

# Transoniq Hacker

"The 'Zine Too Hot to Live!"

## Retrospect

### Whatever Happened To... The Mirage?

Pat Finnigan

Well, gang, we're only one year away from a new millennium. Seems like only yesterday we keyboard types were the popular guys in the band because it took a van to hoof our gear around. So everybody loved to ride with us because we had a Volkswagen Microbus (and other uh, er, factors, yeah, that's it). Once we arrived at the gig, though, we became the Maytag Repairman — who wanted to help us drag a Rhodes up the stairs? Or worse yet, an old Hammond organ and Leslie? No, you had to be a pretty close-knit group to play together in those days because moving keyboard gear was a 4-man job. That's one of the many changes in music that had far-reaching implications above and beyond its surface...

As does the acquisition of Ensoniq by Creative Labs. From a plucky group of VLSI engineers at Commodore to a \$77M company in 15 years, how could we have known the far-reaching implications of such a company? When all is said and done you've got to give credit where credit is due, even when business and economy dictate some popular and unpopular decisions in this global economy. So let's look back at this company and consider what they've done and where they've been. Let's reminisce for a minute about those days before the world caught up with...  
THE MIRAGE

Okay, Sherman, set the wayback machine to 1982. After having a bellyfull of Jack Trammiel (president of Commodore), Bob Yannes, John Carpenter and Al Charpentier decided they'd had enough and took their parachute money and migrated to the keyboard market and threw their lot into a newly incorporated business. The DX7 had just been released, MIDI had just been incepted, and growth appeared explosive in this area, so off they went. Looking at the "Play a Turkey" Emulator ads of that era, they decided 4 octaves of non-velocity-sensitive keys on a mono sampler was no bargain at \$10k (yikes!) and said "Hey, we can do this better..."

The result was the Mirage, a genuine break-

through product. Two 64k sampling engines (one for each keyboard half), the world's first keyboard with a 3.5" disk drive for storage, editable VCA's, filters, envelopes and five octaves of velocity-sensitive keys? This was unheard of in 1984. But for \$1695, it was downright *unbelievable*. And portable — an Emulator was this ugly clunky thing with a 5 1/4" lump of disk drive on the left end, Fairlights were better left stationary (unless you were Duran Duran) in Australia, and the Synclavier was just a twinkle in New England Digital's eye back then...

Initial sales started slowly — what could you do with a sampler? Most musicians never even considered one — at \$10k, samplers were elitist products for those who had already arrived. Au contraire, mon frere: here's a more powerful piece for an eighth the price. Then came the disk formatting utility that let you format your own \$50 box of disks (instead of buying preformatted and pre-labeled blanks from Ensoniq for \$13 each), followed by a tutorial on how to move upper sounds into the lower keyboard half for editing, along with an explanation of what those two-digit hexadecimal codes that winked in the window meant. An input sampling filter soon followed the release of the sequencer expander cartridge (yes, the Mirage was the first keyboard with the "Idea Pad," *not* the MR's), and pretty soon, the cult following of this instrument exploded into the mainstream...

Even third parties got into the act. Indian Valley Marketing released a \$995 RAM expansion option that let you load *three* full disks into the instrument as resident sounds (remember RAMOS?), followed by the MIDI Disk Drive (the world's first SysEx storage device). And here we note the beginning of Ensoniq's diversification back into the computer market — Apple approached Ensoniq for a license to use the Mirage's trick VLSI "engine" (the infamous "G" chip) in their new Apple IIGs (graphics and sound). Nobody at Apple ever wrote software that would address the G chip's VCA and VCF functions, but it still made a splash nonetheless.

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This newsletter is stopping publication November, 1999 (Issue #173).

Issues remaining: **11**

If your address label indicates more than 11 issues remaining, please let us know if we need to work something out with back issues or something.

Ensoniq was off and running...

Established and successful musicians like Herbie Hancock, Thomas Dolby (the list is a veritable *Who's Who* of keyboard musicians of that era) beheld the instrument and bought the Mirage in droves — sales were high enough to develop a rack mount Mirage as well as update/improve the Mirage through three more revisions. And these same musicians were using this technology to *really* push the musical envelope: Jimmy Jam and Terry Lewis used the original Mirage "car horn" sample as the bass for Janet Jackson's "Nasty" hit from the album of the same title. Suddenly sampling became more than playing back a Polaroid picture. Overnight it immediately became a novel synthesis technique. All because Ensoniq included filters, envelopes, all the things we take for granted that were omitted by the big boys...

Other manufacturers dismissed Ensoniq's success as a fluke, but musicians like us sat in awe at the innovation Ensoniq had just dropped into

our collective laps. Guys like me were laughing at DX owners struggling to figure out what an "algorithm" was — we just sampled and looped their sounds and stuffed them on a disk. "Sounds on a disk? Nobody wants to do that..." "Eight-bit sampling? That's hardly listenable." All of this gave the Mirage an allure yet to be repeated, as well as an analog-like sound that still keeps this instrument in many musician's racks just for warm fuzzies...

Then those other instrument manufacturers discovered what a market share Ensoniq had captured from their P and L statement. So in they dove. Roland did their S-10 (with those impossible-to-find QuikDisks), Akai did their S280 (arf!), Yamaha did their TX16W (AAAAIIIIIIIIII!), an entire generation of stinkers attempted to jump on the bandwagon and bag some of Ensoniq's success. By that time, Ensoniq had already compiled the largest sound library in existence, and that doesn't factor in third-party and public domain samples, so any competitor thinking of market entry faced

not only developing a sampling instrument that had to compete with a \$1295 price point — yes, Ensoniq had reinvested profits into R and D and brought us not only a revamped and sexier-looking instrument, but a cheaper, more powerful Mirage with a hotter signal, stereo outputs and a smaller package.

Guys like me bought the keyboard and as many rack-mount Mirages as we could afford. The idea was to get as many samplers in our rig as we could so we could just use a MIDI switcher to select which Mirage we were playing. Load them up with our favorite sounds and switch Mirages in and out of our MIDI data path. But Ensoniq wasn't just resting on its laurels while the competition was setting its collective sights on the Mirage. Malvern was already developing an instrument that stuffed the power of EIGHT Mirages, a more powerful sequencer, improved sample rate, multiple outputs and SCSI into one box...

But that's another story... ■

## HYPERSOFT

## New Product Announcements

### Second MegaDisk Released by Syntaur

As a follow-up to one of its most successful products, Syntaur Productions has just released its *MegaDisk 2*, a floppy disk jam-packed with samples for the Ensoniq ASR, EPS, EPS-16 Plus, and TS-series keyboards. Like its predecessor, the new *MegaDisk* contains 38 different instruments — at least six or seven times the number found on most disks. A drum kit, a multitude of electric and synth basses, organ and keyboard sounds, aggressive synth sounds, and pads are just some of the sounds found on the *MegaDisk 2*.

Syntaur has specialized in memory-efficient samples — packing big sounds into the smallest possible sizes — and the *MegaDisks* take this concept to the extreme. While it doesn't work for some types of sounds, many samples — such as basses and synths — can often be whittled down to unbelievable sizes without any loss in sound quality. Using waveform editing and looping software extensively, Syntaur programmers Sam Mims, Kyle Kee, and John Gould also called on some sound programming "trickery" to create this latest collection of samples. Because of the extensive programming, the samples are very expressive, making full use of patch selects, velocity control, mod wheel, and CV pedal to modify the sound.

With tiny file sizes — averaging about 40 blocks — the instruments load in a heartbeat, similar to loading samples from a CD-ROM or hard drive. And the \$17.95 price works out to about 47 cents per instrument — a price that even most CD-ROMs can't touch.

