associated with Oscillator 1, as well as the values that they have been programmed to. Along the top row of the display the listing shows manual settings; these are settings that are used as the basic starting points for oscillator tuning and waveform selection. From left to right you should encounter the Octave Setting for the oscillator (values are from -3 to +3 in one octave intervals), Oscillator Semitone (this tunes the oscillator in half step intervals, from 0 to 11) and Fine Tune Control (for tuning the oscillator sharp in increments of about 3 cents - range is from 0 to 31). The last parameter on the upper row is the Waveform Select parameter. Unless you have previously made changes, this parameter will be selected when you first call up the oscillator page. This is indicated by a line of dashes that appears directly under the word "SAWTOOTH", which happens to be the waveform selected for Oscillator 1 in this particular program. Since the sawtooth waveform is the first waveform of the 32 possible in the ESQ-1, this seems like a logical choice.

As long as you're here, you might enjoy checking out the different waveforms available on the ESQ. First, make sure the word "SAWTOOTH" is underlined; if it's not, press the "soft button" directly above the word "SAWTOOTH" - the line of dashes should appear underneath. Incidently, this is the way that functions are selected throughout the ESQ. You first locate the page you wish to deal with (as we did when we selected the oscillator page), then use the "soft buttons" to select the function you wish to edit. Now that the waveform function has been selected, we can scroll through the available options using either the increment/decrement buttons, or the data entry slider. (Ensoniq calls it a fader, but that seems like something of a misnomer; I have volume faders on my mixing desk - it doesn't seem to me that one would "fade in" the

data, but I'm probably just being picky.) The buttons will probably prove the more manageable method of selection in this case. The slider tends to work best for roughing things in, such as a filter cutoff setting.

Now that we've gotten our jollies listening to all the wonderful waveforms, let's move on to the lower row of functions.

The lower row of the oscillator page deals solely with modulation; and modulation on the ESQ-1 is a very open-ended concept. Part of the beauty of the system is that there are so many choices for modulation sources. If you've done much synthesizer programming in the past, you've probably come to the same conclusion as I; interesting modulation begets interesting sounds. The oscillator section is typical of other ESQ-1 pages. There are two inputs for modulation, either of which can route any one of the fifteen modulation sources to the oscillator, and a control for the amount (depth) of modulation for each. If, for example, you wish to modulate this oscillator from an LFO for a vibrato effect, you would chose one of the two modulation inputs available (again, by pressing the soft button located directly under it), and then using the data entry slider and buttons to select one of the three LFOs available. Then press the soft button under amount, located directly to the right of the modulation source parameter, and then use the slider and buttons to set how much you want the LFO to affect the oscillator. By the way, the value for modulation amount can be either a positive or negative number, giving rise to some interesting possibilities. How about having the same LFO modulating two different oscillators, but with one going up in pitch as the other goes down? Sounds like fun. I should warn you, however - if you are trying this out, your results may not be as predictable as you'd think; there are a number of parameters associated with the LFO that we have yet to deal with. Don't worry - it will all become clear.

The next page in our guided tour is the DCA (Digitally Controlled Amplifier) page. Select the page for DCA 1 by pressing the button labelled (what else?) DCA 1.

Each oscillator is coupled to itself own DCA, with one final DCA (DCA 4) controlling overall level and stereo panning. The individual DCAs coupled to each oscillator have the job of controlling that particular oscillator's overall volume, as well as any changes to an individual oscillator's volume that need to occur over time. I like to think of DCAs as a sort of electronic spigot, with the output of the oscillator being the liquid that flows

through, and the tap that controls that flow being modulation sources such as envelope generators, LFOs, and the like.

The DCA page is similar to the oscillator page in that manual settings (the base settings that modulation is added to or subtracted from) are listed on the upper line. The first, working left to right, is DCA Level. This sets the initial volume of the DCA, and will represent its volume when no other modulation is present. Its range is from 0 to 63, with 0 representing no volume, and 63 representing maximum volume. One point to make here is that if you are programming a sound whose volume needs to rise slowly from silence, such as a violin section or various woodwind sounds, you must start with the initial volume setting here programmed to 0; otherwise, the sound may immediately jump to the value set for DCA volume the moment you strike a key (depending also on the setting of the final DCA).

The other parameter available on the upper line is easy. It's simply a function to turn on or off the output of the DCA. Its primary usefulness is as an easy way to disconnect one or two oscillators so as not to get confused by the sound they are making when programming another one. Also, it is conceivable that some sounds may only need one or two oscillators. Two come out right.

Like the oscillator page, the lower row in the DCA page is for selecting modulation sources and amounts. Up to two of the fifteen modulation sources can be used here, and the amount can be set as a positive or negative value. (Negative values can be quite useful - try programming sounds with velocity controlled cross-fades, for example.) The one thing that I find particularly well thought out is the fact that with a separate DCA for each oscillator you can program a different dynamic for each oscillator. You can use this feature to create sounds on the ESQ that sound as if they are two or more patches layered, while still retaining the full eight voice capability of the machine. Pretty cool...

Pressing the button labelled "FILTER" will put us into the filter page (betcha coulda guessed). In keeping with the rest of the ESQ layout, the upper line is dedicated to manual settings, and the lower to modulation. The first parameter, in the upper left corner, is for setting the filter cutoff point. This is where the initial filter cutoff setting is set, and it determines the initial brightness of our sound. Hit the soft button located directly above to select this parameter, and move the data slider up and down while repeatedly playing a key on the keyboard to get a feel for what the filter does. By the way, this brings me to a point that should be made. If you change the setting of some ESQ parameter or other while holding down a key you won't hear the change you've made until you release and re-strike a key. So remember to re-strike a key occasionally when modifying sounds, or you run the risk of overdoing it when setting new values for some of the parameters.

The next parameter in the filter section is resonance, sometimes called "Q" or "EMPHASIS". What it does is emphasize the specific frequencies in the area that the filter is tuned to. To check this out, hit the soft button above resonance, and set it to a fairly high value - say 100 or so. Now go back to the cutoff control (hit its soft button), and once again vary the value for cutoff point using the data slider and continuously playing a note. You should hear the typical "quackiness" that a high resonance setting introduces into the sound.

The last parameter in the upper row is labelled "KEYBOARD", and its function is to control how much the cutoff point of the filter is controlled by keyboard position. With this control set to 63 (maximum), the effect is that the filter "tracks" the keyboard, getting brighter as you play higher notes, and darker as you play lower. The main reason for this control is that if you are playing a middle C on the keyboard, and you filter out all the frequencies above, say, 5000 Hz, everything might be just hunky-dory. But when you play a C two octaves higher, that note's upper harmonics will also be two octaves higher, and filtering out everything above 5000 Hz might make the sound too dark. If the filter is tracking the keyboard, it will end up cutting off at something more like 20,000 Hz, keeping the perceived brightness of the sound more or less constant across the keyboard.

The lower row of parameters in the filter section is identical to the modulation sections in the oscillator and DCA pages, so let's go on to the final DCA section.

The final DCA is in charge of overall volume of our ESQ-1 patch, as well as global dynamic changes in volume, and stereo panning. The first parameter in the upper left is simply a level control - identical to the level controls found in each of the other three DCAs. The difference here is that the final DCA controls volume for all the oscillators at once, rather than individually, as do the other DCAs. The other control available on the upper row is panning. Its value can be set anywhere from 0 to 15, with a setting of 0 meaning that the ESQ voice will be sent out the left output. A setting of 15 will send the voice out the right output, and a setting of 8 will send the sound pretty much equally out the left and right outputs, placing it in the center of the stereo field. Directly below this is the modulation input for automated panning effects, and this one is loads of fun. The obvious use for it is to apply an LFO to the panning for the effect of having the sound sweep back and forth between your two speakers at the rate determined by the LFO. Less obvious, but maybe more fun, would be to use an envelope generator or keyboard position to determine the stereo imaging of various voices. Heck, any of the fifteen modulation sources can be used to control stereo panning, including keyboard velocity, mod wheel, or external controllers such as aftertouch, footpedal, or breath controllers. What fun!

The other modulation input to DCA 4 is Envelope 4, useful for shaping the overall dynamics of a sound.

Note that only Envelope 4 can be used here, so when programming a sound in other areas of the ESQ, try to reserve Envelope 4 for final volume shaping.

So there you have the basic layout of one "channel" of the ESQ-1's sound producing circuitry; of course, there are two more channels at your disposal, but since their layout is identical, you shouldn't have any trouble with them once you've got the first channel nailed. Coming up, we'll be talking about those crazy ESQ-1 envelopes and LFOs, along with the various keyboard modes, including oscillator synching, amplitude modulation, splits and layering, and a look at ESQ-1 MIDI implementation. So stay loose, vary those parameters, and above all, have a day.

