Transoniq Hacker

The Independent Ensoniq User's Newsletter

SONIC ACCESS' SONIC EDITOR

A VES for the Commodore 64

By Clark Salisbury

Ah, the Commodore 64. In spite of all the brouhaha and hoopla surrounding the introduction of the latest generation of personal computers, the lowly C-64 patiently sits on the desks of millions of cheap-tech consumers. Writing a successful program for a computer with such a huge marketbase promises significant financial reward. Aim that program at the users of one of 1985's most popular keyboard products, the Ensoniq Mirage, and you could possibly net yourself of a nice piece of change. It should come as no surprise, then, that a Mirage Visual Editing System for the Commodore 64 would appear sooner or later.

Ensoniq claims to have turned down distribution agreements with a number of C-64 VES authors, claiming that none of the systems they had evaluated were quite up to snuff. I believe them. A VES, tricky as it may be to develop, seems to be a snap compared to the difficulty in designing an ergonomically sound program that gives a non-engineer control over events which can have actual durations of less than 1/30,000th of a second. Still, it seems to be a tantalizing idea for a number of programmers.

Sonic Editor is the first commercially available VES to run on the C-64. It requires a Passport or SCI 242 interface. List price for the program is $175 - expensive in terms of other C-64 software, but very competitive when compared with other VES types of systems. Does it work? Yes. Is it easy to use? Well....

Unlike the other Mirage VES's (Ensoniq's version for the Apple II series of computers and Blank Software's MacIntosh VES), Sonic Editor will perform manipulations on wavesamples only: you cannot, for example, manipulate the cutoff point of the Mirage filters from the C-64. Nor can you set loop points, rotate wavesamples, or perform any other Mirage or MASOS data manipulations from the C-64. These operations must still be performed from the Mirage keypad. You do gain the advantage, however, of being able to display your Mirage preset and wavesample parameter settings, and your display can be updated whenever you wish (it isn't automatically updated when you make a change).

The major function performed by Sonic Editor, of course, is to display Mirage waveforms and allow you to edit them. Wavesamples can be shown as a solid line, or as individual dots (pixels), and can be viewed with a grid overlay (for positional reference) or without. The area underneath the waveform can be shaded in to make things a little clearer, but, as with Ensoniq's Apple VES, none of the program's functions can be used while the waveform is shaded in. Another similarity to Ensoniq's Apple VES is that waveforms can displayed only one page (256 samples) at a time. As a matter of fact, Sonic Editor allows for no more than one page of a Mirage waveform to reside in Commodore memory at a time.

Waveforms can be displayed and edited in one of two basic ways; single-page mode and multi-page mode. In single-page mode, waveforms can be scrolled across the screen from right to left. The samples that disappear off the left hand side of the screen will reappear on the right, as if the waveform were simply being rotated. This is not the same as wavesample rotate, however. Since the entire page is rotated, the relationship of wavesamples to page boundaries remains constant. The usefulness of this device lies primarily in making it somewhat easier to see what's happening with a selected waveform at its page boundaries. It also allows editing on the first five pixels at the left hand side of the screen when the program is used in conjunction with a touch tablet. For some reason, touch tablets won't allow you to draw in the extreme left hand side of the screen. To remedy this, you must rotate the current page by enough samples to move the samples at the left side of the screen to the right side of the screen, and do your touch tablet editing there.

In multi-page mode you have two choices for arriving at any specific page. First, you can simply hit the "+" and "-" keys to increment or decrement Sonic Editor's page counter, and then press the "G" key to "get" that page from the Mirage. So if you want to go from page 00 to page 20, you would hit the "+" key 32 times (we're in hexadecimal here, of course), and then press the "G" key. Obviously, it could take you a while to get from page 00 to page 80 using this method. However, the other method takes even longer. By hitting the "6" key, you can toggle the "get" function on, so that every time you increment or decrement the page counter, Sonic Editor will automatically load the new page from the Mirage. Since it takes the program a moment to draw each new page on the screen, this method is more useful for simply "flipping through" a few pages to get an idea of what a waveform may be doing over time. It's a bit cumbersome for moving very great distances within a waveform, though.

Once you have selected the page you wish to edit, you have a couple of choices to make about how you will input data. One method is to scroll the waveform and use game

paddles or touch tablets to position the cursor vertically for drawing. To bring this off it helps to have experience playing Zaxxon or some similar video game. When this mode is activated, the waveform starts scrolling from right to left at a pre-determined speed (it would have been nice if you could change the scrolling speed or direction) and you use the touch tablet or game paddles to move the cursor up or down, sort of like a game of pong. A new waveform is automatically drawn from the cursor position, or the waveform can simply be scrolled without any drawing taking place. If you want to hear the effects of your editing, you must return this page to the Mirage by hitting the "F" (F?) key. In single-page mode, the wavesample will "wrap" around; the samples that disappear from the left side of the screen reappear at the right, as in rotation, so you can re-draw any part of the wavesample you want to by allowing it to scroll back around to where your cursor is. In multi-page mode, you can continue drawing on into the next page, but to hear what you've done, you must still return each edited page individually to the Mirage.

Another method for inputting data is to draw freely on the screen using a touch tablet for input. This is the easiest way to draw or edit waveforms, but it is also the least precise. Those of you who have used touch tablets with the C-64 will know what I'm talking about. It is very difficult to draw a predictable line with a tablet; the cursor tends to jitter, and for some reason or other it will occasionally freak out and draw in lines and things that you don't want, destroying the waveform you are currently working on. Of course, you can always get the original waveform back from the Mirage and start over, so it's a good practice to occasionally send the waveform you are currently working on to the Mirage for easy retrieval should something go wrong.

The final method of editing is called manual-edit mode. When selected, the "British Pound sign" and "CLR/HOME" keys are used to move the cursor up and down a pixel at a time, and the cursor up/down key is used to move the cursor one pixel to the right. When update mode is on hitting the "British Pound sign " key has the effect of moving the cursor one pixel to the right, and one pixel down from its previous location, replacing the previous sample value with the value at the cursor location. Restriking the "Pound sign" key a number of times has the effect of drawing a diagonal line going up; and hitting the cursor up/down key repeatedly will draw a horizontal line. I found this to be the most precise way to edit waveforms, but also the slowest. In actual practice, I expect one would use some combination of these three input methods for drawing and editing waveforms.

Striking the "E" key takes you directly to the page that contains the loop point of your sample, if there is one. The loop point is displayed 32 pixels to the right of center screen with a vertical line drawn through it. Editing can then be performed in any of the normal ways, with the restriction that you cannot edit anything to the right of the loop point. This is annoying, but you can always return to one of the other normal editing modes to perform these types of edits on the loop page.

Sonic Editor also contains a few useful utilities for manipulation of wavesamples. One allows you to store a waveform in a buffer memory location, double and/or triple its frequency (raising its pitch by octaves or fifths) and then to add the original track to the higher frequency version of itself to create doublings, triplings, etc. in octaves and fifths. It would have been nice if some other intervals had been included, but this unique feature is the first hint that I know of about the additive synthesis capabilities of the Mirage. As a matter of fact, I wouldn't mind seeing this part of the program expanded into a separate program that would allow you to take a single-page waveform and move it up or down to a number of different frequencies, and then add these various waveforms back together at different amplitudes.

Another part of the program acts as a librarian for single-page wavesamples and their program parameters. You may store up to 78 single-page waveforms and 78 presets in this area. Sonic Editor provides 78 demo programs, most of which sound as though they were taken from DX-7 sounds. I wasn't particularly impressed with the samples provided, but having a place to store and recall 78 different Mirage samples and presets could come in handy. And these samples can be retrieved rather quickly, which may prove to be of some use in performance settings.