### Classic Analog Synth Sounds Available for the ESQ-1

By popular demand, Syntaur Productions has produced yet another bank of patches for the En-

soniq ESQ-1 and SQ-80 synthesizers, focusing on exactly what these synths do best: analog synth sounds. Syntaur's *Soundset 6* has no pianos, clarinets, or slap basses — it is instead packed to the edges with phat synth basses, resonant sweeps, analog string patches, and many other classic sounds from the Moog/Arp/Oberheim era. These retro patches are just the call for much of today's hip-hop, techno, and dance music.

The bank of 40 new sounds costs \$19.95, and is available on data cassette and in a variety of disk formats (IBM, Macintosh, or Atari disk with loading software, or sysex disk for any Ensoniq keyboard with a disk drive.) The set is also available, together with Syntaur's hip-hop bank, *Soundset 5*, on ROM cartridge for \$59.95.

*MegaDisk 2* and *Soundset 6* are available from Syntaur Productions, 500 W. Prairie Ave., Eagle Lake, TX 77434; call (409) 234-2700 or (800) 334-1288.

### Rubber Chicken Software announces seven new CD-ROM's in native ASR-X format

Their previously acclaimed *Chicken CD-ROM I* and *II* have been translated and hand-tweaked — as well as adding some additional sounds. The *SamplerBank* (drums, loops, and synths), the *SamplerBank* (440MB of high memory sounds), and *Vintage Synth Bank* have been given the same treatment, as well as the *Pelle Pianos The Demos* CD-ROM and Do-It-Yourself Production's *Blue-Wave* vintage synths. Sounds appear in RAMKIT and translated format. Prices vary from \$49.95 to \$199.95 — please call or see the RCS website for details.

Also now shipping is *Module 3* and *4* of *Ensoniq ASR-X Tools*, which provides bulk translation of EPS/ASR sounds, and from scratch sound build-

ing and editing. *Ensoniq ASR-X Tools* is \$59.95, with free upgrades to registered owners.

For the Mac, RCS is now selling the popular *EPSm* program, a complete disk utility, file conversion, and instrument builder for EPS/ASR disks and sounds. Enables your Mac to read, write, and format Ensoniq floppy disks and SCSI Drives, and perform many other handy operations. Price has been tentatively set at \$39.95.

Lastly, RCS announces their new web site — [www.chickensys.com](http://www.chickensys.com). Users can take advantage of the EPS/ASR and ASR-X Knowledge Bases to answer simple-to-complex questions about their Ensoniq instruments. Sound and Software demos are available, as well as helpful product information. To celebrate, there are a couple of free sound disks you can download. There is also a 35-sound FREE demo CD-ROM you can request for a nominal handling charge.

Rubber Chicken Software Co., 714 5th Street SE, Willmar, MN 56201. 800-8-PRO-EPS, 320-235-9798, [support@chickensys.com](mailto:support@chickensys.com), [www.chickensys.com](http://www.chickensys.com).

### The BoWorks announces *The Collection, Vol. 1* — sound disk for Ensoniq MR/ZR Series.

*Vol. 1* of the *Sound Disk Series* provides two banks of sounds for the MR/ZR keyboards. There are a total of 80 new sounds designed to take full advantage of the powerful voice architecture and expressive controllers of the MRs and ZRs. From killer pads to hard-hitting basses and lush el-pianos, this is an ideal collection for the keyboardist playing a wide range of contemporary music. For further information, contact: BoWorks, phone: 614-431-2307, email: [BoWorks@aol.com](mailto:BoWorks@aol.com). BoWorks, 30 Dillmont Drive, Suite 186, Worthington, OH 43235.

# How to Use the *Rhythm Builder* For the ZR-76/MR-76

Paul Adams

This is one great program. I am just now moving up from an SC-1 to the exciting new ZR-76. The step-writing and real time writing of drum parts on the SD-1 was about the hardest thing for me. On the other hand, I was getting pretty good at it. Now with *Rhythm Builder* you can take your time, work up a good beat, do 8 variations, add 8 one bar fills and you are done with it forevermore (unless you want to pull it off your floppy and tweak it some more). If you are in a hurry or do not need 8 variations or fills you can cut corners by using copy to fill out the 16 spots. Then you can pop your personal rhythm into your ZR-76 and play it whenever you like. I am still in kindergarten on my computer and I felt stupid and confused several times trying to set it up, but I hung in, and finally made it work. Then I thought maybe I could save some others a few headaches by sharing the process. Here comes my attempt to walk you through it.

First, download the *Rhythm Builder* file from the Ensoniq web site. Yahoo or other search engines will take you there. Or you can go direct to: [www.Emu-Ensoniq.com](http://www.Emu-Ensoniq.com).

Punch up "Ensoniq Products" and then "Accessories" and you will see it. You can also go to: [Http://www.Ensoniq.com/Binary/RhythmBuilder.exe](http://www.Ensoniq.com/Binary/RhythmBuilder.exe) as on page 134 of the manual... I put this file on a floppy disk first so I could keep it for backup. It sets itself up under "Program files/EnsoniqRB/Rhythm Builder." The help file tells you all about it and some of you may be fast enough to read the manual off the screen but I

printed it and put it in a binder so I could study it carefully.

The easy part is making up the drum parts. What we don't already know we can get off the drum parts that have been or are being published. My interests are jazz and boissa and jazz waltz and I have lots of published samples. *Keyboard Magazine* usually has some drum tracks in every issue, and Jamey Aebersold also has published good drum stuff. A good suggestion in the *Rhythm Builder* manual was to use multiple tracks. You will notice that everything has to be on track one but you can put the snare on track 2 and the hihat on 3 etc and after you get each balanced and quantized you then merge them all back into track one. Then you are ready for your computer work.

To keep from losing things in the computer I gave each sequence a name I could live with and then added V1V2 etc for the Variations and F1F2 etc for the fills. The variations can be any length but they must be all the same length. I found 8 bars best for a start but I can see times I will use the others. Obviously it all has to be the same time signature — 4/4 or 3/4 or whatever.

These variations and fills are now 16 separate sequences in your ZR-76 and you now "save" them to floppy as Midifiles. The ZR manual covers all this very clearly. You then take this disk to your computer and copy the Midifiles to your hard drive. I made a folder "RBseq" under "Rhythm Builder" and it seemed to work out fine. The RB manual also suggests you keep the

disk in case you later want to change or add things. Good idea. I already did this.

The *Rhythm Builder* screen that pops up is easy to work with once you understand it. "Navigating" confused me a bit until I saw that the "Navigating" box pulls up your whole C-drive directory and you can then find your folder and the Midi file and punch them in as per instructions. Name your rhythm and list the drum kit you used and enter what category you want it listed under and your rhythm will be built, and then dropped on your hard drive. Mine went into my "RBseq" folder which was fine with me. Put it wherever you want it. I gave my rhythm the same name as I did on the *Rhythm Builder* screen and I still had to do the Windows "search" to find the first one. Once you find it you copy to another floppy disc and then you insert that disk back into your keyboard and load it. It is sort of like a shell game but keep your eye on it as it flops around and it will work fine. Write on your labels clearly so you know what is what. Raw variations and fills or finished Rhythm.

Now you have your personal custom Rhythm in your keyboard ready to use. Enjoy...

P.S. More good news. Ensoniq has now set up another great service for us ZRs and MRs. It is called "Rhythm City" and it is also under "Ensoniq products" where you found the "Accessories" above. It is new and it only has a few rhythms now, but it is made for any of us to upload our prize rhythms made with the *Rhythm Builder*. Then we can all download any or all that we like and pop them into our own boards. What a great idea. As you get a chance you might let them know you appreciate it. ■

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## What's an EMU?

Eric Montgomery

*[TH — Even though we're not going to be covering Emu gear during our last year, we still figure that, hey, the merger goes on and this should still be useful for our Ensoniq-type readers...]*

If you're thinking about a really big bird from down under that some people eat, you got the wrong Emu. We are talking about the kind that makes samplers. This little note is being sent to you to introduce Ensoniq users to a new line of professional gear, EMU! EMU is under the Creative umbrella and the Sister Company to Ensoniq. EMU and Ensoniq are becoming EMU<>ENSONIQ. Their gear, like Ensoniq, can be heard in movies, videos and in myriad

music genre. Let's dive right in and see what they got.