RND ♩♪♫

We've added a new listing to our network of experts: the Canadian MIDI Users Group is open to questions. Also, we're changing the name from "Mirage-Net" to "Transoniq-Net." In addition to the fact that a certain BBS has started using the name "Mirage Net", we'd like to make it a little more general. In particular, we'd like add some ESQ helpers. Any volunteers?

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Ensoniq is about to release Disk #22 (strings). It's a little different. For one thing it's a two-volume set. The two disks are mirror images of each other with the upper and lower banks swapped. The reason for this is kind of interesting; it seems Ensoniq's Tom Metcalf used a special hacked-out MASOS to create something called "free-running loops." One of the consequences of this is that it precludes using the MASOS move commands to shift samples from upper to lower or from lower to upper. The two-volume set solves this problem (and actually makes shifting samples around a lot easier). There'll probably be questions about the special MASOS, but, (at least at this time) Ensoniq doesn't plan to market it. By the way, the strings are supposed to be fantastic.

*   *   *

Ensoniq is going to conduct a Mirage clinic at Gary Gand Music in North Field, IL [(312) 446-4263] on September 13 and 14.

*   *   *

We haven't heard anything lately about the Canadian group that was developing a memory expansion for the Mirage. If you've heard any news, please give us a call.

Correction: The "Librarian" programs being developed by Blank Software and Turtle Beach and mentioned in last month's Random Notes are for the ESQ, NOT the Mirage. Check out the Hypersoniq section in this issue.

*   *   *

After listening to increasing whimpering from our printer for the last six months, we've decided to quit using the slick paper for covers. (Boy! They hate running that stuff - lots of problems.) We've chosen a heavy gray cover stock that should be with us for a while. (I think it was the comment about "doubling our print charges" that helped us decide.) You might also notice some slight changes in letter style. That's our new Epson LQ800, which will supposedly lend itself to electronic paste-up over the next few months. (Given the right software...)

*   *   *

TRANSONIQ-NET

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

MIDI USERS - Eric Baragar, Canadian MIDI Users Group, (613) 962-0549. Business hours, Eastern time (Toronto, ONT).

MIRAGE COMPUTER BULLETIN BOARD - Provided by John Connolly of Portland, Oregon for information exchange and file transfer. Phone (voice): 503-641-6260. Phone (BBS/computer): 503-646-2095. Free messages. Yearly membership for upload/download: $25.

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

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 9 pm. (602) 937-1177.

SOFTWARE - Paul Braun. (805) 583-5315.

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

CLASSIFIEDS

USER GROUPS

Now forming the Mirage Users Group of Orange County. Interested parties may contact Aaron Hallas (714) 821-6196.

LET'S SWAP SOUNDS. I am interested in forming a users group to meet monthly in the Chicago area. (312) 432-7246.

British Mirage owners should all contact the United Kingdom Mirage User Group. You are bound to hear something to your advantage. Phone Matthew on 089275516 or write to: 2, Walnut Tree Cottages, The Green, Frant, N. Tunbridge Wells, East Sussex TN3 9DE.

Seattle area user's group. Call Loren at (206) 241-7825.

Want to form Mirage User's Group in Hawaii. Contact Kelly Randall c/o KKUA, 765 Amona St., Honolulu, HI 96814. (808) 946-2869.

Milwaukee/Madison area - are there any other Mirage owners out there? I'm interested in sharing ideas, set-ups, custom sounds, etc. Call or write if you're interested. Mike Shawaluk, 2710 Horseshoe Bend, Hartland, WI 53029. (414) 367-4838 nights. (414) 382-3454 days.

SAMPLES

We have ALL kinds of Mirage samples: Minimoog, bells, fat analog and DX7 synths, numerous drums, humorous, you-name-it. Professionally recorded and sampled in recording studios, computer-edited to save memory and disk-load time. From $17.95. Send $1 for listing. Livewire, Dept. TH, 79 Shrewsbury, Oceanport, NJ 07757.

Anyone interested in trading Mirage sounds or information, please call or write Jack Loesch, 162 Maple Place, Keyport, NJ 07735. (210) 264-3512.

I will swap sounds with anybody anywhere in the world. Send me a list, tape, or disks of what you wish to swap. I will send you some excellent quality original sounds immediately. Write to: 2, Walnut Tree Cottages, The Green, Frant, N. Tunbridge Wells, East Sussex, TN3 9DE. Great Britain.

Looking for: a good lead guitar sound, sounds used by Mr. Mister, and Emulator sounds for the Mirage. Also have sampled sounds. Write: Mark Ray, PO Box 2409, Shoals, AL 35662.

Wanted: If you live in the Baltimore area or in Ocean City, MD, and are interested in exchanging sounds, please call Don at (301) 665-2946, or write to 8329 Hillendale Rd., Baltimore, MD 21234.

Wanted - I would like to trade samples with others via the mail. I have all kinds of sound effects and instrument sounds. I am very interested in samples of Oberheim or other "thick" synth type sounds. If anyone has a VES for a Commodore 64, I would be interested in any comments you may have about it. Call Kelly Norris at 205-284-1353 after 5:00 CDT or write to: Kelly Norris, 1127 Birdwood Ct., Montgomery, AL 36111.

WOW!! Novelty disks - The Three Stooges, Warner cartoons, Johnny Weismueller "Tarzans," Johnny Carson Show, etc. Fully guaranteed at $15.95 per disk. For list and prices, send S.A.S.E. to: Talance Recording, 906 E. Elmwood Ave., Burbank, CA 91501.

I am interested in trading Mirage Disks (I own them all) for the K-MUSE "New York" series (10 disks). Contact Dave at 13440 Cambridge #308, Southgate, MI 48195.

SAMPLING? - Use S.O.S. IF YOU OWN A SAMPLING DEVICE OR ARE INTO SAMPLING IN ANY FORM, YOU NEED S.O.S. S.O.S. cassettes contain dozens of sounds for you to sample. All sounds are professionally recorded on pro equipment then dubbed to high quality chrome cassettes. Best of all you can sample direct from cassette deck to sampler, repeat the sound exactly again & again, & no additional instruments, devices, or people are required. Sample any portion of the sound, mix outputs from two tapes playing different segments for totally new and different sounds. Easy cueing, great fidelity, they're GREAT!!! Tape A: sound effects, Tape B: musical instruments, Tape C: percussive. ORDER TODAY!! ONLY $9.95 each, including postage (within U.S.A.). ALL 3 TAPES FOR ONLY $25.00!!! (Texas residents add 5% for tax.) S.O.S. CASSETTES, Rt. 2 Box 552, Roanoke, TX 76262. Checks payable to: LAKE SOUND.

Wanted: The sound used by Loverboy in "This Could be the Night." A bright bell attack with a light synth body. Also wanted: The vocal sound used by ZZ Top in "Rough Boys." P. Wacker, 4221 W Dunlap ##250, Phoenix, AZ 85021.

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.

SERVICES

Don't have time to wade through MASOS to customize disks for specific song/set needs? Need cowbell, clap, and crash on keys 1-3, choir and organ switchable through programs to synth and voices or

piano and organ or...? You set the requirements. P. Wacker, 4221 W Dunlap ##250, Phoenix, AZ 85021.

WHY PROGRAM WHEN YOU COULD BE PLAYING? Giant patch libraries for DX7/TX7, CASIO-CZ, KORG DW8000. Any 32 patches for $24.95! Bulk discounts! Index - $2, demo cassette w/index - $5. Specify synth. Also: patches for Junol/2, Jupiter6, Poly800, Juno106. Write for details. Syntech, Hybrid Arts software priced LOW. Livewire Audio, Dept TH, 79 Shrewsbury Ave., Oceanport, NJ 07757. (201) 870-3115.

EQUIPMENT

Apple Macintosh 400k external disk drive. $250.00/B.O. Call (914) 235-6576. LWR Westchester Area.

COMPLETE COMMODORE SYSTEM! Includes 1541 disk drive, Sequential Model 64 MIDI Sequencer, Sight & Sound Magical Musical Keyboard, Koala Pad, lots of games + serious programs, joystick, Commodore tape drive, blank 5-1/4" disks with holder, lots of programming books +++. $450/B.O. Call (914) 235-6576 anytime. LWR Westchester Area.

Ensoniq Mirage keyboard. Excellent condition. $1395 or trade for Mirage Rack Mount. Roland MSQ-700 sequencer - $395. Mirage flight case - trade for DX7 flight case. Call Bryan in Miami (305) 551-7589.

For sale - Ensoniq Mirage. Purchased November. Still under warranty. Perfect condition. 8 disks, MASOS, and Advanced Sampler's Guide. $1350 firm. Call or write: John Mulreman, 19 Mercer Ave., Port Monmouth, NJ 07758. 201-495-9028.