In conclusion, Sonic Editor does what it says. I found a couple of things annoying about the program. The length of time it takes to go a number of pages into a wavesample, or the fact that you can only draw from left to right in any of the edit modes (with the exception of the free drawing mode); if you make a mistake you either have to start over by getting the un-edited waveform back from the Mirage again, or you have to scroll completely through the 256 sample waveforms to get back to where you made the mistake, and that can take a while. The manual, by the way, is awful. There are actually only 9 pages of instructions, some of which are not very clear. There is a table of all the commands at the back of the manual, some of which appear nowhere else within the manual, and many of which have no mnemonic device to help you remember what they do; "T", for example, is the command for moving the waveform left by one pixel. On the upside, though, the program will definitely make it easier to manipulate waveform data, and should be a help in finding or creating good loop points. And the couple of extra functions it includes, the librarian and doubling and tripling of waveform frequencies, could also help keep one amused. Of course, it's likely that there will be other VES-type programs available for the C-64 before too long, but the Sonic Editor actually performs a number of useful functions which you may find will fit nicely into your sampling bag of tricks. Sonic Editor can be ordered from Sonic Access, P.O. Box 4024, Santa Clara, CA 95954.

Clark Salisbury is Product Specialist with Portland Music Co. in Oregon, and is also a partner in "The Midi Connection," a Portland-based consulting firm. He has been actively involved in the composition, performing, and recording of electronic music for over six years, and is currently involved in producing and marketing his own pop-oriented compositions.

CHANGE OF ADDRESS

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An Electronic project for Mirage owners.

By Joseph Palmer

Like many of you, I've have had some discouraging attempts at getting a good single page loop on my Mirage. Rather than give up and go back to playing guitar, I decided to approach the problem head on. The MASOS guide describes a long and not particularly fun method of sampling, setting the loop, and playing back to listen for jumps in the playback frequency. Boring - I'd rather spend my time on the creative process.

The best solution to this problem is to have a real-time display of the waveform as it would appear in the one-page loop. First the bad news. The solution requires an oscilloscope. Not the $3500-type, but the type that could be had for about $50.00 at yard sales and computer and radio swap meets. I've developed a circuit that can drive the horizontal input to an oscilloscope with a sawtooth waveform at any Mirage sample rate x 256. With the sound source driving the vertical, the net effect is a real-time view of the waveform as it would appear in one page of memory. The really slick effect is that the waveform will slide across the screen in one direction if your sound source is sharp and the other direction if it is flat. This is similar to the old spinning disk tuning standards that were produced in the 60's and 70's. The other side-effects of this set-up are the ability to actually see the waveform and count number of cycles per page of memory. (Ensoniq is right, three-cycle-per-page loops don't work well). My very first attempt at looping with this device gave me a noiseless, perfect loop. First time, mind you! Perfect.

My box has two rotary switches and a RCA jack on the front. Each switch has a knob that goes from 0 to 10. To set up, I just set the sample rate on the knobs (for example, for sample rate 20, I set the left knob at 2 and the right knob at 0). The output from the RCA jack goes to the horizontal input of the scope, the output of my mixer goes to the vertical input.

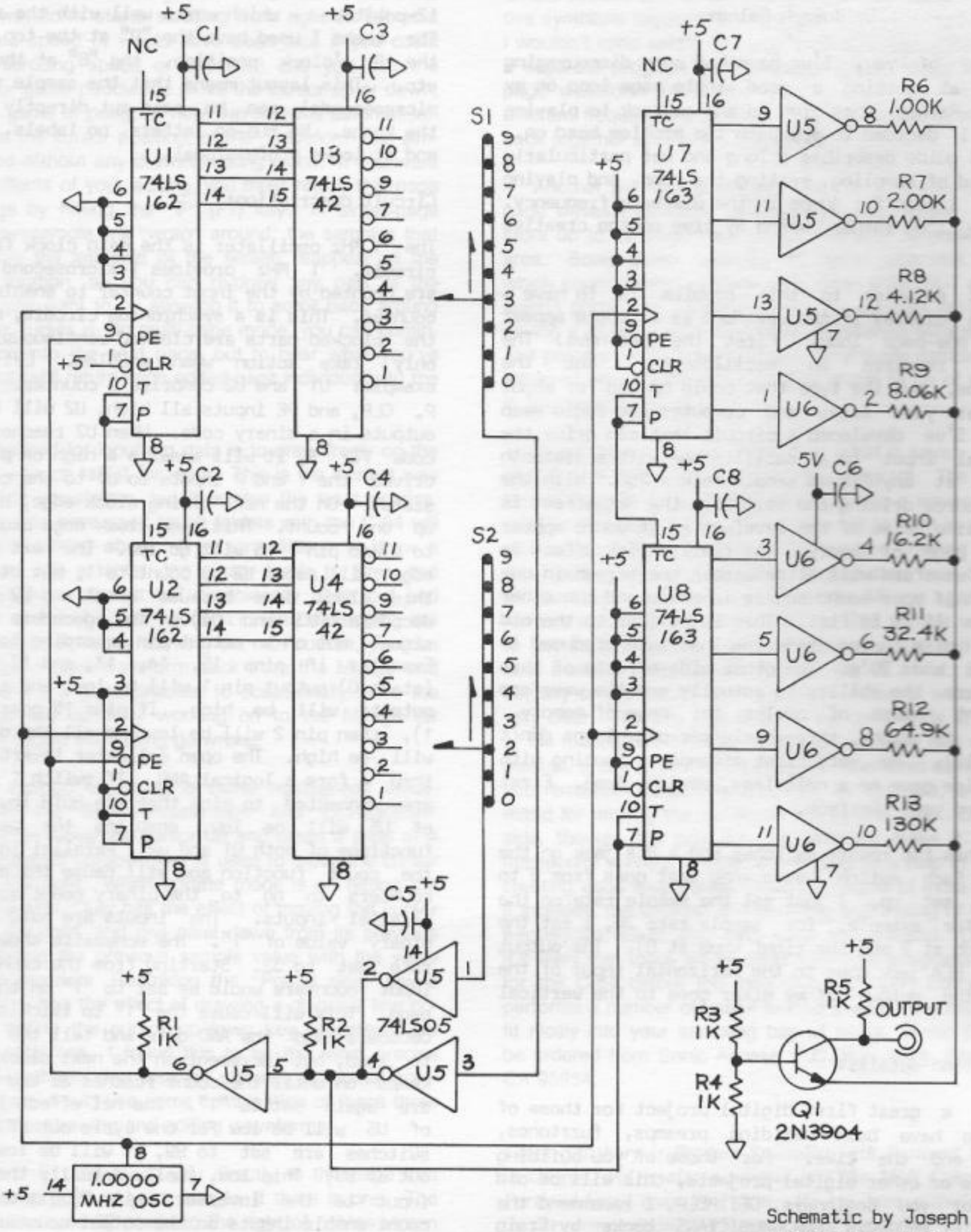
Construction details:

This is a great first digital project for those of you who have been building preamps, fuzztones, reverbs and the like. For those of you building computers or other digital projects, this will be old hat. For you beginners, GET HELP. I recommend the ELECTRONIC PROJECTS FOR MUSICIANS books by Craig Anderton. THIS IS NOT A PROJECT FOR THOSE OF YOU WHO DON'T KNOW WHICH END OF A SOLDERING IRON GETS HOT.