Some of the most exciting gear they have released has been a set of modules that are geared for certain types of music — Carnival, Orbit and Planet Phatt. Carnival has sounds that are set up for the Latin music scene. Orbit covers the techno/dance world and the Planet Phatt has R&B and hip-hop in the groove. All three modules feature 32-note polyphony, 100 drum and or music patterns (yes, they can be synched to incoming MIDI clock), 6 audio outputs, 640 presets, 2 synchable LFOs per preset, 32-pole resonant filters and some wild and crazy colors. Don't let the shiny red, gold or

purple 1 rack space boxes fool you, after hearing them you'll know that these are some serious musical tools.

Connect an Orbit or any of the other modules to a Launch Pad and man do you have something cool! The Launch Pad is a desk top performance controller. It has 1 octave of velocity sensitive drum pads, a pitch wheel, modulation slider, 4 assignable sliders, and the ability to transpose -4 to +5 in octaves and in 12 half steps, transmits MMC (MIDI Machine Control) and MIDI clock. Want to do some res filter work? Plug it in to a Planet Phatt or maybe an Orbit and go to town moving the assignable controllers and get the coolest most intriguing things you've ever heard. The Launch Pad really turns the whole idea of using controllers into a fun-filled performance instead of this technical scary thing that only computers or really expensive keyboards can do. Take more control over your music. Check out the Launch Pad!

As you probably already know, EMU is a big sampler company that has been around since 1972. Since then they have gone from the original Emulator to the E-6400 and E-4X/K. These monster samplers boast a maximum polyphony of 128 notes, 8 analog outs, a max of 128 megs of RAM, up to a 2gig internal hard drive, 24-bit effects, a big graphic display (great for waveform editing), 48-track sequencer, AES/EBU digital I/O and much much more.

If you like the specs and I know you'll love the sound of the EOS series of samplers, try turning any EOS sampler into a synth! Purchase the E-synth 16-MB ROM upgrade and install it into an EOS series sampler. Or maybe, just buy an E-synth keyboard or rack from the jump. Now you have the power of an E series sampler with a 16MB ROM sound set. Of course, in EMU fashion, you can go a little further by adding the brand new Orbit/Phatt ROM sound set to the EOS series. If you get into an E-6400 (entry EOS sampler), you can actually add every option to get to an E-4 or E-synth. If you need a serious sampler, there is no excuse now, EMU's got what you need!

Let's assume you need the EOS series quality but the budget has got you a little constrained. Here comes the ESI-4000. This cool, easy to use 2 rack space sampler has 64 note polyphony, 10 outputs including the S/PDIF digital I/O (4 analog outs are standard), optional effects, SCSI (standard) and an internal ZIP

drive (optional). All in all, the ESI-4000 is indispensable for creating and editing your own samples, no matter what type of music genre.

Now, for something completely different, introducing Audity 2000. If you think you've heard some good arpeggios, you haven't heard nothin' yet! This is an arpeggio on steroids! The Audity 2000 can trigger 16 different arpeggios at once. Audity is a 1-rack space powerhouse. Audity features 640 ROM presets, 256 user presets, 50 different 12th order resonant and modeling filters, 32-note polyphony (soon to become 64 note at no charge!), 6 analog audio outputs, S/PDIF digital out, expandable ROM and the list just goes on and on. Something that stands out with EMU gear is the ability to use controllers. There are 4 knobs on the front of Audity that allow easy access to filter cutoff, filter attack, resonance, gate, movement and many more edits. It is hard to describe the sound of this new type of module because the 200 waveforms include analog, noise and modern waveforms. It is a must hear. This is the sound of the future.

Lastly, I have got to mention one of the greatest things to ever happen to a PC. It is called APS, *Audio Production Studio*. It is like putting an E-6400 in your computer! APS will replace your sound card I/O with the same quality I/O that is on the E-series samplers. APS will allow you to sample (using the included *Sound Forge* software or your choice of sample editor), sequence (using the included

*Cakewalk Express Gold* software or your choice of sequencer) and make patches using the included *Vienna* software. APS includes some high quality effects including reverb, chorus, flanger, auto-wah, pitch shifter and distortion. The sound set includes a 2 Meg GM and an 8 Meg GM sound set. Eventually the Sound Font library will grow to include just about everything, the legendary Proteus sounds, maybe E-series samples, your imagination is the limit!

Whew! That's it! I think that you've just got a good overview of EMU products. As always, be cool, be funky, make music, think "EMU<>Ensoniq!" ■



*Bio: Eric Montgomery has written demos for Ensoniq products and Christian Music projects. Eric is almost finished working on his next CD and still enjoying that thing called life!*

# Communing with your Ensoniq

## Part II

Bob Lang

In the first part of this series (Issue 161) we reviewed the MIDI specification, looked at computer requirements and explored the WINDOWS API. In this part we will take a look at a real program and see how the API and messaging works to allow you to commune with your Ensoniq.

### Programming Language

To begin programming one must first pick a programming language. One has many choices: PASCAL, C, FORTRAN, VISUAL BASIC, etc. With more than 3 million developers using it, Microsoft VISUAL BASIC 5 (VB5) is a good choice for quickly developing Windows based applications.

As you might imagine, dealing with all the possible combinations of windows, events and messages could be mind boggling. Fortunately, VB5 insulates you from having to deal with all the low-level message handling. Many of the

messages are handled automatically by VB5; others are exposed as Event procedures for your convenience. The only messages we will handle on a low-level are the MIDI messages.

### VB5 Advantages

VB5 is a rapid application development tool. Windows and controls are created using a drag-and-drop user interface. The programming required to display buttons and controls is minimized. The VB5 programmer's interface, shown in Figure 1, is well thought out and eliminates the need to memorize exact statement syntax. VB5 also has good debugging features which allow the programmer to execute one statement at a time and view variables during program execution. VB5 has some new features like the ADDRESSOF function that is important for MIDI work. VB for applications (VBA), a relative of VB5, now comes as part of Microsoft WORD and EXCEL. There is even a project on the Internet to write a MIDI synthesizer inter-

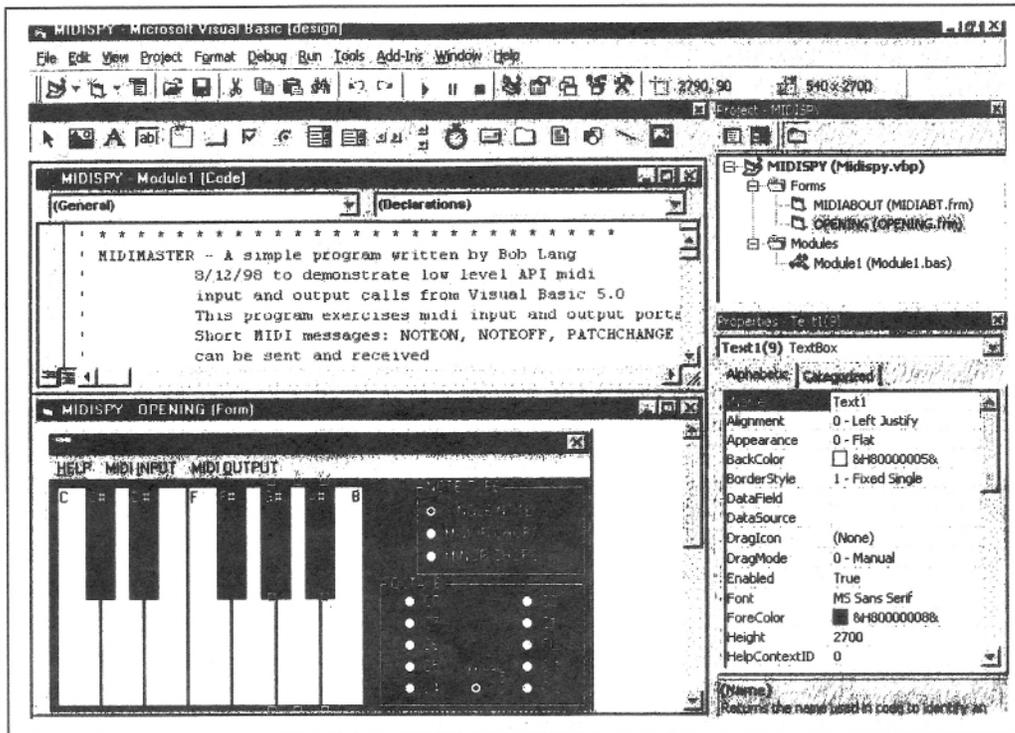
face in EXCEL using VBA!