For sale - Mirage (revised version). Perfect condition. 5 months old. Includes 9 factory disks, 10 blanks, MASOS, more. $1400 or trade for Ensoniq ESQ-1. Joe (215) 698-8424. Philadelphia area.

MASOS and formatting diskettes and original "Advanced Sampler's Guide." (I had an old Mirage & got a new one.) Also - I'm looking for a clean Fairlight thick breathy flute and a Roland Jupiter samples. Write: Don Carineri, 8329 Hillendale Rd., Baltimore, MD 21234.

SOFTWARE

Commodore 64 software - Sorry, not for Mirage, but we do have several data storage and librarian programs for your other synths. Patch disks also available. Excellent software at reasonable prices. Atari ST software coming soon! Write for more information. Music Service Software, 801 Wheeler Rd., Madison, WI 53704.

EMPLOYMENT

Rapidly growing keyboard company looking for representation in Canada. Excellent income, preference given early replies. Send resume to K. S., 110 963 Canada Inc., 5460 Royalmount, Suite 207, Town of Mount Royal, Quebec, Canada H4P 1H7.

Electronic Percussionist/Tech needed to support songwriting duet for performance and recording. Background vox a plus. Exec relatives in music biz also a plus but not required. Leave mess at bleep (914) 235-6576. LWR Westchester Area.

MISC

WHY PROGRAM WHEN YOU COULD BE PLAYING?? Patches for DX7/TX7, CASIO, KORG DW8000, ROLAND JX8P/10, JUPITER6, JUNO1/2, 106, expertly programmed on ATARI 1040ST computer. From $17.95. Demo tape (except Jupiter, Juno106): $5, refundable - specify synth. LOW prices on ALL RAM cartridges and MIDI hardware/software for MIRAGE and synths. Livewire, Dept. TH, 79 Shrewsbury, Oceanport, NJ 07757 (201) 870-3115.

Aynone using the VDS or the MVES waveform editors for the C-64 please call (206) 241-7825 (Loren) or (206) 329-7281 (Anthony). Loren 3727 S 150th Number C, Seattle, WA 98168. We'd like to hear a hands-on approach review.

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 4 issues.)

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.

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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. (Issues missed due to late or no change notification are your own dumb fault - we mailed them!)

CROSSFADE LOOPING (WITHOUT A VES)

By David E. Meschter

My task seemed insurmountable...to loop the impossible loop! But armed with my wonderful (& quite necessary) input sampling filter and a 12-band graphic equalizer I made a modestly stunning sample of the ubiquitous finger bowing of a cheap wineglass. This sample did not have too much of what one could call a stable fundamental frequency. Standard looping practices yielded unsatisfactory results. Short looping techniques proved to be quite nasty for they imposed an almost arbitrary looping frequency at the end of the sound that had little to do with the previous 125 or so pages of memory. Long loops proved to be a bit less nasty but even moderately passable splice points were very hard to find and ultimately were unacceptable. This is because the sound's harmonic content is so complex as well as actively variable across the entire waveform that nothing in the sound repeated with enough consistency as to define the beginning or the end of a loop of any length. I, not being one prone to belief in impossibilities, decided that there must be another way of looping this sound. So armed with my MASOS manual, diskette and a second cup of coffee, this is what I came up with -

The secret of a silent splice is how well the end of the loop segment matches its beginning. However, because of the complex way the harmonics develop in this wavesample from page to page, no page near the end of the sample could match any page near the beginning well enough to provide a silent splice. Since a loop must tie its last sample to the first sample in the beginning of the loop segment, and since I had already realized that this splice point would have to be nasty, I decided to bury the nastiness in a crossfade. This is what I did.

My wavesample occupied 00 to FF in lower memory. I defined from 00 to 7F as the attack segment of the sound and that 80 to FF would be my loop segment. For this style of crossfire looping, the attack segment must be the same length as the loop segment.

Step #1: Save the sample! The MASOS functions used here will alter the wavesample. If a mistake is made, resampling will not be necessary.

Step #2: With MASOS still booted, I set up the destination as the same size as the my sample: upper memory wavesample #1, 00 to FF.

Step #3: With my sample in lower wavesample #1, 00 to FF, I use the fade out function on the loop segment, avoiding the attack segment (00-7F). I did this by defining source start at 80 and source end at FF. Then press Load Seq (for MASOS functions). Then key #3 (fade out function), then Enter. Now we have a wavesample that starts out the way it was recorded, then at 80 it starts to fade out, finishing at FF.

Step #4: Next, I placed the source start back at 00, with the source end still at FF. This defines the entire new wavesample as the source.

Step #5: Then I copied this new version of the sample into destination (upper 00 to FF). I did this by pressing Load Seq (MASOS functions). Then key #1 (copy function), then Enter. Now I have the same thing in the upper memory.

-Bear with me now-

Step #6: Now, I redefined source to describe the attack segment by moving source end to 7F, source start is already at 00.

Step #7: I then performed the fade in function on the attack segment by pressing Load Seq (MASOS functions) Key #2 (fade in function)/ and Enter. Now the attack segment fades in from 00 to 7F.

- Now for the fun part! I added the fade in version of attack segment to the fade out version of the loop segment.

Step #8: I redefined the destination by moving the destination start from 00 to 80, destination end is still FF.

Step #9: I added the source (which is the fading on of 00 to 7F) to the destination (which is the fading out of 80 to FF). This was done by pressing Load Seq (MASOS function) / Then key #5 (add function)/ Then Enter.

Now look at what we have in the upper keyboard. 00 to 7F is the natural attack of the sample, at 80 that sound begins to fade out as the beginning starts to fade in. By the time we reach the end of the wavesample, FF is faded to zero and the attack segment has faded in to its max. Since the end of the attack segment is 7F it can nicely be spliced to 80, providing a loop with a very low nastiness quotient!

Step #10: We can now turn the looping function on and define page 80, sample 00 as the loop start and page FF, sample FF (which of course is our crossfaded version of old page 7F) and the loop end point.

---Voila!---

What we have done here is to bury the discontinuity of an awkward loop splice in a crossfade, while making to loop point silent. However, there is one problem. Because of the way human hearing works, we hear volume changes in a logarithmic way, not linearly. The MASOS fade functions are linear. This means that they will often sound a bit unnatural. Linear crossfades will have an audible dip in volume at the midpoint of the crossfade. Donny Blank of Blank Software licked this problem by offering a choice of linear or logarithmic (-3 dB) fade functions in their wonderful Sound Lab package.

Bio: David Meschter is a composer, musician and audio system consultant, and accompanies David Tudor and John Cage on all domestic and foreign tours of the Merce Cunningham Dance Company. This summer David will premier "The Parenthetical Set", a performance piece for Mirage, MIDI computer, and computer assisted electronics along with dancer/choreographer Helen Barrow, in New York City and Portland, Maine.