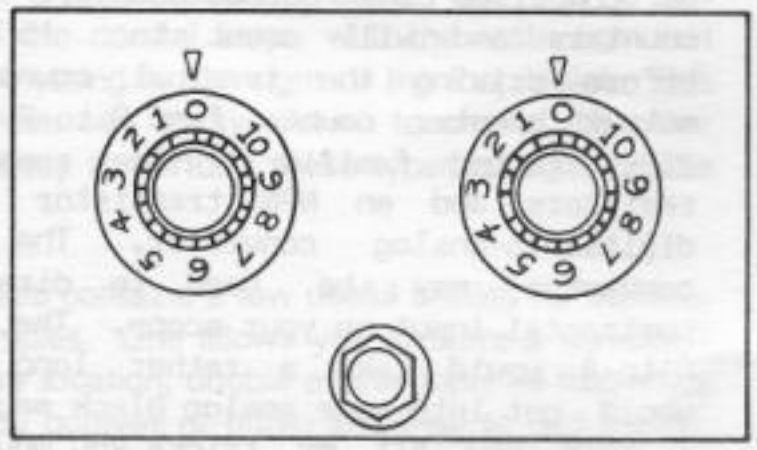
Many of the construction details can be had from Craig's books or other books on the subject. I built my circuit on a piece of prototype board from Twin Industries in Santa Clara Ca. The entire board was wire-wrapped and I soldered wire-wrap pins onto the switches and wrapped them as well. I used a plug-in-the-wall-and-out-comes-5-volts-dc power supply. (Try your local electronics junk outlet.) The box is a plastic experimenter's box from Radio Shack. The switches also come from Radio Shack. (See parts list.) The knobs are not stocked at R.S. and must be located somewhere else. The switches are 12-position - which works well with the right knobs. The knobs I used have the "0" at the top, the "3" at the 9 o'clock position, the "6" at the 6 o'clock, etc. This layout means that the sample rate (in the microseconds) can be read out directly from top of the knobs. No rub-on letters, no labels, no trouble, and it looks professional.

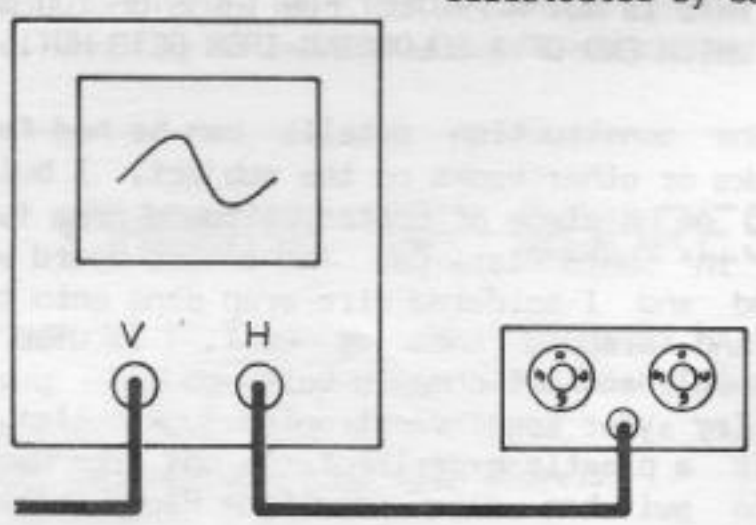
Circuit description:

The 1 MHz oscillator is the main clock for the whole circuit. 1 MHz provides 1-microsecond pulses that are counted by the input counter to enable the output counter. This is a synchronous circuit, meaning that the clocked parts are clocked continuously, and they only take action when enabled. Let's take an example: U1 and U2 comprise a counter. With the T, P, CLR, and PE inputs all high, U2 will count on its outputs in a binary code. When U2 reaches the binary code for 9, it will asserts a high on pin 15. This drives the T and P inputs to U1 to the count-enabled state. On the next rising clock edge, U1 will count up one count. This same clock edge causes U2 to go to 0 and pin 15 will go low. The next rising clock edge will cause U2 to count to 1, but U1 will ignore this clock edge because of U1 and U2 drive binary decoders (U3 and U4). The decoders drive a low signal out on an output pin according to the inputs. Example: if pins 15, 14, 13, and 12 are all low, (state 0) output pin 1 will be low, and all the other outputs will be high. If pins 15 goes high (state 1), then pin 2 will be low and all the other outputs will be high. The open collecter inverters below U1 thru 4 form a logical AND. If switch 1 and switch 2 are connected to pins that are BOTH low, then pin 6 of U5 will be low, enabling the parallel load functions of both U1 and u2. Parallel load overrides the count function and will cause the output of the counters to go to the binary count applied to the parallel inputs. The inputs are hard wired to the binary value of "1". The schematic shows the sample rate set to 32. Starting from the count of 32, the input counters would be set to "1" on the next clock edge. This will cause the "1" to trickle through the decoders and the AND gate and tell the counters not to load, but increment on the next clock edge. This keeps on until the count reaches 32 and the counters are again set to "1". The net effect is that pin 6 of U5 will be low for one cycle out of 32. (If the switches are set to 99, it will be low for 1 cycle out of 99) This low, (well, actually the high at the input to the inverter, pin 5) is used to enable count-enable inputs on the output counter U7. U7 and U8 comprises the output counter. These are binary counters and will count to 15 (hexidecimal F) before driving the terminal count, pin 15. The output counter counts from 0 to 255 for a total of 256. (Sound familiar?) The remaining inverters, resisters and an NPN transistor make up a crude digital-to-analog converter. The output of the converter may be used to directly drive the horizontal input on your scope. The operation of the D-to-A would take a rather long description that would get into some analog black magic. Besides, if I told you all my tricks you would put me out of business. So there.



Schematic by Joseph Palmer
Illustrated by Sally Baron





Bill of Materials

U1,2	74LS162
U3,4	74LS42
U5,6	74LS05
U7,8	74LS163
QI	2N3904 (R.S. 276-201)6
OSC	1 MHZ
S1,2	1P12T (R.S. 275-1385)
C1,8	Bypass for ICI-8, 0.1, 10v
R1,5	1k ohm 1/4w 5%
R6	1.00k 1/4w 1%
R7	2.00k 1/4w 1%
R8	4.12k 1/4w 1%
R9	8.06k 1/4w 1%
R10	16.2k 1/4w 1%
R11	32.4k 1/4w 1%
R12	64.9k 1/4w 1%
R13	130k 1/4w 1%

Box: 7.75 x 4.375 x 2.375 R.S. 270-232
Board: any good prototype board
Knobs: see text
RCA connecter: R.S. 274-346
Power supply: Any 5 volt D.C. that can supply 200 milliamps or more.

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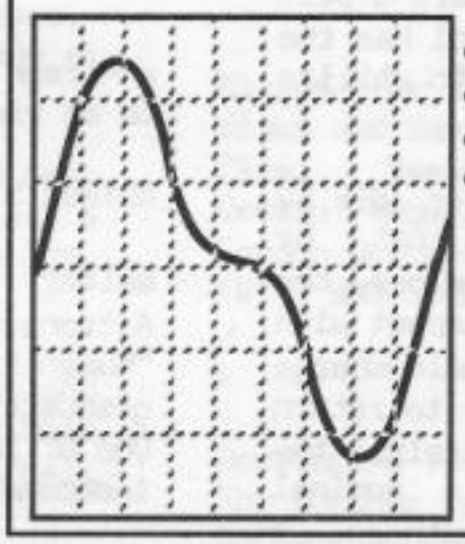

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Mirage Bulletin Board System

A Proposal

by Walter Daniel

In a previous article, I considered the possibilities of telecommunicating Mirage sound data. I also suggested that a computer bulletin board system (BBS) could be established for such a purpose. In this article, I present what I believe to be a well thought-out proposal for a Mirage BBS. There are BBS systems that support other instruments, so a successful precedent exists in this area. There is an article in the December issue of Keyboard that examines this topic in general.

How could a BBS serve Mirage users? Distribution of sound data (samples and programs) is a good start. Communication between users is likewise beneficial. Electronic bulletins from Ensoniq and independent developers would be timely and informative. General news and online reviews are feasible as well. Technical help in the form of messages to and from the manufacturer could be fast and to-the-point, a true direct line.

As I mentioned in my previous article, samples for uploading and downloading would need to be just a few pages long to keep the phone time required for transfers within reason. I propose a format of eight pages -- this allows for multisampling, albeit with one,two, or four page loops. A sample can be quite complex even with this limited memory allocation. Of course, the samples would need to begin on even-numbered pages for the reasons given in the Advanced Sampler's Guide. Only one set of program parameters would be transmitted with each sample instead of the four allowed in the Mirage.