### VB5 Disadvantages

VB5 applications are not small. While the executable program (EXE) may be small, the DLLs required to run the programs may be several megabytes. VB applications are hard to document and debug because the processing is done in real time and the execution is event driven. VB5 is expensive with versions ranging from \$80 (Learning version) to \$1000 (Enterprise version).

### Special Needs and Characteristics

One of the functions one needs is a way to pass the address of a subroutine to an API function. The ADDRESSOF operator, which is only available in VB5 or later, will do the trick. Microsoft says, "Using ADDRESSOF may cause unpredictable results if you don't completely understand the concept of function callbacks!" This is true and during the development of the program documented in this article, I have crashed the program, VB5, and the operating system many times! Debugging is difficult because BREAKPOINTS that one might set, may not work properly when MYWINDOWPROC and ADDRESSOF are being used. But at least now you have a working program model to use as a guide.



## Sample Program

Using the information in this and the preceding article we are ready to write a simple program called MIDISPY, shown in Figure 2, that passes information to your Ensoniq synthesizer and accepts MIDI information from your synthesizer. The program allows the user to select the MIDI ports to be used for input and output. The program sends NOTEON, NOTEOFF, and PATCHCHANGE MIDI commands. Major and minor chords can be sent to the Ensoniq.

All MIDI commands are received and displayed except MIDI clock and active sensing. A piano keyboard on the screen is used to send notes and displays notes received. Keys turn blue when they are sent or received. Received MIDI information is displayed in hexadecimal format. An octave indicator shows or sets the octave of the note(s) sent or received. A screen button requests a single sound dump SYSEX which is displayed on the screen.

The source code and executable program are available on the Internet at: <http://www2.netdoor.com/~rlang/midispy.htm> and should be used to follow along with the explanation of the program below. The MIDISPY.VPB text file contains the information about which other files are part of MIDISPY. This is the file that is loaded into VB5 to begin editing. It is not edited directly by the user. OPENING.FRM is the text file that contains all the coding related to the OPENING form. The FORM\_LOAD subroutine that starts the program is located in OPENING.FRM. This file includes information on the size, color, controls on and placement of the OPENING form. The OPENING.FRX file contains binary information such as images to be used on the form.

MODULE1.BAS text file contains declarations of the WINDOWS API functions that are needed in the program, declarations of variables that are common to all forms and subroutines that may be used anywhere in the program.

## MIDISPY

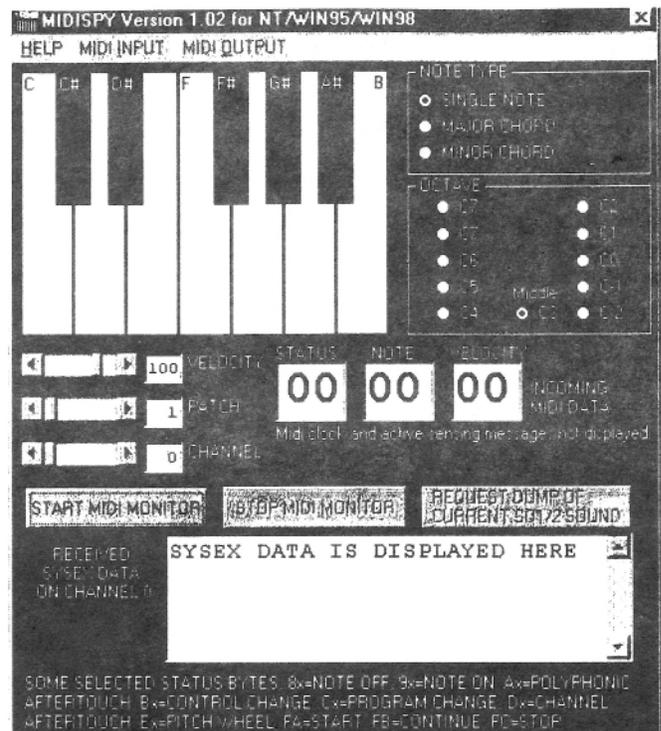
The first subroutine that is executed is FORM\_LOAD. This routine first initializes KEYCOLOR array to the proper piano black and white colors. The VERSION of the program is put into the OPENING Window caption to identify the version of the program to the user. midiInGetNumDevs is called to determine the number of MIDI input devices. Then midiInGetDevCaps is called for each of the MIDI input devices to get their names. The names of the devices are loaded into the pulldown menu labeled MIDI INPUTS. Finally the first MIDI input device is selected as the default device to use with a call to OPENMIDIIN(0). A similar process is repeated for the MIDI output devices. At this point the OPENING window will appear on the computer screen

and the program is idle and it is up to the user as to what happens next.

## Transmitting Data

Assuming the default input and output devices are satisfactory, the user may click the left mouse button down on one of the piano keys on the screen. This will trigger the Text1\_MouseDown subroutine. The piano keys are actually twelve VB textboxes. The INDEX returned when Text1\_MouseDown is called is the piano key number (0 through 11 = C through B). Next the MIDI NOTEON message is built by combining the NOTEON nibble with the channel number nibble, HSCROLL1(2).VALUE. Next the octave of the note is determined by looking for which of the OPTION2(0-10) radiobuttons is selected. Once the octave is known the MIDI note number, NOTEZ, is calculated by adding the piano key INDEX to the octave OFFSET. At this point the piano key is turned blue and the note is played with a call to the PLAY subroutine. If a major or minor chord has been selected with the OPTION1(1) OR OPTION1(2) radiobutton, the remaining notes of the chord are colored blue and played. The Text1\_MouseUp subroutine does the reverse of the Text1\_MouseDown routine in that the NOTEOFF messages are built and sent and the piano keys are reset to their original black or white colors.

The PLAY subroutine builds the MIDI message for the midiOutShortMsg API function to send.



The MIDI message must be packed into a four-byte-long variable, MIDIMSG. This is done by a series of additions and multiplications. The first byte of the message is put into the low order byte of MIDIMSG. The note number is put in the next lowest byte by multiplying by 256 (HEX 100) and the velocity from HSCROLL1(0).VALUE is put in the next lowest byte by multiplying by 65536 (HEX 10000). Then midiOutShortMsg immediately sends the message to the open MIDI output device.

The other way a MIDI transmission occurs in this program is by movement of the horizontal scroll bars HSCROLL1(1) (PATCH) or HSCROLL1(2) (CHANNEL). If the patch or channel is changed by moving the scroll bars, the HSCROLL1\_CHANGE subroutine is activated. HSCROLL1\_CHANGE sends a patch change MIDI command using the new patch and channel.

## Receiving Data

Receiving data is a little more complicated than sending data. In order to start receiving MIDI data, the user must press the "START MIDI MONITOR" commandbutton which calls the START\_CLICK subroutine. First WHANDLE is set equal to the handle of the OPENING window. The SetWindowLong API function is used to set the window procedure from the default to the user written window procedure called MYWINDOWPROC. Note that SetWindowLong requires the address of the new window procedure so the VB5 function ADDRESSOF along with the name of the procedure is used to satisfy this requirement. Now that the window procedure has been redefined, the MIDI input device can be opened. This makes the connection between the MIDI input device and the window procedure through WHANDLE. The input is started with a call to midiInStart. The program is now ready to receive and send data.