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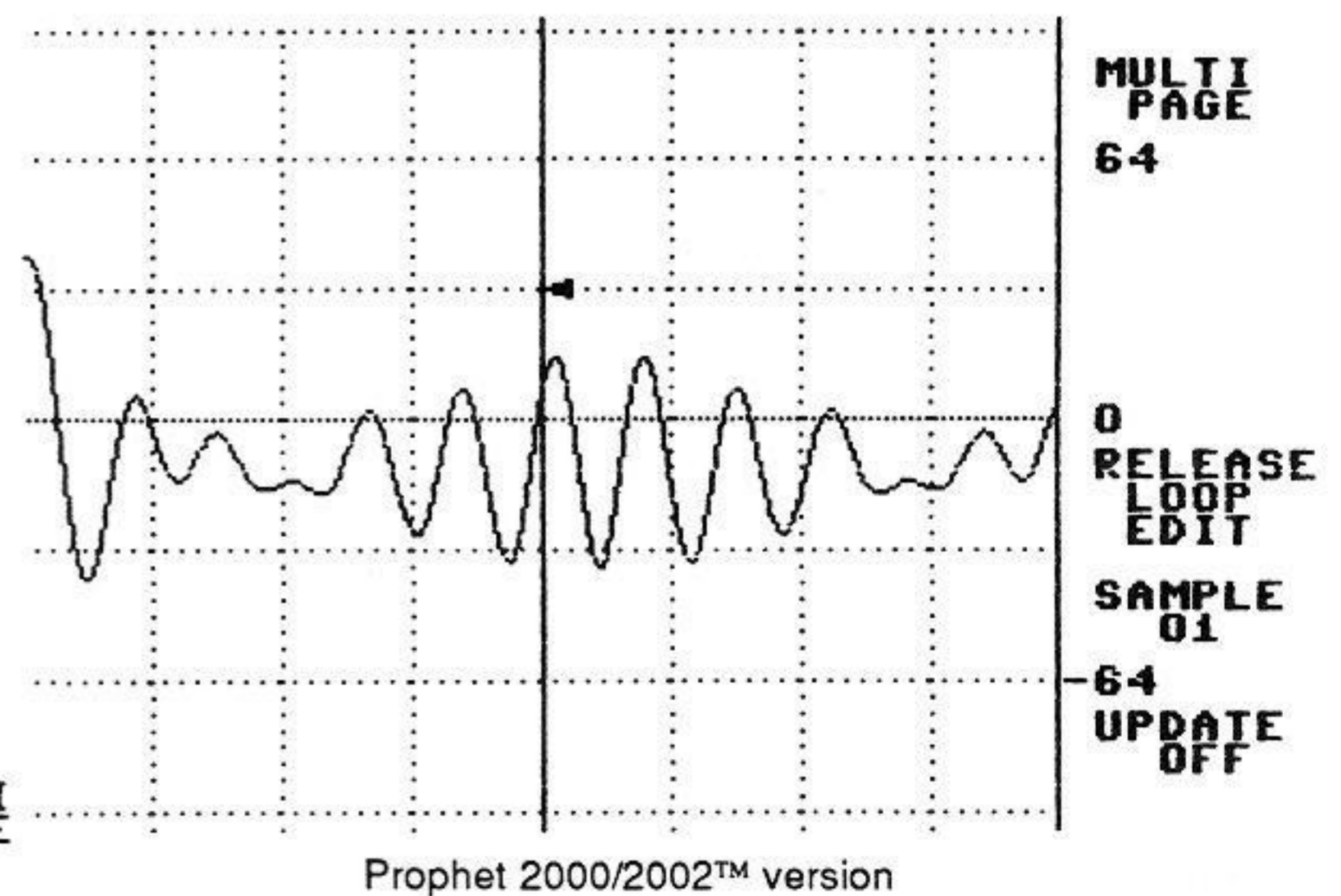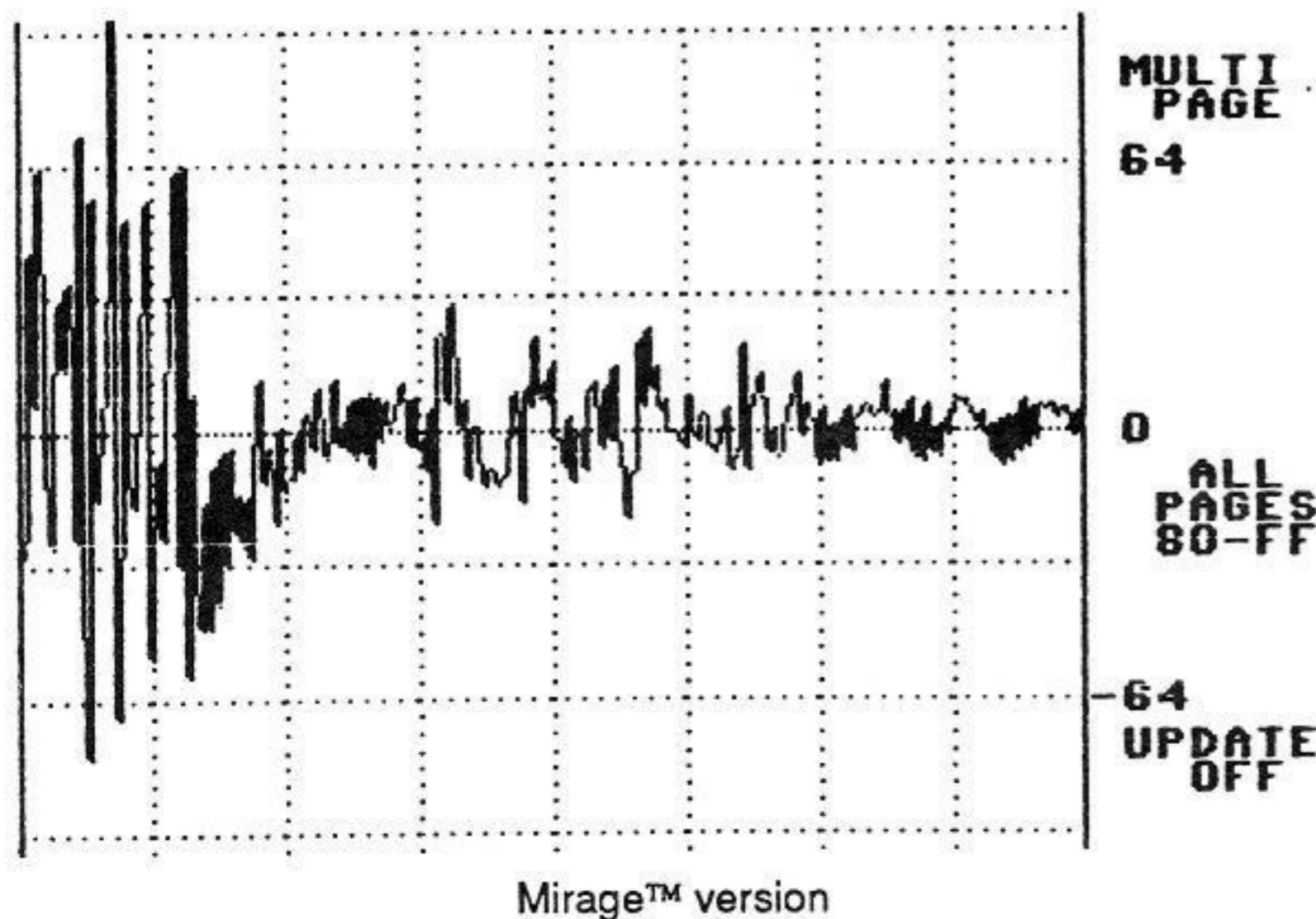
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APPLICATIONS

COMMERCIAL AUDIO AND THE MIRAGE

By Jim Eshleman, II

The Mirage is quickly finding a home in many types of recording studios, both professional and amateur. One area which has quickly warmed to the unit has been the commerical audio market, which I am involved with. Commercial audio encompasses much more than straight-forward music recording, it often includes recording sound effects, commercial copy or narration and "jingles." Applications range from radio and television commercials to a/v presentations and can even include answering machine tapes.

Musically, the applications almost speak for themselves. I am an engineer for New Lake Studio in Macon, Georgia; and we use the rack-mount sampler with a DX-7. If you own a Mirage keyboard and no DX-7, you're really missing something. Although this MIDI combination was meant for each other, I don't think enough has been said about the musical power of this awesome combination.

One of the first things I did when I hooked up the Mirage was to compare the acoustic piano from sound Disk #1.4 to the acoustic piano sound of the DX-7 (often called STEINWAY). The next logical, and most rewarding step, was to pan the two in stereo...and fall in love. The richness of this simple application is quite impressive. In fact, many of the acoustic samples which have a synthesized analog in the DX-7 can be combined and panned to get stereo simualted sounds. I found some very pleasant results by adding a touch (say about 9) of portamento on the DX-7 patches, especially flutes and horns.

For those of you who have Sound Disk #2, the fat analog synthesizer sounds on this disk are great when combined with some of the quasi-analog patches which are available for the DX-7. Again, the stereo panning makes some of these sounds come to life. I've had great success sampling my own analog sound, too. As a die-hard analog synthesist, my favorite keyboard was a Korg PolySix for years...'til I sampled my favorite patches from the PolySix. I now have them on disk and I'll probably make this disk available in the near future because it has many popular Top-40 type sounds on it.

But aside from these musical applications, there are many non-musical situations which have been filled by the Mirage. I do a lot of commericials for our clients, and the advertising medium is always on the lookout for an innovation. By sampling announcer voices, or special effects... a new spectrum is opened for commercials.

A few months ago, I had a job come in from an auto parts store. In the course of their marketing, they found that a major number of their products were sold to the black community; so their order specified an R & B commercial. At the time, I was experimenting with "breakdance" patterns... sampling one word and striking the keys rapidly. This was perfect for the R & B spot... so I used the name of the company, and sampled the word "bumper" (the first part of their name: Bumper-to-Bumper). By using a sequencer, I programmed in a quick series of 32nd notes and auto-corrected their resolution. The result sounded like "bump-bump-bump-bump-BUMPER!". This was synced to the drum machine, which was programmed with a funk rhythm, and a "rap" commercial was born.

The same client had also been getting good results from advertising on C & W stations. So we created a tough cowboy spot, that suggested a desert setting. In the middle of the spot, we used a sample of the word "bumper" which was whispered loudly. I had mixed in a little whining white noise behind the vioce when it was sampled, so that the word sounded like it was "in the wind", so to speak. The result was quite good, and is heard regularly in the Southeast today.