Specialized software would be necessary to transfer the sample and program to the computer over MIDI. This program would extract the eight pages from the entire 64k upper or lower memory of the Mirage. Desired pages could be located by a computer search of the entire samples. A faster technique would be to record samples in a specified format of memory locations; another way would be to have the computer prompt the user for the locations and lengths of the pages to be used. The computer would store the program, wavesample control block, and segment list on disk with the sample. Perhaps a title and set of user notes could be included in the disk file.

To upload a should, the user would use any terminal program with the protocol(s) (such as XMODEM) that the BBS supports. The computer would read the disk file into memory, then send the file to the BBS with error checking as called for in the transfer protocol. To download a sound, the user would use his or her terminal program to capture and save the file to disk. The wavesample utility program would now work in reverse: placing the eight pages in their proper memory locations, copying the one program to all four locations, then sending it to the Mirage over MIDI.

The logical choice of computers for which to develop the wavesample extraction/reconstruction utility would be those machines that support Visual Editing

System-type functions. At this juncture, that list includes the venerable Apple IIe, the Macintosh, and -- just recently -- the Commodore 64. Although the utility does require some programming development, the task is not as large as to preclude supporting all three computers. I would strongly recommend supporting the three in order to broaden the base of potential users of the BBS. The program for each machine should be compatible with many MIDI software compatible with multiple interfaces is commendable and I hope that it will continue with this application.

The computer that actually is the BBS need not by any particular model or brand, all that is required is a BBS program that supports a file transfer protocol plus the various messaging functions that are a part of the system. Using an existing protocol has the inherent flexibility of allowing the user to utilize terminal software already owned.

Projects like this BBS tend to live or die by operations planning and execution, not by insurmountable technical challenges. Therefore, the potential BBS operator must examine this aspect with great scrutiny. The software developer would charge for the wavesample storage utility in order to return the investment in development. Similarly, the operator of the board would charge a nominal membership fee to cover operational expenses. A policy of one download for one upload might need to be instituted to keep a rotation of new sounds available.

I see three candidates for running such as BBS: the instrument manufacturer, independent software or sound disk developers, and instrument newsletter editorial staffs (hint, hint Eric!). [Ed.: Right - as soon as they invent 36-hour days.] The manufacturer has the technical support and access to the lates hardware and support information. The independent developer has the latest information about his or her products; the developer also can receive immediate feedback regarding products and requested products through the BBS messaging function. The newsletter staff has access to the latest news and information in the field. Perhaps the most versatile arrangement would be some combination of the three -- the newsletter staff operates the BBS and provides news, the manufacturer provides technical support and news, and the independent developer can announce his products.

What I am hinting at is a form of online advertising. This advertising would be optimal in that the user would request the ad. The user sees only desired information while the advertiser knows that advertising is reaching the proper users directly. An example would be for a sound disk developer to post an announcement of a file that is a sample (no pun intended) of a product. The user could read the announcement if interested, download the file, and try out the sound. If it meets the user's needs, he or she would make an informed purchase of the complete product. Obviously, eight pages of memory can only give a taste of a full 64k sound, but the file can demonstrate sampling clarity, programming expertise, an so on.

A crucial aspect of this entire concept is that of the dreaded telephone bill. Long-distance night and weekend rates are approximately $10 per hour, so make those log-ons quick! Perhaps establishing a toll-free 800 number would be feasible with the cost spread amongst the many users through membership fees. For the real die-hards, there's GTE Telenet PC Pursuit, a service that provides unlimited night long-distance computer phone lines for a fixed monthly fee (limited to major cities at present). If the BBS is set up as part of an existing telecommunications service, it is within a local phone call for most users. However, connect time for the service costs money as well, thereby reinforcing the time-honored maxim regarding the nonexisting of a no-cost midday repast.

I solicit comments and ideas on the subject of a Mirage BBS. Write to the Hacker or telecommunicate to me via Compuserve (my ID is 75066, 164).

AUTHOR'S BIOGRAPHY

Walter Daniel may have studied Aeronautics and Astronautics at MIT, but he did minor in music (a "humanities concentration"). He is presently a graduate student and hockey goalie at Georgia Tech. One of these days he is going to finish--really!--an independent recording.

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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.

Hollywood Mirage Owners User's Group. Hints and techniques. Sound trading and demos. Meetings held at Classic Sound Recording Studios. For info, call Patti (213) 664-7622.

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

SAMPLES

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 quality sample of Sound 22 from the OBERHEIM. Jay Quinlan, 213 15th Place, Manhatten Beach, CA 90266.

WANTED: A good sample of a DX-7 electric piano with plenty of "metallic-bell" attack content! Also wanted: a solo french horn sample. Mark Wyar, 1121 Middle Ave., Elyria, OH 44035.

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.

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.

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

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.)

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.

* * *

We just got finished with a visit with Ensoniq. Space and time permitting, we'll tell you more about just who these rascals are, where they came from, and where they're going in the coming issues.

* * *

One thing (among many) that made a big impression on us during our visit - their new products (see our Hypersoniq section). These goodies looked hot enough that we've decided to include them in the regular coverage in the Hacker. (Note: We're not cutting Mirage material - we're just plain growing. More 16-page issues.)

* * *

Last issue, people were still waiting for software for IMB-PC's. This month, we have three different outfits making announcements. Check our classifieds under "Software" and "Announcements" for two of them. The third is "SYNTHASSIST" from Northeast Visions, 68 Manor Dr., Glenmont, NY 12077. (They didn't send us an ad.) If you have any experience with any of these, please let us know. We're looking for reviews of all three.

* * *

Ensoniq has been trying to think of some way to thank their early customers. What they've come up with is a warranty extension. The warranty for units with serial numbers up through 12,000 has been extended an additional six months. If you haven't sent in your warranty card and you want to take advantage of this, just send them your name, address, phone, date of purchase (month & year is close enough), model number, and serial number.

* * *

Speaking of warranties... Ensoniq tells us that there are several bogus dealers out there. Some of these guys are even filing off serial numbers. Everyone reading this probably already has a Mirage, but you might pass it on to your friends. If you're not sure that you're dealing with an authorized dealer, just call Ensoniq and they'll let you know.

* * *

In last month's article on Sample Ideas, Duane King mentioned buying single-density disks. Ensoniq does NOT recommend this. Double-density disks should be used. Typically, the single-density disks are ones that have been culled from the double-density quality-assurance tests.

* * *

For people out there interested in selling their samples in a big way, DAZCO (892 N Washington St., Pottstown, PA 19464) has set up a disk duplicating service. They'll even apply your labels and include the latest Ensoniq operating system. Prices vary with quantity but are very reasonable. In the larger quantities (say, 50 and up), they aren't much more than you'd probably pay for just the blank disks - and it includes the disk!

* * *

Ensoniq has just gone to version 3.2 for the Mirage operating system. This version should correct some bugs that caused some missing note and hung note problems over MIDI. They've also implemented the new way of reading MIDI switches that was agreed upon at the MIDI Manufacturers Association winter '86 get together.

* * *

We'll be starting to get into renewal time for some subscribers in the near future. Don't worry about missing anything. We send out renewal notices about the same time we send out your second to last issue. You'll have plenty of time to renew.

* * *

Regarding phone calls: We're getting about a dozen per day now. If we're not here and you get our machine, please let us know if we should call you back COLLECT. Sorry, but a small outfit such as ourselves can't be making dozens of long-distance calls. If we can't call collect, and you really need to speak to a human, your best bet is to take a chance and try again later.