The MYWINDOWPROC subroutine is activated anytime a message is received by the OPENING window. The message can be a mouse move, a button click, a MIDI message, etc. The variable UMSG contains the message received. MYWINDOWPROC checks to see if UMSG=MM\_MIM\_DATA, that is, is it a MIDI message? If it is not a MIDI message, it is passed on to the original window procedure using the CallWindowProc WINDOWS API function. If UMSG=MM\_MIM\_DATA the message is processed by MYWINDOWPROC by calling the DISPLAY subroutine.

The DISPLAY subroutine breaks apart the MIDI message stored in the passed argument, PARAM1. First the command byte is stripped off by ANDing it with FF. At this point the command byte is checked to see if it is a MIDI clock signal (F8) or active sensing (FE). Because so many of these are sent they are ignored by the program and the subroutine exits. Otherwise the command nibble and channel nibble are stripped off the command byte. The channel number is displayed in the horizontal scroll control, HSCROLL1(2). Next, separate processing

is done depending on whether the command nibble (CNIBBLE) is a NOTEON, NOTEOFF or PATCHCHANGE.

For a NOTEON, the NOTE is decoded from PARAM1. The octave is calculated and the OPTION2(0-10) radiobutton indicating the octave is selected. Next the note velocity is decoded from PARAM1 and displayed in the horizontal scroll control, HSCROLL1(0). Some keyboards send a NOTEON with a zero velocity instead of a NOTEOFF. The note velocity is checked at this point and the piano screen key corresponding to the note received is set to its default color (black or white) if the velocity is zero or blue if the velocity is not zero.

For a NOTEOFF the processing is similar to the NOTEON except the piano screen key corresponding to the note received is set to its default color. For a PATCHCHANGE, the new patch number is displayed in the horizontal scroll control, HSCROLL1(1).

Finally the TOHEX subroutine is called to display the first three bytes of the MIDI message in hexadecimal notation in textboxes TEXT1(0-2).

That takes care of sending and receiving short messages like NOTEON and PATCHCHANGE. Now we turn our attention to SYSEX data. To start a SYSEX dump to the computer, one must send a request which is itself a SYSEX dump. In the MIDISPY program the request is sent by clicking on the "REQUEST DUMP OF CURRENT SQ1/2 SOUND" commandbutton which calls the SYSEXBUTTON\_Click subroutine. The SYSEXBUTTON\_Click subroutine first stores the SYSEX message that will instruct an SQ1/2 Ensoniq to send a SYSEX dump containing the settings for the current sound to the computer in a buffer called MYREQ. A pointer to the buffer and the length of the buffer are placed in SOUNDREQ. Before the request is sent, the SOUNDREQ input MIDI header, which contains information on the input buffer, is prepared and made available to the open MIDI input device. Finally, the midiOutPrepareHeader and midiOutLongMsg are used to send the request. The midiOutUnprepareHeader program causes the program to loop until the message is successfully sent.

As above, the MYWINDOWPROC subroutine is activated anytime a message is received by the OPENING window. MYWINDOWPROC checks to see if UMSG = MM\_MIM\_LONGDATA, that is, is it a SYSEX MIDI message? If it is a SYSEX MIDI message, the DISPLAYHEX subroutine is called to display the data received in hexadecimal format in the TEXT4 textbox. The midiInUnprepareHeader API function is called to clean up the input header and allow it to be re-used.

## Cleanup

That is pretty much the guts of the program but before the program can end there is some cleaning up to be done. First of all, the program will not let the user exit before stopping the MIDI

input by clicking on the "STOP MIDI INPUT" commandbutton which calls the STOP\_CLICK subroutine. The midiInReset API function is called to stop MIDI input. The user is asked if he wants to clear the MIDI data textboxes. If yes, the DISPLAY subroutine is called with an argument of zero to clear the MIDI data textboxes. The on screen piano keys are reset to their default colors. midiInClose is called to close the MIDI input device. Finally, the window procedure is reset to its default value.

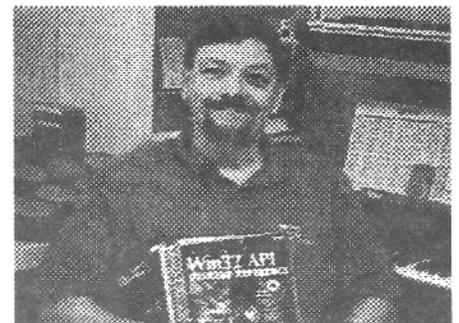
## Nothing Can Go Wrong... Go Wrong... Go Wrong...

Now you understand how the midispy works and you fire it up. Why doesn't it work? After you check all your MIDI cable connections and Ensoniq settings, verify the following check some of these symptoms:

1. I think the Ensoniq is ignoring MIDISPY. The program defaults to use the first available MIDI input and output devices. If the Ensoniq is connected to another device you must select the correct device from the dropdown menus marked "MIDI INPUT" and "MIDI OUTPUT."
2. I can send NOTEON and NOTEOFF messages to the Ensoniq okay, but the onscreen keys don't change colors when the Ensoniq keyboard is played. You must press the "START MIDI MONITOR" button. All MIDI input is ignored unless this button is pressed.
3. I can send and receive everything except current sound SYSEX message. This could be two things. First, the Ensoniq MIDI base channel must be set to 1. Secondly you would have this problem if you are not using an Ensoniq SQ1/2. If, God forbid, you were using an KORG M1 you would have to change the data in the MYREQ array to "F0 42 FC 30 00 19 10 F7" to get the current sound dump.

## Conclusion

So that completes the summary of the MIDISPY program. I've introduced all the basic API functions of the Windows system for doing basic MIDI transmitting and receiving and shown you how to use them in the MIDISPY program. You should have the groundwork to start writing your own Ensoniq editor or utility. Good luck!



*Bio: Bob is an engineer by profession and a musician by inclination.*

# The Interface

Letters for The Interface may be sent to any of the following addresses:

U.S. Mail - The Interface, Transoniq Hacker, 1402 SW Upland Dr., Portland, OR 97221

Electronic mail - Internet: [interface@transoniq.com](mailto:interface@transoniq.com). In many cases a quick answer can be obtained by posting to our interactive, on-line Interface at our Web site (<http://www.transoniq.com/interface.html>) or calling Ensoniq CS at 610-647-3930.

This is probably one of the most open forums in the music industry. Letter writers are asked to please keep the vitriol to a minimum. Readers are reminded to take everything with a grain of salt. Resident answer-man is Pat Finnigan (PF). Letter publication in the printed version of TH is subject to space considerations.

TH -

I have problems with getting my internal Zipdrive to operate with my ASR-X. I have set the SCSI to 5 (like the Zipdrive) and I have SCSI termination on. I insert a total blank Zipdisk (I was down to a computer shop and checked that it was empty), but I still can't format the disk. The messages I receive is "Disc not ready" and "SCSI 5 not ready" etc. What have I done wrong?? Maybe I should try the SCSI port on the backside? When I "search for SCSI device" the screen counts up to 5 and stops for several seconds then continues to 7 and nothing! I have tried SCSI termination off, reset the SCSI buss... but NADA.

Help!  
Regards,  
Toby  
[Mattssons@hotmail.com](mailto:Mattssons@hotmail.com)

[PF - Toby: The issue here is that the ASR-X cannot have the SAME SCSI ID as the Zip drive. As with older Ensoniq SCSI-able stuff, I'd set the internal SCSI ID of the ASR-X to 3, and the Zip SCSI ID to anything BUT 3. You should spool up and be happenin'...]

TH -

Does anyone know of any 3rd party companies that supply parts for the EPS?