I have to admit to being a little lazy, and none of the applications in this article are talking about perfecting a loop, or hexadecimal theory. I work on a time basis, and the Mirage's sampling power has been used mostly in one-shot situations, except for my persnal synth samples, but the results have been great for us and our customers.

Automobile dealers are highly media-competitive, and the Mirage became one of those little-understood devices that made the dealer want to use us to do regular commercials, instead of using a radio station. Nothing worked faster than taking the word "COMPARE", and playing it low on the keyboard so that it sounded like it came from a pro wrestler. But by sampling the sound of a passing car, I found that you could imitate the sound of different sizes of passing cars and change their speed by playing them higher or lower on the keyboard. This works with a sample of a telephone too. The effect is that you have everything from a child's phone to an old English telephone available. Nightclubs advertise regularly, and they like to hear things like "(name of club)...ROCKS!" played low on the sampler with lots of reverb.

In commercial audio, there are often times when you have to invent your own sound effect; and the Mirage came into play on a recent commercial where we needed the sound of a herd of sheep. I had a girl say "baa-baa" into the mike, sampled it, and played back several keys at random in close proximity to the note where I had sampled. Another good effect is the sound of studio audience going "oooh" when they see the prize assortment on a game show, I used my voice and a girl's saying "oooh" in a rising and falling scale, and then played it back by pressing six or

seven notes at the same time. It sounded like a crowd.

I saved a music project with the Mirage recently. We had recorded a "logo" (a station id) for a new radio station's program, and we had spent hours recording the vocals. It was my mistake really... I had written the lyrics of the spot to say "Easy, easy, 108...beach music party...". An announcer at the station called to tell me that it was supposed to "Easy, Hits, 108...etc.". Fearing that I'd wasted a lot of time and money, I tried something new. I sampled my voice yelling "HITS." Then I played back several notes close to where I'd sampled, and ran the whole thing through a Harmonizer. The effect sounded like a samll crowd of men and women saying "Hits" at the same time. I punched it into the track, and saved the project.

Certainly, many other studios around the country are discovering new applications for the Mirage every day. I'm hoping that some of these ideas will help others to invent some off-the-wall uses that I can pick up on. I'm currently working on sampling applause. Eventually, I'd like to have everything from a samll group to a stadium crowd. Another unique application is sampling the "wet" signal from a reverb unit (or almost any effect) as a note is being played on the DX-7, and then playing the sample in tandem with the original note. I've used this on the acoustic piano patch with good results. This frees up your reverb when you've got other uses for it.

Limits are in the eye of the beholder. Stay happy!

About the author: Jim Eshleman, II is Operations Manager and Chief Engineer of New Lake Studio, Inc.; a dedicated commercial production company in Macon, Georgia. He was an Audio/Visual Specialist for the Air Force; and is widely known in the Southeast for his synthesizer applications.

HYPERSONIQ
NEW PRODUCT RELEASES

BLANK SOFTWARE has announced plans for a September release of SOUND FILE - a program and sequence management package for the Ensoniq ESQ-1. SOUND FILE gives the ESQ-1 the ability to efficiently store and manage program banks, songs, and sequences generated on the ESQ-1 on the Macintosh or C-64 computers. SOUND FILE has the capacity to hold four internal ESQ-1 program banks in the computer's memory simultaneously. The programs can be renamed, cut, copied, or pasted to new locations. They can also act as on-line program storage - more than doubling the amount of program memory available in a stand-alone ESQ-1. A complete bank of 40 programs transfers via MIDI in only 7 seconds. Over 1600 individual sound programs can be stored on a C-64 floppy; nearly 8000 on a double-sided Macintosh disk. Suggested retail price is $99.00.

DIGIDESIGN has announced BURNER, a new program which allows you to create drum machine sound chips from Sound Designer sound files. BURNER lets Macintosh owners program EPROM drum chips with sampled sounds from any of the keyboards that use Sound Designer (which naturally includes the Mirage). BURNER supports the following drum machines: Oberheim DX, DXa, DMX and Stretch, Sequential Circuits Drumtraks, Linndrum LM2 and Linn 9000, E-Mu Drumulator (cymbal chip only) and all Simmons digital drums. Digidesign will also post drum sounds that can be downloaded on various bulletin boards. For more information, call (415) 494-8811.

SONIC ACCESS announces SONIC EDITOR Version 3.0. Features include: 1. Print screen function from anywhere in the system. The high-resolution edit screen may also be sent to the printer if it is equipped with dot-programmable graphics. 2. Key repeat function - very useful in setting page count quickly and when using the manual edit mode keys. 3. A new 40-page manual written by Walter K. Daniel [Ed. - Who I suspect is the same Walter K. Daniel who has contributed several articles to the Hacker - including a favorable review of a competitor's product. Yes, folks, fame and employment come to Hacker writers.] containing tutorials and examples to help you through the complex functions. Version 3.0 is available as an update to current owners of SONIC EDITOR for $10. Send check or money order along with receipt to: Sonic Access, POB 4024, Santa Clara, CA 95054.

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Presents:

Vision

Visual Editing for the Mirage and IBM PC, XT, AT

by Turtle Beach Softworks

Created by seasoned samplers, **Vision** is an unbeatable new sound design program for the IBM, PC, XT, AT or compatible, that can make sound manipulation easier for Mirage users. The program is designed specifically for visual editing and allows fast, easy wavesample editing and parameter manipulation without many of the drawbacks of other sound design programs.

Vision features 8 different screens which are simple to locate and easy to read. Each screen performs several distinct functions, making such chores as looping and editing a snap rather than a hit or miss ordeal.

Vision contains a complete manual, program diskette for the PC and 2 MASOS-I diskettes.
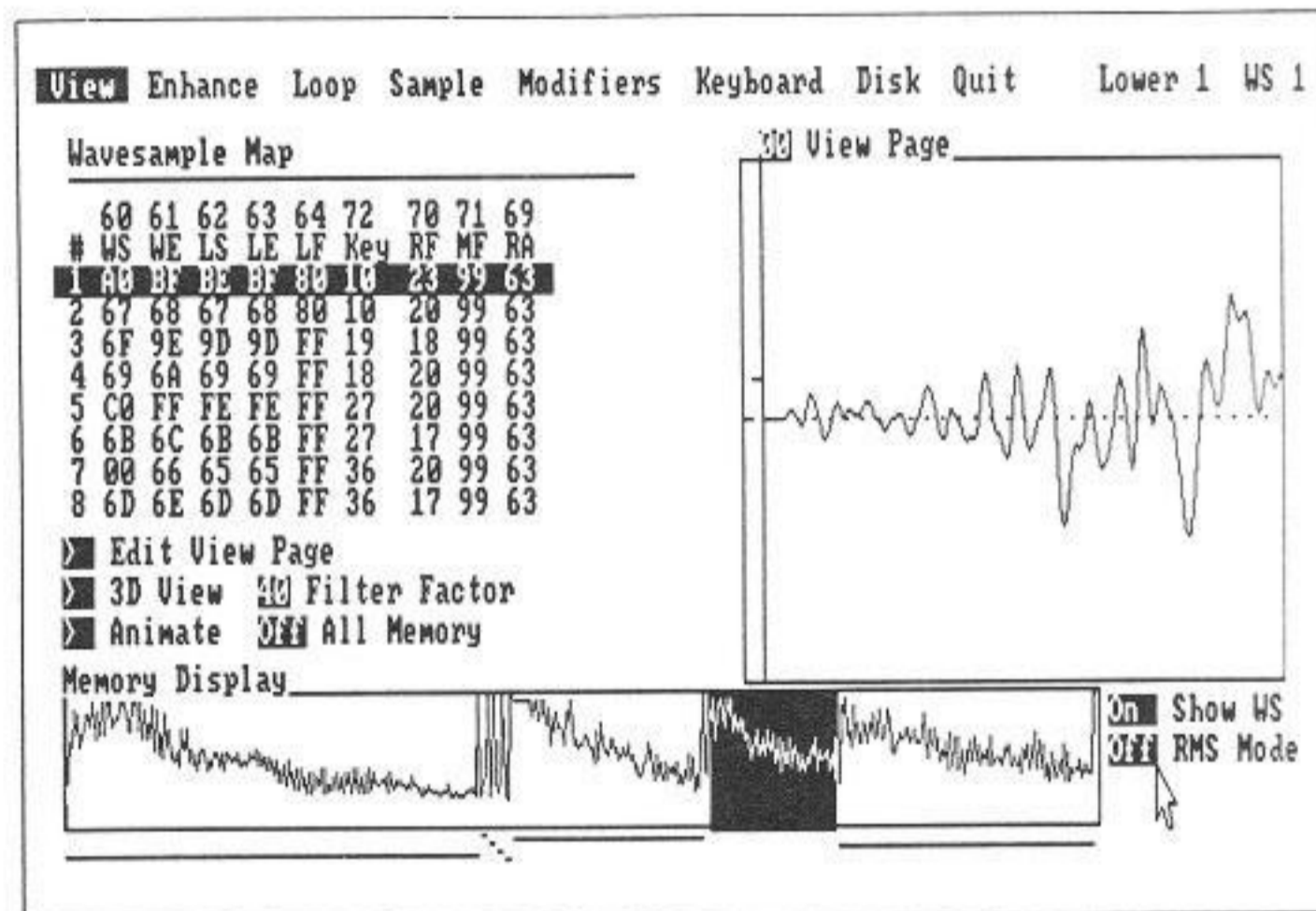
The View Screen

FEATURES:

- 3-D graphic wavesample display
- Easy to remember one key commands
- 4 note PC keyboard sound ability
- Exclusive animate function
- Specially designed user interface to ease parameter modification
- PC disk sound storage ability
- A Mirage diskette copy function
- Advanced Samplers Guide style printout for all program parameters

Vision has been given an exclusive endorsement by Ensoniq and is available through authorized Ensoniq dealers worldwide. For more information contact Turtle Beach Softworks at P.O. Box 5074, York, PA 17405.

