Musical High-Tech Acquisition and Usage
by Jerry Tachoir

Starting my career as a die-hard acoustic musician, my use of electronics was very limited, something I consciously avoided. My best extreme was using microphones to pick up my vibes and marimba in environments such as outdoor festivals, where a high sound-level is necessary. As digital equipment became accessible, I explored a digital delay unit to enhance the sound of my vibes through my microphones; and I fell in love with the sound possibilities. This was the beginning for me of the "monster" of high-tech acquisition and usage.

  Electronic equipment purchases are a never-ending battle of wants and needs. My first Yamaha D-1500 digital delay was of no use unless I had a PA system—which leads to the need for cables and a power amp. A quality speaker system is next, requiring stands and again more wires. In order to protect your investment, a power conditioner is a must—which needs a rack installed for protection. This is just the beginning!

Basic MIDI Performance

  Several years ago Bill Katowski invented the KAT MIDI mallet controller. At first I wasn't sold on the KAT: a keyboard pad device used to play any MIDI device (including synthesizers) using a mallet technique similar to performing on my acoustic instruments. It didn't track well and had a delay of sound from the point of attack that I was unable to accept. After a few refinements and some creative programming by Mr. Katowski, the controller became a viable option for a mallet player to enter the MIDI synthesizer world; so I bought a four-octave unit at approximately $2000.

  When it arrived, I still couldn't play it until I bought a stand (another $120). Then I needed some sort of sound module; so I purchased the Roland D-110 (the state-of-the-art multi-timbral sound module at that time) for another $1000. Before I was able to get a sound out of it, I needed a MIDI cable ($25) and more cables to connect it to my PA system. As you can see, the expenses to enter this "basic" MIDI world are a bit on the steep side.

Read All About It

  Now the manual.... I had to read the manual twice before I really had an idea as to the capabilities of the KAT. I still had to program the KAT separately for each individual sound and set-up that it offered. My first programming worked fine in my studio, but it didn't allow for the quick changes necessary for live performance. How would I use this mallet controller in concert?

  Again, out came the manual. The KAT's options were very open, allowing for a complete personalization of the instrument; so a *reprogramming* of the KAT was in order. The manual told of a now-unavailable Yamaha MCS-2 MIDI control station that allowed faster program changes and offered pitch bend, breath-controller functions, and several other user-programmable options. I **had** to have one: another $400, plus the $20 MIDI cables and some required adapters to connect to my KAT stand. This device really helped make program changes fast and accessible—and provided another manual to study and learn. Since it is so important to know the capabilities of your equipment in order to facilitate your performance, it seemed that I constantly had my nose buried in some manual or MIDI magazine.

Sequencing

  Having always been involved with computers as a necessity in keeping track of contacts, mailing lists, and other business-related events, I became aware of partnering synthesizers, computers, and sequencing. At that time most of what I had heard were boring, repetitive, short musical examples of disco-type beats and patterns for which I had no use; so at first I couldn't really foresee my application of this technology. But when I was later turned on to SMPTE time code and locking to tape, my eyes opened widely; and the capabilities became clear. I *had* to have

one; so I bought a Mac Plus computer at $3000. With a 20 MB hard drive and 1 MB of RAM, I thought I had enough power to run a bank!

A MIDI interface was necessary—and one that could send and receive all the varieties of SMPTE and MIDI time codes: $350 plus more cables.

Now I had to have some sort of sequencer software. After seeing a friend's system, I decided on Mark of the Unicorn's "Performer" software: about $600, if memory serves. Speaking of memory, I then learned it would be advisable to expand my Mac Plus' memory to the maximum allowable of 4 MB: about $400, plus the $25 tool kit to crack open the Mac—and don't forget your anti-static wrist strap. Finally, after reading the about two-inch thick "Performer" manual, I was up and running. This was truly amazing: everything seemed to work as explained in the manual...until one day an "unexplained system error" interrupted my work! A call to tech support told me I needed the $49.95 upgrade to solve the problem. The software arrived in a few days—with a manual (of course) explaining the resolutions to my problems and offering a list of new and improved commands and possibilities.

Music Notation

It was time to print some music. The logical pick to convert my sequenced MIDI files to notated music was the brother of "Performer": "Professional Composer." At only about $400, this package included the Sonata font for quality music printing on a laser printer. Of *course* I wanted quality printing—dot matrix just didn't cut it; and I was tired of constantly running to a service bureau and loading my Sonata font and files for printing. "I *must* have a laser printer." So I selected Apple's then-new Personal Laser Printer NT with Postscript for $3200 (today under $1000).