HYPERSONIQ

- New Product Releases -

Hybrid Arts, Inc. has announced the Oasis/XE Mirage Sample Editor ($187.87) which features high-resolution graphics, 8 levels of zooming, librarian, and most of the features of the top-of-the-line editors. It runs on the Atari 130XE Computer ($109) with the MIDI-Mate Hardware Interface ($190) and permits use of TV set or computer monitor for display.

Hybrid Arts also has announced the Oasis ST for the 520ST which will be released in Spring, '86. Contact: Hybrid Arts, Inc., 11920 West Olympic Blvd., Los Angeles, CA 90064. (213) 826-3777

Ensoniq Introduces New Digital-Sampled Piano

The Ensoniq Piano features 12 preset sounds, all instantly available at the push of a button. In addition to grand piano, there are digitally-sampled electric piano, marimba, electric bass and upright bass waveforms in the piano's memory. Acoustic piano variations include bright and mellow timbres, as well as honky tonk piano. There are also bright and mellow electric piano variations, plus two marimba sounds, vibes, percussion and mallet.

The keyboard features 76 piano-sized weighted keys with a smooth and responsive piano-like feel. It gives the player control over dynamics and timbre with touch sensitivity and sustain and sostenuto pedals. There is also a transpose switch which allows transposition up a major 4th and down a diminished 5th.

The Ensoniq Piano features the latest MIDI implementations including 16 MIDI channels programmable conveniently from the front panel. There are also separate MIDI channels for bass sound, MIDI In, Out, and Thru jacks. The sustain and sostenuto pedals are also sent and received over MIDI.

Other features of the piano include built-in stereo chorus, stereo outputs, stereo headphone jack, and separate output for the bass sound which allows it to be sent to a different amp.

For more information concerning the Ensoniq Piano contact: Ensoniq Corp., 263 Great Valley Parkway, Malvern, PA 19355

Ensoniq Introduces Digital Sequencer/Synthesizer

Ensoniq Corp. has introduced a new 8 voice MIDI-based instrument. The ESQ-1 Sequencer/Synthesizer is a powerful complex-waveform synth and multitrack MIDI sequencer in one compact keyboard instrument.

The ESQ-1 is an 8-voice polyphonic, polytimbral synth with the rich sound of 3 oscillators per voice. There is a choice of 32 multi-sampled and synthetic waveforms for a nearly unlimited variety of sounds and effects. Included are sampled waveforms of piano, strings, and brass instruments, in addition to a wide variety of synthetic waveforms.

Choosing programs is greatly simplified with the ESQ-1's 80-character fluorescent display. Easily readable in nearly all lighting conditions, the display shows 10 programs - by name, not just number - at any one time. There are 40 programs on board with an additional 80 cartridge programs available, giving the player instant access to 120 distinct sounds.

The ESQ-1 MIDI features a polyphonic, velocity sensitive 61-note weighted-action keyboard with programmable split points and sound layering on either or both keyboard halves.

The ESQ-1 MIDI features include a special "MIDI Overflow Mode" which permits slaving other MIDI units together to create a 16-voice synthesizer. There are also Poly, Omni, Multi, and Mono modes plus 8 simultaneous polyphonic channels with separate programs.

The new ESQ-1 contains a sophisticated sequencer with 2400-note internal storage (expandable to 10,000 notes) and 8 discrete tracks - each with separate program and MIDI channels. Each track has 8 voices dynamically assigned.

The sequencer also features a mixdown facility for balancing individual tracks, sync to tape selector, built-in metronome and auto-locator, plus 30 separate sequences chainable into 10 songs. External storage of notes from the sequencer can be made on audio tape or on 3 1/2" diskettes using the Mirage Digital Sampling Keyboard or Digital Multi-Sampler.

Standard accessories for the ESQ-1 include the ESQ-1 Owner's Guide, Programming Guide, Footswitch/Sustain Pedal, and detachable power cord.

For more information about the ESQ-1 contact: Ensoniq Corp., 263 Great Valley Parkway, Malvern, PA 19355

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.

DISK REVIEWS

By Erick Hailstone

Disk #11

Bank 1

Lower	Upper
Stacked Strings	Perc. Stacked Strings

The lower sample, because of its range and the fact that it is an entire string section under each note make it less useful for chords. Single lines that move slowly and quick percussive phrases work best. L2 adds chorusing, L3 has a long attack with a long filter sweep. This gives it an effect somewhat like a vocal chorus. L4 is chorused with a quick hard metallic attack.

Upper 1 - The cellos drop off fast leaving high sustaining strings. There is a noticeable hiss probably due to looping and aliasing so don°t sustain parts by themselves too long. U2 is the same with chorusing. U3 has chorusing and a medium length filter sweep. U4 - A quick hard attack and quick decay.

Bank 2

Lower	Upper
Rack Bell	Kalimba

On L1 the sound sustains quite a while and although pitched there are so many random overtones floating around that this sound is more useful as an effect than for melodic phrases. It sounds like an incredibly long pipe struck with a wrench. L2 has a softer attack. L3 = L1. L4 = L1.

U1 - Kalimba is an African instrument; a small box with pieces of metal you pluck with your thumbs. This is a pretty faithful representation. U2 mutes the aftertone emphasising its percussive nature. On U3 the aftertone is sustained and chorused giving an effect like an electric piano. U4 - chorused, sustained, and filter sweep thrown in. All of these variations appeal to me.

Bank 3

Lower	Upper
Wind Gong	Split Drum

L1 - This sound is beautiful. It's a Chinese gong, perfect for the big entrance. It has a soft mallot attack and long sustain. Great for clearing one's brain after trying to make your own samples. L2 filter sweep adds an airy quality. L3 is up an octave. L4 is up an octave with light chorusing and filtering.

U1 - Again, an African folk instrument, a box made of wood with slits that give different resonances to areas when struck. This is a little less bright sounding than I would like but still useful. U2 is up an octave, U3 down an octave. U4 is chorused with quick filter sweep.

Disk #12

Lower	Upper
Pipe Organ with bass pedals	Full Pipe Organ

L1 - KILLER!! This will rattle the roof. Enough low footage to destroy most speaker systems. L2 has a little less attack. L3 has chorusing and a bit less aggressive. L4 is chorused with a quick attack and a medium decay.

Bank 2

Lower	Upper
Pipe Organ with Bass Pedals	Pipe Organ Brass

L1, as the name implies, is organ brass - a thinner, more nasally sound than L1, Bank 1. L2 is slightly subdued. L3 has more chorusing. L4 has a very long attack with equally long filter sweep and high resonance.

The upper sounds and variations are the same as the lower except for the absence of pedals and higher range.

Bank 3

Lower	Upper
Pipe Organ Postiv with Bass Pedals	Pipe Organ Postiv, Travers, Flute & Schalmei

L1 is the least aggressive of the bunch - very smooth. L2 is slightly subdued. L3 is chorused. L4 has a quick percussive attack with muted sustained organ tone.

U1 has a quick smooth attack with organ flute tone with a high harmonic up an octave and a fifth. U2 is again subdued. U3's a little less bright with the harmonic further in the back and no chrousing. U4 is similar to L4.

Disk #13 This disk was not available at review time - it will probably be included in next month's Hacker.

Disk #14

Bank 1

Lower	Upper
Solo Cello 1	Flute

L1 - The cello is excellent. It is very pure so you must add all the nuances (vibrato, glisses, etc.) L2 is down an octave. L3 is chorused and L4 is down an octave and chorused.

U1 - Again, the flute is very pure so you must add everything else. This approach gives these samples the most versatility. U2 is down an octave. U3 is chorused and U4 is down an octave and chorused.

Bank 2
Lower Upper
Orch Brass French Horns/Muted Trumpets

L1 - Lots of horns with the right amount of pitch variance between them for natural chorusing. L2 is down an octave and Parameter 72 is raised an octave. L3 is chorused (I'm sick of chorusing). L4 is the same as L2 with, you guessed it, chorusing.