[Raidan@webtv.net](mailto:Raidan@webtv.net)

[PF - Raidan: Only Rubber Chicken Software and Syn-taur Productions, and that's primarily SCSI interfaces. I'm sure Ensoniq still has the dies for all their proprietary VLSI chips, but running them would cost such a fortune it's an economic infeasibility issue. Shame to see such great equipment die of neglect...]

Dear TH,

I've just bought a CD-ROM containing sounds in (unfortunately!) the AKAI-S3000 format. Is there any possibility to access these sounds. I just checked the Ensoniq homepage but there is still no OS update to read those files.

Thanks for your help,  
Thorsten Lau :-(  
[lau@et.ruhr-uni-bochum.de](mailto:lau@et.ruhr-uni-bochum.de)

[PF - Thorsten: Only by using a sample editing program that will write these back to disk in Ensoniq format. Sorry - they never got past the S-1000 format in the last spin of the ASR's OS...]

[Thorsten - But how can I get these Akai S3000 Samples from the CD-ROM in the PC? And what Sample Editor can import them and export them as Ensoniq files?]

[PF - Thorsten: By SDS'ing from an Akai into the PC via MIDI. Awfully slow. I don't think Passport ever ported Alchemy over to the PC. You might try SoundForge's Sonic Foundry or [www.giebler.com](http://www.giebler.com) to see if he's written an Akai-Ensoniq xlator. The key thing here is getting the PC to recognize the Akai CD file format...]

TH -

Can a CD player be used to load sequences into the

TS-10/12's?

I have about 700 sequences on about 14 floppies. Is there someone, or some company that will put these on a CD for me so I can access them quickly on a gig?

I use a TS-10 and TS-12 together, with the 10 being the slave. I may be getting old and forgetting things, but it seemed as if when I transposed the 12 in either sound or preset mode, the MIDI cable sent the transposition to the slaved 10 and transposed it for me. I can't seem to get my 10 to do this anymore. I think I checked the obvious things, but should this be hard to set up?

Glenn Normand  
[gnormand@dibbs.net](mailto:gnormand@dibbs.net)

[PF - GNormand: Good question. Any readers doing this on the side (or on the front)?]

[Eric Montgomery (Emu-Ensoniq Technical Support) - I looked into the situation and found that the TS does not have the ability to load sequences via SCSI. The SP-4 and TS OS can read EPS, EPS-16+ and ASR-10/88 samples only.]

Hello Ensoniqers,

Was the TS-12 the greatest synth of all time!!?

A few years back I bought a TS-12 and due to some tough times financially I had to sell it. I am now realizing that with the exception of two drawbacks it may have been the greatest synth of all time! (Drawbacks being, No 88-key model available, and only 32 voice poly, a synth with that much power needs about 128 voice poly.)

Here are a couple questions, before I start to look for a TS used...

1. If a patch is an evolving Hyper-Wave, and it is put in the "minimode" pitch type and played legato, will the Hyperwaves continue to evolve as long as notes played are legato, or will the Hyperwave list simply restart at the beginning each time a note is added?
2. How difficult would a voice expansion modification be... i.e. turning the TS into a 64-voice unit or 128-voice unit for a small fee?
3. I can't remember, how many Hyperwaves could be in one list?
4. Are Hyperwaves available on the new ZR-76?

5. What is the difference between Transwaves, Hyperwaves, and 2nd generation Transwaves?

6. How many of you would like to help me petition Ensoniq to make the TS-88 - a 64 or 128 voice synth with 88 piano weighted keys, and maybe a 2nd fx generator, and sequences saveable as SMF's!??

Thanks,  
Marcus  
[sonicman001@worldnet.att.net](mailto:sonicman001@worldnet.att.net)

[PF - Marcus: Answers, in order:

(1) Correct. The "retrigger" setting may alter this, but I think you've got it right here.

(2) Impossible. No tools, resources, or engineers remain to conceive and manufacture such a product in an economically feasible manner. And for a discontinued synth? Don't hold your breath...

(3) Neither can I. Readers?

(4) Nope. The ZR is a wavetable player.

(5) A couple of letters (nyuk-nyuk). Seriously, I've forgotten. Readers?

(6) See #2 above...]

[Michael Hyman ([mikeh@Op.Net](mailto:mikeh@Op.Net)) - (3) You can have up to 16 STEPS in one Hyperwave list. If you're a really clever patch programmer, you can get around this limit in various tricky ways...

...Speaking of which: I've decided to give away my own original TS patches and detailed descriptions on my Web site: <http://www.op.net/~mikeh/tspatches.html>. They are mostly hyperwave patches, and are fun and unusual. Enjoy!

- Mike "Master of the Hyperwave" Hyman]

[Dave Simenson ([fivetone@elite.net](mailto:fivetone@elite.net)) - Answer: Yes. Next question?

I love my TS-12, and also play an MR-Rack. For power, versatility, and ease of use, you can't beat the TS.]

TH -

I came across a Maartists SCSI kit (since discontinued) which I was contemplating for a cheap upgrade for my EPS (with an Ensoniq 2X mem expander kit). I'm aware that cross-brand kits may not work. Anyone know if this combination does? And will ZIP drives work with this combination?

Bryan Tan Suan Tiu  
[bryantan@singnet.com.sg](mailto:bryantan@singnet.com.sg)

[PF - Bryan: This interface will work famously with your 2X expander (that's IF it accepts a SCSI interface), but will NOT communicate properly w/a ZIP drive. The ONLY SCSI interface approved for use with Zip drives is the Rubber Chicken SCSI interface. VASTLY superior, imminently more flexible, YEARS more current, this is THE SCSI interface to buy.

But I'll bet your 2X doesn't have the SCSI connector...]

TH -

Is it possible to use Giebler utilities to transform wav files from a Windows NT computer, then burn them onto a recordable CD and have the ASR-88 able to read it from its CD ROM? If so, and anyone has experience doing so, please let me know... Including how to do it effectively.

Shteev  
[Plutocat@mindspring.com](mailto:Plutocat@mindspring.com)

[PF - Shteev: Geez, if I have a Chevrolet, put Shell gas into it and run into a Ford, can I take it to a Nissan dealer and get it fixed so my wife thinks it's a Toyota? I can't resist this kinda answer to that kinda question, but yeah, it's a valid question, so...

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(A) The Giebler Utilities allow you to move Ensoniq (as well as other manufacturer's) proprietary file format sounds to and from your computer for archival purposes. They do NOT turn \*.wav files into Ensoniq-readable sounds (or Fords into Chevys). You'll want a program like AWAVE to do that. Since the Giebler Utilities only run in a DOS window (or in DOS), NT ain't an issue. Check out [www.giebler.com](http://www.giebler.com) for the skinny on all his cool x-platform utilities and wareS...

(B) As far as burning an ASR-readable CDROM, I've done that on a Mac, but as you have a PC, I'd defer to [www.soundcentral.com/~chickeneps](http://www.soundcentral.com/~chickeneps) and check out the "Recording Ensoniq CDROMs" faq: Garth has good tips there.]

TH -

How do you use the MR with a Windows sequencer like Cakewalk Home Studio and be able to access the ROM and RAM patches, i.e. get past just GM sounds?

Thanks,  
Jack Hutchinson  
[jhutchinson@branford.k12.ct.us](mailto:jhutchinson@branford.k12.ct.us)

[PF - Jack: I don't know that Cakewalk Home Studio supports anything BUT the GM spec. If it lets you select different synthesizer sound maps, you want to download the MR IDF (instrument definition file). Matt Savard has an MR-61 map with the optional Urban/Dance card installed. Check him out from our "Related Links" page...]

[Dave Simenson ([fivetone@elite.net](mailto:fivetone@elite.net)) - You need the MR instrument definition file, MR.ins. I got this file from either the Ensoniq or Cakewalk websites, can't remember which. Then, in Cakewalk, you define the instrument bank for each part, and you can use all those juicy MR ROM and RAM sounds, skipping the fairly insipid GM sound bank. It works great!]