Working demo diskette now available. Send $10.00 to Turtle Beach Softworks, P.O. Box 5074, York, PA 17405.

The View Screen - The View screen shows the wavesample memory of the entire keyboard with the current wavesample highlighted. View, edit and **Vision's** exclusive animate function permit waveform manipulation and even allow you to help correct tuning and volume problems and find ideal loop points.
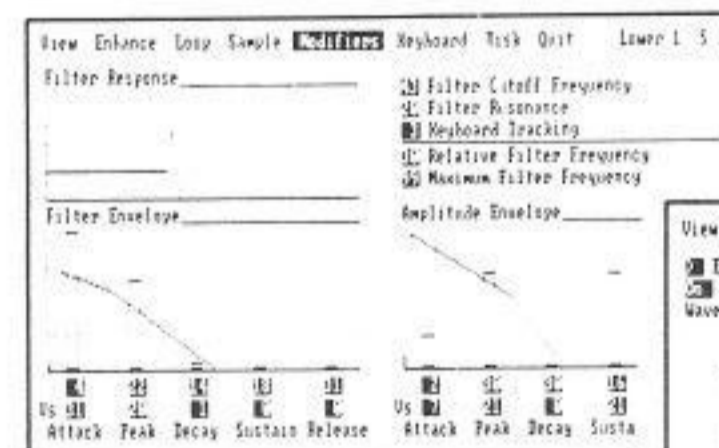
The 3D Screen - The 3D screen allows you to see changes in the wavesample's pitch, amplitude, phase and volume all at the same time. The 3D page and animate page combine to give you unsurpassed ability to view wavesamples as they occur in time.

The Modifiers Screen - This screen permits editing of all filter and amplifier settings, plotting the filter and amplifier envelopes and velocity information as you change them.
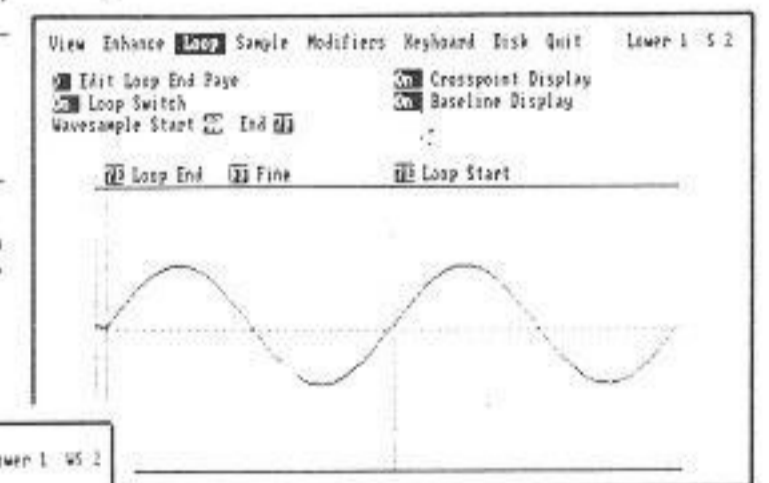
The Loop Screen - Short and long loops are easily found with the loop screen. The edit option allows you to fine tune the loop end page to produce clickless loops.

The Modifiers Screen

The Loop Screen

The 3D Screen

This system requires:
- An IBM PC, XT, AT or compatible 8088 based computer
- An IBM Color Graphics Adapter, Hercules Graphics Adapter or other popular graphics adapters
- At least 320K memory, 1 disk drive, and DOS 2.0 in the PC
- An IBM PC MIDI Interface: either an Octave-Plateau OP-4001 or a Roland MPU-401/MIF-lpc
- An Ensoniq Mirage DSK-8 or Multi-Sampler DMS-8
- 2 MIDI cables

turtle beach softworks
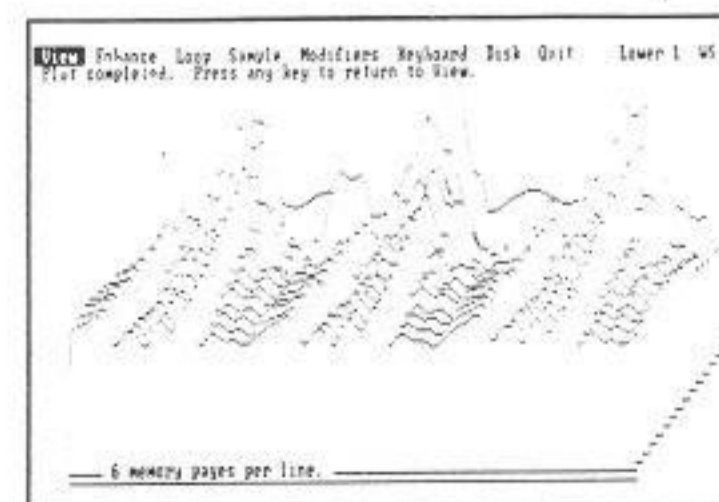
Dear Sirs:

I have 2 questions: One regards an article by Traktor Topaz about changing lines in the program to dump the MVES screen display to a printer. However he doesn't tell how you get to the basic program listing to do so. I would like to know how.

Also I would like to know if you can research whether it would be possible to use a mouse on the Apple IIe MVES by some change in the program. I have this in slot 4 and it works as an alternate for a Koala Pad for a Bantavision animation program but not the MVES.

Yours,

Robert Curtis
Chicago, IL

[Ensoniq's response - The mouse probably requires a special software driver which is not available with VES. If the mouse acts exactly like a Koala Pad or a set of paddles - and plugs into the same port - it would work with VES.]

[Ed. - See Traktor's response, as follows, re program changes.]

Dear Hackers,

Apparently a couple of people have been puzzled by: "How do I escape the Apple VES Menu long enough to do modifications to the Menu Program?"

Although the answer is simple, at first it stumped me, too. I apologize for not including the answer in the article itself. Here's how:

1. First make sure you have done a back-up of your VES disk. In fact, you might want to make up a third disk on which to do your modifications. (I did).

2. Don't boot VES.

3. Instead, boot some other Apple disk that gives you access to Basic, such as the Apple DOS 3.3 Disk. Then insert the VES disk and read in the program you wish to modify using "LOAD MVES.1.1".

4. Save the original, unmodified version back to the disk with "SAVE ORIGMVES.1.1".

5. Make your modifications to the MVES program, as detailed in my articles. Then save the modified program back to the disk with "SAVE MVES.1.1 ".

Happy Tweaking!

Traktor Topaz
San Francisco, CA

Dear TH:

I was excited to see in your June issue that Clark Salisbury's lead article discussed moving about wavesamples from one disk to another. I really compliment you on how often your content is right on target with Ensoniq users' needs.

For several months I have been trying unsuccessfully to make up a couple of disks suitable for accompanying a live piano and, with the aid of an external sequencer, driving the Ensoniq, making up a trio or quartet. Using MASOS Parameter 18, this should be a simple matter of copying one wavesample at a time from 2 or 3 different disks, from lower to upper; then, when all eight are finished, back to the lower keyboard using Parameter 17. Unlike live sampling, the pure copying process should be simple and reliable, right? WRONG!

My efforts resulted in several unexpected and bizarre problems, such as:

1. The factory drum and percussion wavesamples did not, apparently, use all the memory assigned to them on the factory disk, so that my transferred wavesample would give me a drum beat and then say "one" like the MASOS disk. This problem could be cured by trimming off the end of the wavesample, but for the following problems I can find neithor cause nor cure.

2. Some drum beats or notes when copied now have a double attack.

3. The quality of the sound, in, say, 20% of the tries (but repeatedly on a given wavesample) comes out very poor in quality: and yes, this is after adjusting playback parameters to be identical with the original. It becomes fuzzy and not "full tone" and seems to be combined with some "white" noise.