U1 - French Horn - not bad. I wish there were 2 or 3 different samples of this - one with the opening attack a little longer - one with some spit in it. Well, maybe in the future. U2 is muted trumpets. Now, I'm gonna have to yank out my classical collection to check this, but this sample seems just a bit too nasally and irritating for my taste. U3 - I never would have thought a French Horn Player would own a chorus pedal but this one does. U4 - so does this trumpet player.

Bank 3
Lower Upper
Cup Gongs ?

L1 is fabulous bells with a bright, ringing overtone an octave and a fifth above. L2 is a cymbal with a quick, crashy attack and long resonant sustain, like a china cymbal. L3 is down an octave. L4 = L2 with a light long filtering and is chorused.

U1 - I don't remember ever hearing this sound before. I love it. There is a metallic clank with a pitch that is almost vocal-like afterwards. Unique and quite beautiful. U2 sounds like a muted tubular bell. U3 has a quick, extremely metallic attack with a softer reed-like pitch afterwards. U4 = U1 with a softer metallic attack.

SAMPLEWARE DISK #1

Bank 1
Lower Upper
Bass/Snare Cymbal/Snare Brushes

L1 - The first octave is a marching band bass drum. The second is a snare drum looped to sound like a drum roll. The next six notes are a normally struck snare followed by 10 notes of marching cymbals. The next 10 notes are a staccato snare I believe is struck with a brush. And finally snare being played with brushes swiped and struck (you'll hear it when you hear it). L2 and U2 soften the bass drum and snare, brighten the cymbals and brushed snare and add a rhythmic variation to the played brushed snares. L3 and U3 add filtering and an icky wiggley vibrato to everything. These guys have got a sense of humor. L4 and U4 have a long high-to-low filter sweep with high resonance.

Bank 2
Lower Upper
Tuba Banjo

L1 is tuba-like, okay in the context of their accompanying sequence but I'd look for a new axe if I got a tone like this. L2 is a longer attack. L3 is muted with the dreaded chorusing. L4 is low to high filter sweep.

U1 is a not bad banjo. More of a picked Mickie Finn style than bluegrass although if you worked on your fingerpicking patterns, who knows? U2 has a longer sustain to the basic attack and brighter. I'm gonna call it detuning this time, but you'll all know what I mean - arghhh. U4, once again, wiggly vibrato.

Bank 3
Lower Upper
Clarinet Harmonica

L1 - clarinet - you bet! Just like one. L2 muted with vibrato, in this case useful for doing Lawrence Welk gigs. L3 is chorusing. L4 is longer attack, sustaining tone with vibrato.

U1 - The first note of this sample is someone blowing and sucking in and out as they go from high to low on a harmonica. This is a cute cliched effect to have around. The rest of the sample is an echo harp or some other type of harmonica. Definitely not a blues harp. U2 is a little less bright and chorusing is removed. Hallelujah! U3 spoke too soon; more chorusing with light filtering. U4 no chorus, filter sweep and sustained.

This is the first disk I've heard from Sampleware and it's almost a novelty disk because the sounds are so quaint and cliched. I mean this in a positive way because in certain situations these cliches are quite valuable (film scores, TV music, commercials, etc.) I hope they continue to come up with unique sounds for us all.

MIRAGE* OWNERS
Expand your voice library with new sound diskettes from
DATA 1

VOL. I
Drums and Percussion Sounds I
Includes conventional and electronic drum sounds, plus digital reverb snare and toms. Percussion sounds include conga, timbale, African percussion and more. $25.00

VOL. II
String and Voice Sounds I
Includes a variety of solo and stacked string and voice sounds $25.00

VOL. III
Funk and Electric Dance I
Includes slap and pull bass, DX7 bass, scratch, zap, lazer and much more. $25.00

VOL. IV
PIANO, ORGAN I
Includes electric piano, Vox combo, pipe organ and rock organ. $25.00

VOL. V
Digital Synth I
Includes sound track strings, funky bass, space bass, and futuristic synth sounds. $25.00

VOL. VI
Horn Sounds I
Includes big brass, trumpet, trombone, bari sax, French horn and clarinet. $25.00

Send check or money order to:
DATA 1
129 Squire Drive, Melbourne, Florida 32935
(305) 254-6509

2nd day air shipping included in price. Foreign orders add $5.00. C.O.D. orders add $5.00 (U.S.A. only). Send $5.00 for demo cassette. Contact DATA 1 for an updated list of sound disks.

* Mirage is a trademark of Ensoniq Corporation.

THE INTERFACE

Dear T.H.

The last bars of the song are rocking the crowd into a frenzy. Then a performing musician's nightmare begins - the sounds of silence. The crowd scurries off the dance floor and patiently awaits for the next groove to begin, but what do they get - the sounds of grinding disk drives and the hiss of the PA speakers. The impatience of the drummer manifests itself in the usual in-between-songs, drum rolls, etc. which are the symbol of an unprofessional band. The guitarist, who is never satisfied with the tuning of his instrument begins the irritating twanging, open string strumming, and harmonic 5ths to check the tune of the axe.

So this is today's hi-tech Top 40 band. When all the sounds are loaded into the Mirage, and the appropriate program selected, and when the correct sound is loaded into the Akai S612, and when the proper patch has been selected on the AX80, which is the master MIDI keyboard, and the right information has been booted up into the SQD-1 sequencer, the band can finally begin its next number.

In my younger days, there was nothing more satisfying than a smooth medley of songs, sometimes by a particular artist, or sometimes songs having a similar backbone strung together nicely. Now, I have to tell the club owners that the break in between songs is intentionally put there to allow the patrons time to get off the dance floor and have time to grab a drink - which puts more money in the owner's pocket.

This routine has been getting by quite nicely, but I wish there was a way to get maybe 6 to 10 songs - sequences, patches, Mirage sounds and programs all loaded without stop, or maybe a second or two between songs.

There may be a way!

What is needed is a mass storage device, say a 30 meg hard disk, containing enough sampled sounds, DX7 patches, AX80 patches, DDL patches, sequences, etc. for maybe 50 songs. Each song could be loaded into device that had maybe 1 meg of RAM (or even 640k like my PC with 10 meg hard disk), and the information fed to each MIDI device as needed. With the next song - sequences, sound patches, samples, and all MIDI events taken off the hard disk and loaded into RAM waiting for the end of the song in progress and then sent out immediately, songs could easily be chained. After all, the two things that slow down the process of getting another song going is: (1) Finding the appropriate software (sound disks, sequencer disk) and placing them in their respective drives, (three different ones in my case - Mirage, Squid, and S612) and (2) Disk I/O which takes maybe 6-9 seconds on each machine. The way in which I get a song loaded in twenty seconds is to get the sound or sequence loaded into each machine's RAM, then pull out the disks and then place the next set of disks in while not singing or playing in the current song.

I would suspect that to get sequences, sound patches, and samples all on one hard drive, they would have to have a common operating system, (maybe MIDI-DOS) so one could write batch files of song medleys or whatever else had to be done over the MIDI system. I believe the batch file concept to be the most crucial element here because one could chain songs without ever combining them - sort of like chaining files on the disk for printing, having them append onto each other as they print, but each file still remaining separate. In this case, the word file could be substituted with song, and printer with instrument - and ultimately loud speaker.

One last remark; in business computers, memory (RAM) is cheap. It is not uncommon to find PC's with 1 meg of RAM and 20 meg hard disks selling for under 2,000 dollars - when are music computers (Mirage, Emulators, etc) going to get on the memory bandwagon, without taking musicians to the cleaners?

Sincerely,

Woody Haugh - Woody and The Splinters

[Ed. - One of the problems with comparing computers to music equipment is that the production quantities are so different. Most of the popular personal computers are cranked out in the 100's of thousands. This allows all sorts of economies of scale. Another difference is the operating environment. This goes a long way toward explaining why you don't see hard disks on stage. They're still pretty freaky just sitting on your desk. Maybe someday. One solution (which you probably won't like too much) is to have a rack full of Multisamplers and just control them all from a master keyboard.]