Hello,

I use an ASR-10 configured for audio-track recording. I am currently using a Bournoulli external hard drive which works fine. I recently purchased a Syquest Syjet 1.5, hoping to use this in chain with the Bournoulli drive to write and record songs. I have not been able to get the ASR to read the Syquest. When I try to format the Syquest disk, I get an error message: "disk not responding." Is it possible to chain these two hard drives? What procedure must I take to get the ASR to read the Syquest drive?

Thanks,  
Elliot Schei  
[egschei@ouray.cudenver.edu](mailto:egschei@ouray.cudenver.edu)

[PF - Elliot: I don't know if Ensoniq has tested the Syjet with the ASR and pronounced it a compatible device or not. Check with Garth Hjelte of Rubber Chicken Software at [www.soundcentral.com/~chickeneps...](http://www.soundcentral.com/~chickeneps...)]

[Eric Montgomery (Emu-Ensoniq Technical Support) - Ensoniq tested the Syjet 1.5 Gig hard drive and found that it worked fine. Of course, as time has gone on we have not re-tested the drive to see if things have changed. (Remember the Iomega Zip drive?) The first step to get the Syjet to work is the same as with the Zip. If my memory serves correctly, the Syjet cartridge does not have a physical write/protect window to move, it is in software. The Syjet cartridge that comes with the drive is locked (protected) so that it cannot be formatted. You will have to either buy a blank cartridge or use a computer that has a SCSI card to un-protect that "tools" cartridge.

Be sure that you terminate the drive. You may have to take the Bernoulli drive out of the SCSI chain while formatting as another experiment in getting it to work.]

Dear Sirs,

Could you please advise me about the following: I'm looking for a PC format CD-ROM with sounds for the ASR-10. Do you know some that are definitely worth having?

Yours Sincerely,  
Nikola Medic, London, UK  
[nikola@medic.freemove.co.uk](mailto:nikola@medic.freemove.co.uk)

[PF - Nikola: I highly recommend The Sample CD from Rubber Chicken Software (<http://www.soundcentral.com/~chickeneps>). It's around \$40 US and includes the runtime version of Gary Giebler's Ensoniq Disk Extractor. Super deal, LOTS of useful sounds as well...]

Hey guys,

I just started a scribe with you and I'm glad I did. I've got a prob. I have the ASR-88 with a Zip and the CDROM drive it came with. Not so long ago I turned everything on like always and the CDROM will not function. I took it all apart and tried it one-by-one. The ASR seems fine. I tried the Zip and it was okay. But when I tried the CDROM, it keeps telling me that there's an unconnected device. I tried other cables, same thing would happen. The CDROM looks fine - I turn it on the light comes on the disc spins like always. But when I turn on my ASR it acts like nothing is there!

Please, can any one help? I have no other spot to go to.

DIGILIN@aol.com

[PF - DIGILIN: Ensure the ID of the ZIP and the CDROM are not set to the same ID (5 or 6).

Further, ensure the ZIP is the last device in the chain, with termination set to "ON" on the ZIP. If the CDROM has an external terminator, then place it as the last device in the chain with the Zip Drive's termination set to "OFF"....]

Hi again Hackers -

## Classifieds

### HARDWARE/SOFTWARE

For EPS/EPS16+/ASR: SLT 1 to 5, 10 disk sets: \$20 each. ESS 1 to 6 & 10, 3 disk Signature Series sets-\$15 each. AS-7 Baldwin Piano 5 disk set for ASR/TS: \$15. Sample Bank CDROMs for ASR & PC: \$25. CDROMS for ASR/ASRX: Ultimate CDROM: \$50. CDR-11 Keyboards: \$55. CDR-8 Orchestra: \$55. CDR-10 Pop and Rock: \$55. State of the Art Natural CD Rom, Akai format: \$50. Steve Stevens Guitar CD Rom, Akai format: \$85. Syquest 270MB removable SCSI Drive with 5 cartridges for a total of 1.35GB of storage! 1 year old and in great shape, includes SCSI cable \$165. Contact: Boris Korol (613) 228-9846 or email: [sampleit@hotmail.com](mailto:sampleit@hotmail.com)

E-Prime: 76-note weighted keybd, 64-note polyphony, 16-trk seq. memory card, manuals, Hybrid case: \$1350. U pay freight: COD cash - same way I buy equip. Reason for selling: getting 88-note machine. 734-776-7678 or [garyallan@ameritech.net](mailto:garyallan@ameritech.net).

Help! Am willing to trade straight up my TS-12 (OS 3.10) w/case for a TS-10 w/case. Nerve damage in my right hand means switching to a nonweighted keyboard. Have 1000's of sounds and samples. Call: 516-471-6916, A1.

When the music's over, ya gotta sell and move on! EPS-16+ turbo rack, all the goodies: \$800. ESQ-1 with E-PROM recordable: \$450. Alesis 1622 16-channel

I'm very happy to report that since my last posting, I found an ASR-88 in beautiful condition. I called Rogue Music in NY, and the first one they'd ever seen had just come in that very day! Is this blessed or what?

Since I'm "scuzzily challenged" I have to ask what is probably a dumb question: Is there a way to hook my new 88-key beauty and my ASR-10 rack mount to the same Syquest drive, or do I need separate ones? Also, does anyone know if the two little holes on the strip along the back are to hold a music desk, and if they are, where I can get one?

Thanks for all your fine answers,  
Peter Heim  
[pch7@interport.net](mailto:pch7@interport.net)

[PF - Peter: Do NOT connect a common storage device to two Ensoniq samplers. They both share a SCSI ID of #3. And, by definition, NO two devices on the same SCSI chain can share the same ID #. Terje Norstad (author of EP5m and other required Mac->ASR utilities) elaborated some very pertinent file allocation table issues in response to a theoretical setup like this last year.

You'll have to do the 610.647.3930 dance to order a music rack to fill those holes. Luckily, it has no SCSI ID #...]

Hi,

My ASR-10 has DI-10 and I have a CDROM writer SCSI. How can I record into CD from ASR-10?

dThanks,  
Carlos  
[carlosm@mbasystems.com.ar](mailto:carlosm@mbasystems.com.ar)

[PF - Carlos: You're one of the few to bag the Digital I/O card for the ASR-10. However, the addition of the digital I/O doesn't mean you can connect a CD writer directly up to the ASR and record CD's. You'll still need a computer and CD writer application software (Adaptec Toast is a favorite) to write CD's that the ASR can read...]

mixer: \$400. Roland U-110 PCM sound module: \$400. ART MultiVerb LT: \$200. Turtle Beach Pinnacle Hard Disk Recording Card (IBM compatibles), Cakewalk 5.0: \$400. Bernoulli 230 Hard Drive (for EPS+) PLUS CD-ROM: \$400. Rubber Chicken CD's I & II, Midiman 2x4 merge box w/2x2 addition: \$100. 2-In, 6-out switchable mid junction box: \$100. Will consider best offers by end of month. Call quickly. Kevin: (719) 568-5280.

EPS Classic for sale! Very Heavy-Duty ATA flight case. PS Systems 4X expander. 250+ floppies, with printed listing, of sounds. Home seldom used only - Never used live or in studio. Excellent condition! Best offer - Will separate w/case. Finale 3 - Notation Software. In box. Full documentation. \$75 obo. Keith Mullin, 217-221-7267 days, 217-224-4036 nights, [kmullin@harris.com](mailto:kmullin@harris.com).

### FREE CLASSIFIEDS!

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Hey TH,

That's sad news [announcement in #161] – I hope you'll kick that EMU-vibe off – 'cause we're a couple of freaks here that'll love to see some weird merge of Wave-boy-grains/pitchwarp, DP-4, Ultra-Proteus/Z-plane with stereo audio-in and some real-time audio modulation messed up with sample-playback and ROM sounds – all in a small handy box of one unit-space – you know??

I hope you keep them working for the travelling composer/musicians – not only for the studio-crew.