4. Sometimes the transfer will not obey the preset memory markers, pushing aside the end marker and running it out to a much later position in memory. This messes up not only the sample being transferred but also anything located in the memory immediately beyond it.

5. Sometimes the top key set for a transferred wavesample simply refuses to work; e.g., if I try to give seven percussion sounds one key each, giving a bass the octave and 1/2 above them, I would find them all to be okay on top key except that wavesample #3 insists on occupying 2 keys and #4 is covered up.

A hint of this forthcoming problem was given when booting my MASOS disk and finding that, on band upper #3, one of the keys said "one-two," thereby proving that it was activating the memory for two wavesamples. My dealer found that all his MASOS

disks of various vintages did the same. One factory rep said that this is normal and proper and another said that the disk must be defective. Whichever, I'll bet it is related to my problem.

After careful study of the manuals, Steve Coscia's and Clark Salisbury's articles, I am unable to discover anything I have been doing incorrectly. My dealer has also spent hours of time trying to make me a disk as desired with his newest equipment, including the Macintosh VDS and editing system. He is having about the same problems and has not yet succeeded. I am wondering how Messrs. Coscia and Salisbury have avoided these problems??

There is so much potential in combining several favorite factory sounds, plus samples, on one disk for live performance, I am sure many of your readers want to do it. Any light on this would be most appreciated.

Sincerely,

George E. DeWolf
Las Vegas, NV

[Ensoniq's response - Regarding #1: Try turning the wavesample's loop on and off after that wavesample has been moved. #2: Check the mix-mode. #3: One parameter that should not be adjusted to be identical is Filter Frequency if the sound has filter keyboard tracking. This can make sounds too dull or noisy when you move them from their original keyboard position. Also, check the mix-mode. #4: Make sure the destination and source are the same size or problems can occur. #5: Check mix-mode.

Regarding the MASOS upper 3 question: This is normal - upper 3 didn't have a loop marker set. To fix this, simply select the wavesample and turn the loop on and off, then resave it.

About combining factory sounds for performance; Sound Lab for the Macintosh makes this very easy according to the people who have used it for this purpose. Have you tried this with another Mirage and/or another copy of MASOS? It is possible you have a hardware or memory problem, although if factory samples play properly this is unlikely. Be sure to check whether the sounds you are copying are mix-mode sounds (many are) and that the proper wavesamples of the mix are located in the right places. Be sure you're playing the sample back in the proper mode. If not, this can create double hits and top key problems as well as distortion. Additionally, a number of Mirage factory sounds have been digitally diddled in such a way that they CAN'T be moved without confusing the operating system. This was done to add features which weren't available in the operating system.]

[Ed. - Hey! This is the first we've heard about this. It would nice for Ensoniq to say which samples these are so folks don't waste their time trying to move them about.]

Dear Hacker,

I have a friend who plays keyboards and when I heard his Mirage sampler I was amazed so I ran out and bought one. I received it in perfect shape except for the famous top "C" knock, that I have found most new rev Mirages have. But after a few weeks I found another problem that really bothered me. Sometimes after power up and first load you take a sound, say acoustic piano, and you start at the bottom of the keyboard and move upward chromatically you will hit a note that has very high distortion then if you "gliss" the keyboard this note will move to a different location but if you power down and reload the problem will disappear I have had the Mirage for four months and it has happened only four times. Have you heard or has anyone written about this problem. Also I would like to know how to start a users' group in the Fort Lauderdale Florida area.

Thank you,

Dan Hosek
Margate, FL

[Ensoniq's response - It sounds like a defective filter which is not being auto-tuned properly each time. A service center can determine which filter is defective and can take care of the top C as well.]

[Ed. - As you've probably seen by now, the easiest way to start a user's group is to run a free ad. You should also contact your dealer regarding other Mirage owners, meetings, & whatnot.]
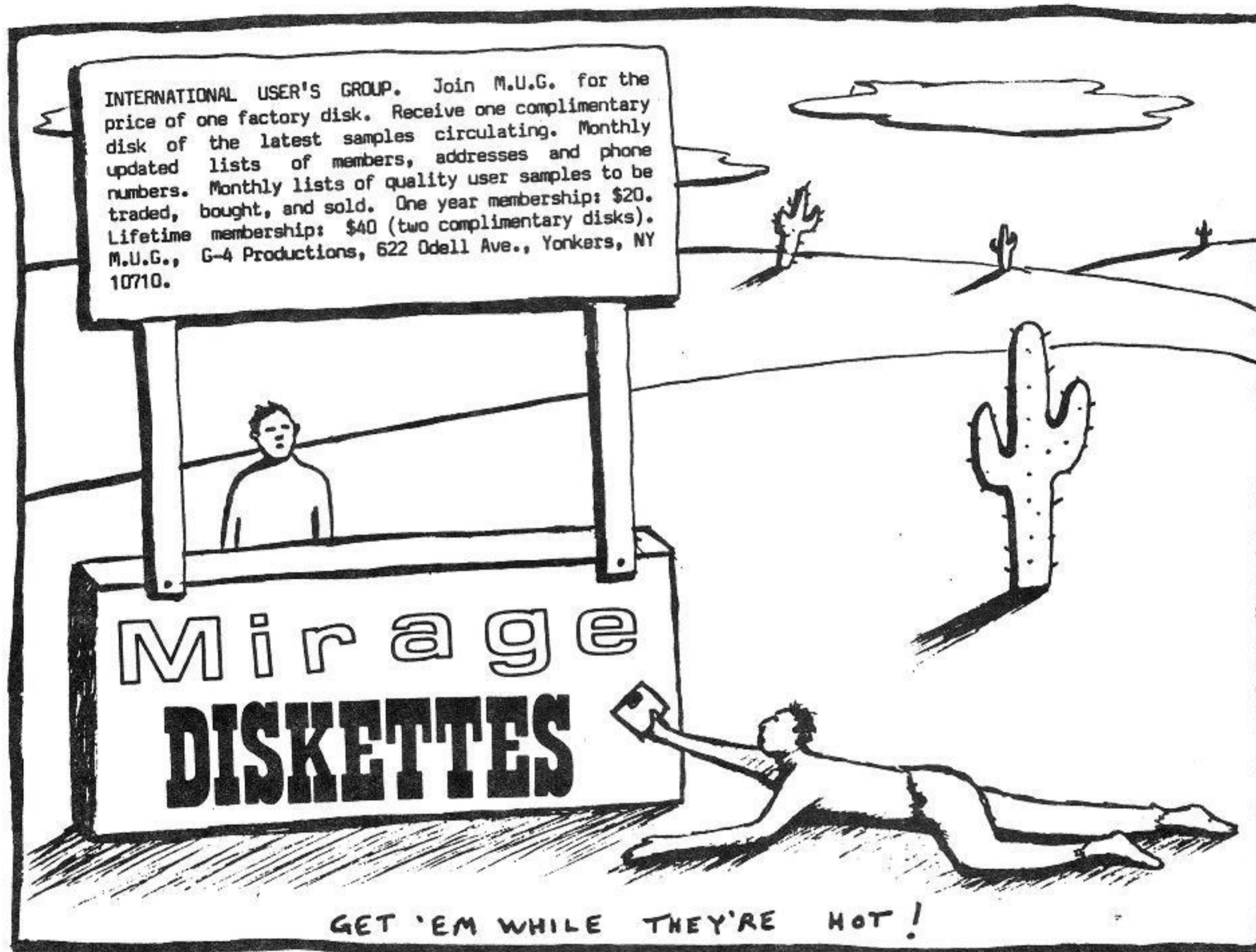
Dear Hacker,

I am one of those Mirage owners only interested in using it as a musical instrument, sampling can be left, (thankfully) to those who understand such matters. There must be a number of us out there in the same boat. I'd hate to see the Hacker turn into a technical publication. How about more articles relating to performance. (The ones you have done have certainly helped.) Everybody's gonna have brilliant, clean samples and have no idea what to do with them. I think this forum offers a wonderful chance to educate us all about making music with our Mirages, besides I think I've shown everybody I know what my burp sounds like at middle C.

Thank you,

Bob Upton
Minneapolis, MN

[Ed. - Although Issues 12 and 13 ended up fairly technical, #14 was more centered on sound & software reviews. This issue looks like it's going to be different yet. There's no trend here - it just varies with the relative humidity. (Our aim is still to cover as many aspects of the Mirage and the ESQ as we can.)]