Dear Transoniq:

I have an older model Mirage, and I think I can live with all the imperfections but one - the keyboard. I recently read that it cannot be changed, but it drives me crazy. The keyboard STINKS BADLY. So, should I trade it in and go for the whole upgrade, or keep it as a second one and just buy another?

I have a Syntic, Studio I sequencing program for the Commodore C64 computer and I was considering buying a drum machine that samples. Well, I discovered the Disk of drum sounds and, to me, they sound terrific. But one problem - only mono out. But the sounds are very good - to the point that I could consider buying a second machine. Is there anyone out there in Mirage land that could share my frustrations and with whom I might talk to by phone or letter?

Please Write or Call:

Chuck Bear
Chuck Bear Studios
8301 Needles Dr.
Hudson Fl 33567
813-868-7508 after 6 p.m.

[Ed. - Maybe someone will contact you regarding trading your keyboard. One thing you might consider before you decide whether or not to keep it or trade it or whatever, is that as your collection grows you'll have other keyboards you can use to drive it. For instance, the new synth from Ensoniq has the new weighted-action keys and would make a pretty powerful combination.]

Dear Hacker:

I appreciate the newsletter greatly. I also fall into the category of a working musician and use the Mirage for its high-performance sounds, and (as stated by another musician in your last letter [Ed. - #7]), am waiting anxiously for some kind of memory expansion modification to allow loading more sounds into the Mirage for quick changes. Could something be made similar to the sequencer expander that would allow this? My other grump is that I have found most good lead/solo sounds to be "Virtual Sampled" - transposed down one octave to avoid aliasing. The sound in particular I'm looking for is like the flugalhorn sound of a Roland guitar synthesizer. I've tried sampling some analog brass, hornish, sounds (and spent hours) and keep banging up against aliasing, and if not that, I lose a portion of the attack as I go up the keyboard. (Next try will be a multi-sampling approach.)

I'm almost thinking I will have to get some kind of analog system for those high and sweet brassish/hornish sounds.

I have also enclosed a letter to Ensoniq concerning a glitch in the recent operating system - which, at least for me, is a problem. But all in all, the sounds are great. I use Disk #5 90% of the time.

Thanks,

Bob Kelley

[Ed. - If you're really interested in memory expansion, check out the announcements section of our classified ads. A Canadian group is looking for encouragement to do just that. You may need to use an analog synth to get what you want. There's many things that they just plain do better.]

Bob's letter to Ensoniq:

Dear Ensoniq, c/o TRANSONIQ HACKER

I recently discovered that when I boot up from OS 3.0 or greater, I have MIDI problems. My controller, a Roland EP-50, acts like it has contact problems. That is, sometimes when I hit the keys, no signal is received by my Mirage - no sound. Furthermore, if I hold down a key in the left half and hit a key an octave or two up, the upper note will sustain until I release the lower note. The odd thing is, none of this is a problem when I boot from the 2.4 version of the operating system. I've contented myself with booting with the lower version, but feel this could eventually catch me or limit me from newer and better things to come in your OS.

I have tried playing with the new MIDI-Parameters in hope of correcting this - but to no avail.

My local dealer could only guess that it is something to do with the cross in systems and that I would have to work it out with Ensoniq and Roland. Thanks for all the good work, hope to hear something about this.

Sincerely,

Bob Kelley
Steamboat Springs, Colorado

[Ensoniq's Response - Actually, this is the first time that we've heard about this one. (There aren't very many 3.0 disks out there.) I think this may have been fixed in version 3.1. Please try it (or 3.2 which has just been released). 3.2 corrects some note-hanging and missing-note problems. Let us know if you still have problems.]

Dear Transoniq Hacker,

We have a weekend dance trio that has a wide range musical appeal, and the Mirage has made us sound like 6 men. With more info through T.H., maybe we can add a few more "invisible players!"

For instance, I purchased a Yamaha RX21 drum unit and, unfortunately, the "21" and the Mirage don't "sync." Perhaps a list of units that do sync, or clock units that would do the job would be nice to see.

Thanks again!

Jeff Cavallo
N. Royalton, OH

[Ensoniq's response - The following procedure will allow a MIDI drum machine to clock the Mirage sequencer:

1) Set Parameter 85 ON.
2) Start the drum machine.
3) Hit the Record button on the Mirage two times.
4) Start recording on the downbeat of the drum patter.
5) Hit the Cancel button when you're done.
6) Turn the drum machine off.
7) Hit the Seq Play button.
9) Restart the drum machine.

NOTE: This procedure won't work for previously recorded sequences.]

Transoniq Hacker:

What a great newsletter you have here.

....While we're on the subject, is it possible (I hope it is) for the Mirage to send out on multiple MIDI channels (with a new operating system) each channel corresponding to a user-defined section of

the keyboard. I should think it would not be difficult since the keyboard already knows what note is being sent and could quickly scan the keyboard and keep on switching the output MIDI channel. Since switching the channel, other information like key-off will not be sent and would not interpret the playing of the corresponding slaves (is this not true?). The only problem that I can see is that the scanning rate and switching is not fast enough. Then again, I am not that familiar with MIDI specs etc. The Casio CZ can ACCEPT on 4 MIDI channels. How does that work, and can the same technique be used on the Mirage?

Next question; are there any users groups in the Philadelphia area that you know of, or can find out about.

And, finally, are there any electronic bulletin boards set up where we can download samples and corresponding program parameters. Or, how can this be done?
And remember "A sample a day, keeps the DJ's away!?"

Barry Kirsch
2500 Skyview Ave.
Langhorne Pa. 19047

[Ed. - While it may be theoretically possible to scan the keyboard in the way you suggest, it isn't done in any of the operating systems now in existence and Ensoniq has no plans to ever do it. Regarding user groups and bulletin boards; we've printed your complete address - maybe someone will contact you. Keep watching our classifieds. (Lots of readers in your area.)]

Dear Transoniq,

I purchased my Mirage in August of '85 and have been working on the job with it since the day I bought it. I'm playing 6 nights a week, so I have very little time to attempt sampling or to investigate disks and their usability. I was wondering if anyone out there has purchased Vol. II from Data I and could tell me if their string samples are a lot thicker than the Mirage Diskette #3? I like the thickness of the Roland JX-8P strings and wondered if anything comparable was available for the Mirage. Not necessarily an analog synth sample, but maybe a more stacked string ensemble as opposed to the single violin or single cello sound. I would be interested in trading or purchasing more usable samples with anyone in the Detroit area.

My band is playing in Flint for the next month, so I'm traveling at least 4 hours a day. Lots of people ask me how I like my Mirage and I love it.

I wish Ensoniq would totally update earlier models so people who like keyboards all around or stacked high could play on a good set of keys like the DX-7 or JX-8P. The early model Mirage keyboard is difficult for me to adapt to since I was trained on an acoustic piano for fifteen years. (And I don't feel like moving my Steinway around.) I (and, I'm sure, others) would pay to have a better-feeling set of keys to play.

Brian Caldwell
Grosse Il, Mich.

[Ed. - You might check out the review of Data 1's Vol. II in Issue 8. It was one of the more favorable. Running the output of the Mirage through a "coarser" might also give you the fat sounds you want. About the only thing you can do about the keyboard (other than getting used to it) is to look around for a trade or to drive it with another MIDI keyboard more to your liking.]