Best greetings,  
Jorgen Teller  
DELETE@compuserve.com

[PF – Jorgen: Just to show that I'm not bitter about these guys dumping us, here's a plug for them. Check out the Audity – it's a supercharged Fizmo in one rack space...]

Hello,

Which parameters should I use and how on an Ensoniq **Mirage** (model DSK-8) to use it as an external keyboard to play through my MIDI port at my Soundblaster soundcard to Cakewalk 6.0 which will be my sound module? In Cakewalk I have set MIDI in as sb MIDI in [330] and MIDI out as sb sequencer [220]. I hope you are able to help me.

Jens  
Denmark  
jens\_dra@post9.tele.dk

[PF – Jens: As the Mirage is not a multitimbral instrument, you simply connect a MIDI cable from the MIDI OUT of the Mirage to the MIDI IN of your MIDI/Gameport adapter. The Mirage normally defaults to MIDI Channel #1 output (it xmits MIDI data on Channel #1), so you should be good to go. Try a test track or two just to ensure Cakewalk is receiving MIDI data...]

TH –

I know this is sort of off the general topic, but I noticed a recent comment about Fatar controllers "failing at an alarming rate." I use Fatar Studio 90's in a "piano show" in Providence, RI – they take quite a pounding three nights a week. They are not designed for that type of use. Plastic pieces constantly break in the instruments' action, counterweights snap, pivot rods work out of position. They are a constant maintenance nuisance – I have to do most of the work. In two and a half years in this show we've entirely replaced the keybeds in 4 instruments – at over \$400 a pop. Fatar customer service is great and co-operative, but there is stinking cheese in R&D.

Also – if you ever open one of these things up – wear gloves!! They have lots and lots of REALLY sharp sheet metal exposed. If anybody knows another, more appropriate place to post, let me know, or pass it along yourself.

This magazine is the greatest – I hope Ensoniq can somehow return to its roots in designing cutting edge, gazillion featured, low cost instruments so the "TE" can stay alive. Thanks for all your efforts (a loyal subscriber since issue #1).

Joe Rose  
devoid2@ix.netcom.com

[TH – Unfortunately, even if Ensoniq does return to its roots, we've been "disinvited." Announcement in issue #161. (You must have quite a collection of Hackers!)]

[PF – Joe: I used to repair the Korg SG-1D's (for a venue similar to what you're doing) called "Little Ditty's." They used Fatar controllers for audio a week and

then took them back and swapped them for Korgs. Until the manager of the club made the piano players pay for all the keys they broke, I'd sell these guys about 3 octaves worth of ivory every week.

And yes, I've cut myself a few times performing warranty repairs on those Fatar controllers. No fun and even less warranty reimbursement.]

Hello everyone.

I have a question:

My **MR-76** is behaving oddly. I use a MOTU Midi Timepiece AV as a MIDI patch bay ported out to the MR-76 as master controller (Channel 1), a Roland JV 1080 (Channel 2) and Alesis QSR (Channel 3). Lately, though, when using the internal MR-76 sequencer, I keep getting the message "Align MIDI channels to track numbers?" after trying to set up Midi Out Channel 2 or 3 to communicate with the rack synths. Pressing "yes" or "no" makes the machine go gaga – I get stuck notes, data disappears, or the 16 track recorder lights go out (even though there is data recorded on them.) Re-initializing hasn't helped. The recent craziness happened after dumping some sequences back and forth in Cakewalk – I fear some internal synth data has been scrambled. Any ideas or help would be appreciated.

Jamie Haynes.  
jhaynes3@snet.net

[PF – Jamie: Anytime you get goofy or unexplained behavior from the MR-76, perform a hard reset. First, save all data ("Save All?") to floppy. Then save the sounds, sequences, flash, and other data as single files. This won't guarantee its integrity, but you can try to reload bits and pieces of your valuable work. By saving as individual files, you can load them one at a time until the corrupt file is loaded: you'll know which file this is when the machine starts acting goofy again...]

To perform a "hard" reset, hold down the Song Editor Erase button while powering up your MR-76. If this doesn't resolve the problem, you'll need to contact Ensoniq Tech Support at 610.647.3930.

Ensure you're using the latest OS for the MR-76 as well...]

Hi,

Dingram243 here to ask about where can I find an instrument definition for the **MR-61** that I have to be used with Cakewalk Proaudio 6.0? I only was able to get the instrument definition for the MR Rack but not the MR-61 from Cakewalk. If anyone has this instrument definition please send it to me at dingram243@aol.com.

I've also experienced other problems when dealing with that instrument definition. I was not able to get any other bank except for the GM bank of sounds but I need access to all of the banks that the MR-61 has to offer. How can I do this? Please give detailed instructions – I'm legally blind and I want to use all my Ensoniq equipment the full potential that I can. In the situation with my MR-61, which knob would I turn and how many clicks to the right or left, and which buttons to push on which side of the display, since I can't see the display.

I also have a **DP-4 Plus** and I want to use it with CWPA 6.0. However, I'm not sure how this should all be connected. I also want to use the vocoder effect with Cakewalk – how can I do this? I have a Mark of the Unicorn MIDI Timepiece-AV and everything that I have connected is going to its own ports for both MIDI in and MIDI out. But how do I make sure that the DP-4 Plus will fit just nicely with this setup and how can I use the vocoder patch from there?

One more question. This question is concerning samplers. Can I use my **ASR-10** with Cakewalk or would

this work with the other Ensoniq equipment that I have along with the MIDI Timepiece-AV from Mark of the Unicorn? I want to make all the right choices.

dingram243@aol.com

[PF – Spoke with dingram243 last night for about an hour. Got him on the right track.]

TH –

Subject: **SD-1** or **VFX-sd**

Is there anyone out there who still uses one of these beasts?

I love 'em.

supamild  
Supamild@aol.com

[PF – supamild: Yes. Me. SD-1/32. mitoo. ]

Hello TH,

Whatever happened to Robby Berman? It seems like a long time since I have seen anything from him in TH. His articles were always fun – yet informative. Seems like PF has had less time for articles too, since he has taken over the Interface responses.

In the December issue of *Keyboard* there was information about a CD ROM for the ASR's called "The Art Of Transwaves" by Derek Von Krough distributed by Sound Engineering. Has anyone had any experience with this CD yet? Does the Hacker plan a review? I was wondering how much of the CD is compatible with the EPS-16+ since that is the keyboard I have. The Waveboy Transwaves set has some of my favorite sounds for the EPS, so if this CD is done as well as those were I am most interested.

I have been getting TH for many years now but have never written in. I owe you all one hell of a huge THANK YOU for your great magazine and also to all those who make up the helpful spirit of the Ensoniq community (including Ensoniq themselves). Great work!

Tony Milone  
Plantation, FL  
anthonyemilone@msn.com

[TH – We've been asking Robby for more articles for some time now... never seems to work out. But Pat's still got a few more articles in 'im. We've got Sound Engineering's new product announcements in the current issue (#161) and review copies have been requested. We'll see what happens.]

[PF – Tony: I promised Robby that I wouldn't reveal who he went to work for (if he's still there). It's tough writing something new about something that's been out of production for so long that most users have discovered all of the inside tricks & tips by themselves. Rest assured once we discover something completely different we share it with our reader base...]

"The Art of Transwaves" is so new I don't think we've had the time to do an eval on it (if the Hacker has received an eval copy, for that matter)...]

And thanx for the kind words. Means more to us now than ever before... ]

[RB – Hi all. Sorry to have been so missing-in-action, but, jeez, where does the time go these days? Chalk up my absence to insane busy-ness. Also, I've been working for ENSONIQ for a few years now, and when I think of interesting stuff to say, I generally put it right into our manuals. Have a great holiday season, everyone.]

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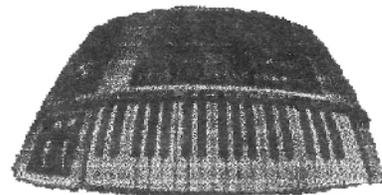
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