Dear Hacker:

I just bought a brand new Mirage (2 weeks old). I handle it with kid gloves, and transport it in a good case. Every couple of gigs I have to tighten the underside screws because they come loose. The high C key is loose and I hardly ever hit that key! I live in central Wisconsin, the closest authorized repair station is 5 1/2 hours away. Is this instrument going to survive the Wisconsin winter? Will the disk drive work after being out in the truck at -10 degrees? Did I just buy myself a $1700.00 HOME USE ONLY instrument?

Sincerely,

Dennis Provisor
Stevens Point, Wi

[Ensoniq's response: The problems with screws and keys are not typical. You should contact our Customer Service Department at 215-647-3930.

We do not recommend leaving the Mirage, or any electronic instrument in -10 degree weather. When brought into a warm area, condensation will form which can cause damage. The disk drive in the Mirage, as with all disk drives, is rated for storage to -40 degrees F and operation down to +40 degrees F. Let any system with a disk drive warm to room temperature before operating. Switching power on to any electronic system when it's that cold can cause thermal shock failure of any number of components.]

TH,

The article in Issue 12 of TH by Clark Salisbury on MASOS was very good. I only had one gripe. He treats the use of hexadecimal numbers a bit flippantly. They are not quite as easy to manipulate as he implies. I am a computer systems analyst, and programmers (in general) do not like this system (some of the old timers used to claim to, but I don't believe it). However, hex has some real advantages when communicating with computers and we are sometimes stuck with it. The use of hex is one of the major problems I see with Ensoniq's system. Otherwise the Mirage is great.

However, the reason I'm writing is not to complain, it is to say that hex arithmetic can be as easy as Clark Salisbury pretends (maybe he's a genius and to him it is easy). The real pros use a little device known as a computer calculator which works in hex or decimal notation and allows you to switch between the two. Recently, Casio (those other music guys) came out with a Computer Math Calculator (Model CM-100) which sells for under $20.00 at your local cut-rate store. (Before this, the only option was a $75 TI calculator.) I suggest that anyone into using MASOS get one of these. They are fairly easy to run, and you don't really have to understand hex. Just read the Mirage display and punch in the hex on the CM-100. You too can know that EF minus A5 equals 4A. Now, do something about it.

Another possibility for computer owners is to purchase a utility program to do hex math. For those

with an IBM PC or compatible, the Borland Sidekick program has a hex calculator function that is nice. I'm sure that there is something for the Macintosh. I haven't gotten a VES yet, but would hope that they make the hex math unnecessary.

Hang in there and keep up the good work.

Sincerely,

Phil Rosine
Missoula, MT

[Ensoniq's response: For the most part, if you're doing serious sampling, you need a computer. If you've got a computer, you should get some form of Visual Editor. They are available for nearly every major computer and most require no HEX math or supply a HEX math utility. Note, the TI-36 calculator also does HEX and is even cheaper than the CASIO.]

Dear TH:

You're getting better all the time! More questions for you:

1. I would like to make the slap-echo sound used on Disk 16, Sound 2, Program 2. (It appears on other Ensoniq disks, too.) Is there any way to create this effect on any sound using the Mirage alone and without sampling?

2. I would like to get two more of the plastic grey disk-carrying cases from Ensoniq. Are they sold separately? How much? Will they deal with me directly if I send a letter and a check?

3. Can you or a reader suggest 2 ways to get a good "sfz" (sforzando)- type dynamic envelope setting -- one using touch sensitivity and one without it? If it helps, I can MIDI to a DX-7, but I'd like to be able to do it without external help.

4. Enough talk (myself included) about disk data transcripts. If you have any plans or (legal ability) to publish, say, 3 data transcripts for "TH" issue, I'm volunteering to work on the project. With enough volunteers, we could finish quite quickly. Is there some other obstacle beside this? It would be of tremendous help in any data manipulations that are attempted by Mirage users. (I guess you know that.) Combining this proposed new column/chart with your terrific disk reviews -- well, look out!

5. As time, space, and money permit, how about compiling a list of back issue topics to be printed once at the end of each year and listing only that year's issues. I read your editorial comment in issue 12 about not wanting to encourage too much back issue activity at the moment, but how about this: starting with, say, Issue 6, where the O.S. Version 3 update and wavesample copying are discussed, you could list only issues from that point on. I ordered that back issue in particular and it opened up a whole new area for me in wavesampling copying. I copied another back issue from a friend, and it too

was immense help. Knowing what we're missing in other issues may be more insightful to some readers that you think. Again, I'll volunteer to compile the list to help other readers if you contact me. I'm only missing 2 issues from this year and I'd like to buy them anyway, so the only thing you would need to do is okay it. The job requires no particular writing talent, just a list of approximately 8 topics for 12 issues which would not take up too much space. I think that takes care of the time and space problems, so please consider the proposition. As for money, it's of course only a matter of printing costs for an additional column. Alright, I'll shut up already, but just say "yes."

Thanks again for all your past and future assistance.

Dave A. Caruso
Southgate, MI

[Ensoniq's response: Answer to #1: This is a Mix-Mode sound which plays two different samples on each of the oscillators of a voice. One sample has silence at the beginning and the "delay" time between the "echo" is changed by altering the start pointer of that sample. You could use MASOS to make a copy of a sample farther on in memory, but you would write over the original sample that was there. If a sample

already has silence at the beginning, you could turn mix mode on and readjust all of the wavesample pointers. Be sure you have enough wavesamples to go around.

Answer to #2:   The disk holders, sans the Ensoniq logo, are available at most computer stores.

Answer to #4:   All of the wavesample info can be obtained using any visual editor. If you want a complete dump of disk data - that's 128 kbytes. We don't even have that information.]

[Ed. response: In answer to #5, go for it!]

Dear Hacker,

My question, which I'll get to in a moment, concerns performance applications of the Mirage, which first of all I want to gush about for a minute. The Mirage has really helped me overcome my techno-phobia. Right out of the box it opens up possibilities through a set of readily understandable commands. The variety,, usability and fidelity of the sounds in the disk library is very impressive. The overall effect is like having a truckload of instruments under my arm, but with very little of the intimidating jargon intruding into the process as a sort of prerequisite to actually playing the instrument (which is what put me off the DX7 when it

came out). Some of us who have been playing beloved but cumbersome Hammond and Rhodes keyboards for years, really appreciate the way in which the technology has been placed in the service of the musician without requiring the equivalent of a Masters degree in programming.

I have encountered one small problem in performance. Maybe you can offer some advice. I use a couple of modified sounds in the set, but I don't always modify them in exactly the same way because the sound system and the acoustics of the environment vary a lot. For instance, using the bells from Disk #2 often requires shortening the release time, but how much it needs to be shortened depends on things like whether I'm playing through my own individual amp in a small and densely packed pub or through a sizeable PA outdoors. So storing a modified sound on disk doesn't get it. The parameter is easily accessible and the modification can be accomplished quickly so that approach works fine . . . when it works. But several times now (3 to be exact) the following weird thing has happened: I have called up the appropriate parameter and reduced its value without any change occurring in the sound. On each occasion, I methodically double checked that the right parameter has been selected, and noted that the reduction in value does in fact register in the LED; still no change in the sound. Next I re-boot the sound, re-select and modify the parameter; same result. Next I re-insert the disk, re-boot, re-select and

**DATED MATERIAL
TIME VALUE**

modify; same result.   ???   What's happening? And most important, what should I do in such circumstances?

Thanks for any light you can shed!

Joel Rudinow
"Savannah"
Sonoma, CA

[Ensoniq's response: Are you sure you're selecting the proper keyboard half? There are upper and lower program parameters for each sound. In the case of Sound Disk #2, only the lower program settings affect the bell sound (it is a lower sound which happens to cover the entire keyboard). Remember there are four programs per sound, so you could set up four different parameter settings which could be instantly recalled, depending on what sound system you're using. You would lose the other 4 sounds on Disk 2, however, since these sounds are called up using these programs.]

Hi guys -

We are the Ensoniq Mirage User-Club of West-Germany but also for parts of Austria and Switzerland.

We are also independent, but we work together with Ensoniq-Europe. The people from Ensoniq-Europe gave

me Issue Number 4 of the Transoniq Hacker and I must say that I really liked it. There is nothing comparable in Europe and we would like to change this as soon as possible. Therefore, we need more information about the Mirage and more technical details. Many German Mirage-Users would like to develop improvements and software but they have no chance because they do not have enough technical information. I think that you or maybe one of your readers can help us. It would be very nice if you would send us some detail information about the Mirage (for example a schematic or something about the Mirage's userport).

Well, there are many more questions but I will stop here and write again.

I hope to hear from you soon.

Christoy Domrowe
(Manager of the Mirage User-Club Germany)

[Ensoniq's response: Beginning shortly, Ensoniq will be shipping one issue of the Transoniq Hacker with each Mirage, Multisampler and ESQ shipped to Europe. You should send some more info to the Hacker indicating how other Europeans may join your user group.]