Dear Master Hacker,

I have encountered a problem that I am sure may samplers are going to experience as more people use the new visual editing systems for waveform manipulations. I just purchased the VES from Sonic Access for the Commodore 64. It seems to be quite a comprehensive program for the money. Unfortunately, the owners manual represents one more company's effort to save money on paper and printing... Anyhow, here is my problem/question; I am using the rack-mount Mirage. I connect computer MIDI interface Out to Mirage In. Then Mirage Out to Interface In. Simple, so far. Now, how do I control the Mirage from a keyboard at the same time? Do I have to reconfigure the MIDI cords every time I want to hear what I have edited with the VES? Can I use one of the new MIDI merger devices such as the Kamlet MIDI Merger to send computer and keyboard control to the Mirage at the same time? I called Sonic Access, but they seem to have no idea. You would think that they would have thought of this and put something in the owners manual about this. A MIDI through box will not merge two MIDI signals and I hear that strange things can happen when two signals are merged. Can one of your techno-wizards tell me what theoretically should work before I shell out more bucks on a merger?

Once again, thanks for an informative (and entertaining) publication. It has helped me tremendously to understand Mirage sampling.

Sincerely,

Larry Dunn
Burbank, CA

[Ed. - You DON'T want a MIDI merger. All you need is the simplest MIDI switch box you can get. One that has one MIDI line switched to either of two other MIDI lines - an "A/B switcher." FUTURE NOW, (913) 722-3942, makes one for about $45.]

Letter to the Editor.

First and foremost - your newsletter is great! Hats off to you. Having been the Sales Manager at E-Mu and the Director of Sales and Marketing at Linn I certainly know how much pubs like yours are needed in this industry.

One of the product lines for my new company, K-Muse Inc., is a professional quality sound library for the Mirage.

Our library, which is called the "SOUND COMPOSER'S SERIES," is set apart from the others in that it's well organized and has a musician-friendly format. It is configured to provide a consistent format from one sound family to the other. Each family consists of ten disks with each indivivual disk within a family being related to each other. As an example the "R&B" family has "Prince-like" drum sounds, the bass disk has great funk-pop bass sounds, and the horn disk has punches a la E,W&F etc.

There are five families that will be available by the time this goes to press. They are: R&B, LONDON, CLASSICAL, NEW YORK, and COMEDY. Note each family has 10 disks covering the entire musical needs of a musician - whether it be for recording, composition, or live performance.

Each family covers the following; Drums, Percussion, Bass, Accompaniments, Combination Comping sounds, Sustained Sounds, Orchestra, Brass, Orchestra Strings, Orchestra Hits/Blasts, and K-Muse Designer Blends/Mixes/Demos.

We are dedicated to providing professional quality and we are applying a library design that is consistent and easy to use for one's musical needs. I hope that we can help your readers further appreciate the Mirage and create more and better music through the use of our sounds.

Most sincerely,
Kevin A. Kent, President
K-Muse, Inc.

Dear Hacker,

I would just like to let you know that I have been receiving your newsletter and it is really a great help to me in understanding more about my Mirage.

There is just one suggestion: Could you also write about the maintainance of the keyboard? Lucky for the others they can just send it to an authorized repair shop. Unfortunately, I live here in Manila and there are no repair shops that can handle the Mirage. Maybe you can discuss some trouble shooting just in case we encounter some minor problems. For example - disk drives. I don't even know how to clean it.

Just give us some pointers on what to do in case we get some minor problems.

More power to you. I'm looking forward to my next issue.

Lorenzo B, Illustre
Quezon City, Philippines

[Ed. This is indeed another area we want to cover - as space and time permit. Articles and/or tips from users would be greatly appreciated.]

Transoniq Hacker;

Here is my first question for the Hacker.

1. The manual says that a MIDI clock is always sent out when the sequencer is on. I own a Casio C2-5000, and would like to trigger the Casio sequencer with the Mirage sequencer, but this is not working. I have triggered a Yamaha RX-11 with both sequencers separately, so I know each one is putting out a MIDI-clock. Furthermore, I can trigger the Mirage sequencer with the Casio but not the other way around. I own 3.1 version software. How do I do it?

INTERESTING OBSERVATIONS: I used to do my sequencing with the Mirage hooked up via Sync to my DX Drum machine. I found this to be very satisfactory. I then purchased a Garfield MIDI Adapter because I could not sync my Mirage to my Casio CZ-5000 as mentioned above. I then started driving the Mirage sequencer with MIDI from the DX Drums. First of all, all my original sequences came out 3 times too slow. The only way to get proper sync was to plug the DX into the 24 beat of the Garfield Adapter (it's supposed to be 96). So I recomposed the sequences with the MIDI clock from the DX and was not impressed with the resolution at all! Any comments?

Ian Willson
Oakland, CA

[Ensoniq's response - Regarding your question; check to see if the Casio receives Start/Stop commands. If it doesn't, you'll have to start the sequencer manually. Check the settings on the Casio to make sure it'll sync to incoming clocks. Regarding your observation; the 24, 48, and 96 don't actually have anything to do with tempo. The problem is that you're trying to sync tempos after they were recorded separately at different tempos. The best way to avoid this is to decide on a tempo first, then use a master clock to control everything.]

Dear Transoniq Hacker !

Thanks for an interesting and informative newsletter. I just want to share one experience with the Mirage that might be useful to some other Mirage owners. I bought the Mirage while living in the States. I then started to work in Europe and brought my Mirage with me. To run equipment for the USA market in Europe using an autotransformer to step down the voltage from 220-240 V to 110 V, is normally no problem. However, not so with my Mirage. The power transformer in the instrument has been designed so that the iron core is close to saturation (even with no load!). While this is not a very wise design, it still works OK in the States. However, when the transformer is run at 50 Hz as in Europe instead of 60 Hz as in the States, the current in the transformer is higher, and the stray electromagnetic field becomes appreciable. The electromagnetic field then acts on the case of the instrument (which is magnetic) and puts it in violent vibrations. While the instrument does work, it also emits an enormous acoustic noise. It be impossible to practice the Mirage with earphones in the hotel room in the night

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without waking up other guests. Bringing it in the studio while acoustic instruments were recorded - disastrous. Having the instrument close to a vocal mike on stage would be very annoying. I had to wind a new transformer for the instrument.

So the message is; if you are going to Europe, get a Mirage intended for the European market (or put in another transformer as I did). Since a proper transformer does not cost any more to fabricate, I suggest that the Ensoniq engineers design a new transformer which is not as close to saturation.

When it comes to "wishing list" or suggestions for change of software operating systems, I do miss an option which would allow decoupling the keyboard of the Mirage from the tone generating subroutines. I would find it useful if the instrument would send out the MIDI information but did not give any sound unless you fed the MIDI-OUT to the MIDI-IN. This may be desirable when working with external sequencers/computers if one likes to use the Mirage keyboard as the control keyboard.

I find the way the built-in sequencer on the Mirage works to be a little strange. When you have recorded a sequence and then do overdubs, the activity on the pitch and modulation wheel is recorded into the sequence and will then also affect what was already recorded before. However, you don't hear the effect of this during recording. You have to wait until the next playback before you hear the effect of pitchbend and modulation on the first recorded material. Since I don't think the built-in sequencer should be the ultimate sequencer anyway, I don't consider this to be a big issue. It's just one of those things I don't understand the reason for not doing right. (Actually some computer sequencer programs have similar annoying "deficiencies.")

Best regards,

Terje Finstad
Oslo, Norway

[Ed. - With version 3.0 and above, you can turn MIDI Local (Parameter 30) on or off.]

[Ensoniq's response - The way the sequencer works just illustrates the difference between overdubbing and multitrack sequencers. In overdubbing, the mod and pitchbend are global functions. To make it act like a multitrack sequencer would use up the memory even faster than it already does.]

Dear Sirs,

One question: are there any rumors of the possibility of adding step-time entry onto the Mirage sequencer? I feel it would greatly help the unit. Thanks.

Sincerely,

Ray Tarantola
Milltown, NJ

[Ed. - The short answer is "No." Ensoniq really just intended the sequencer to be a handy "scratch pad" and had no intention of competing with all the other sequencers and computers that are already out there. They don't plan on putting any more development time into it.]