Finally, everything seemed to be in place. I was sequencing and printing quality scores and lead sheets that looked great.

Text and Music

By then I wanted to finish a mallet method book that I had started while in Berklee College of Music. I had the tools necessary to take musical examples and add text explanations to support them—or I thought I did. "How do I get the text on the same page as the musical examples?" The answer was "Aldus Pagemaker," a desktop publishing system that allowed the inclusion of most types of files to be formatted as desired—for the deal-making price of $600. But I *had* to have it: this was the only way to generate the pages for my book.

"Pagemaker" arrived, its intense manuals resembling a college course. More studying was in order; eventually I *thought* I got it together. But when I tried to insert "Composer" files into "Pagemaker," I discovered to my disappointment that the latter program didn't understand these files and thus could not accept them.

Several lengthy calls to tech support at both Aldus and Mark of the Unicorn created some interesting conversation but no real conclusions. Then, on a clinic tour in Canada, I discovered rather by accident that someone had created a "Print to Pict" utility that would probably succeed by converting my "Composer" documents to a Mac picture file that could then be imported into "Pagemaker." After some trial and error configurations I got it to work and generated the book, *Contemporary Mallet Method—an Approach to the Vibraphone and Marimba* (Riohcat Music), which looked as good as or better than most method books on the market.

Today things are a lot easier, utilizing the newer "Pagemaker" with the music-notation program "Finale": the "Print to Pict" utility is no longer necessary. But the initial "Finale" program cost $1000, and all the updates to get to the current "Pagemaker 6" cost more than $800.

Operating System?

Just when you finally get everything running fairly smoothly, along comes the next great operating system. I have discovered that this is the point to resist and procrastinate, for it never fails that this heralded operating system has major bugs and extreme incompatibilities with all of your current software. Approximately six months after the release of this OS, its Version 2 comes out—promising total compatibility. If you really must jump on the band wagon, this is the time to do it.

Shortly after OS Version 2, all the software vendors start announcing new versions that are *only* compatible with the new system. If you want to keep your software investment current, you have no choice but to upgrade *both* your OS and your software. Heaven forbid if you have to buy a new computer: because your old software programs will only work with the new OS, they may run perhaps very slow and erratically on the new hardware—or not at all.

This is a never-ending battle, a battle that is both expensive and extremely time-consuming. You have to install the new software, study the new refinements, and eventually skim through the new manual. Because on-line services and the Internet have become popular exchanges of information, software conflicts and bugs demand an individual's search through the manufacturers' on-line databases for updates—for which searching and downloading time you pay in the form of on-line costs and your own time. With the new information often come (again!) installation, help files, and manuals as a way of life. User groups (bulletin boards) on the Net can be a big help in keeping software current and notifying others of possible software "train wrecks."

Car Talk and Balk

In my view, the marketing of software is a very funny and slightly unethical business, at best. I compare it to buying a car which initially might cost $10000—only to be told that the engine hasn't quite been perfected yet. In a few months (only after you've been stranded several times) you are notified that an upgrade part for your engine will make it work better. Naturally you spend the $395 for the upgrade.

Months later you experience more problems, only to learn that the upgrade you purchased was not compatible with your car—but a *newer* upgrade is available that solves this problem and adds a few extra, desirable options. Another $395 gives you the car you had first expected when talking to the initial salesman and reading the original owner's manual.

Several months pass, and you receive a letter telling of an even better Version 2 that is fantastic! However, in order to be compatible with this major upgrade, you would have to trade in your car. On and on and on: the cycle never ends.

It seems to me that your software should work as you were told initially, the way the manual states. I understand it is virtually impossible to test software with all the endless possibilities of software add-ons and system extensions. However, if you have a lot of software and like to stay current, the endless cycle of $49.95 upgrades every six months to a year can be very costly. Since most software publishers seem to make their profits from the upgrades, perhaps a cheaper initial price would be a compromise.

Giveth and Taketh Away

When technology works, it's fantastic and a real pleasure to once again not have the tools get in the way. But *just* when you think you've got it all figured out, somebody or some "gremlin" takes it away. Given my problem-solving experiences at this point in my musical career, I honestly think I could actually become a computer systems trouble-shooter: I must have come across every conceivable scenario, managing even to stump the experts.

The moral of the story is this. If you are a musician, get it together in college; and *practice, practice, practice*. Because later—when you enter the **real** world—most of your time is spent in the business aspects of music: contracts, interviews, travel, phone solicitation, and more. And should you enter the world of computer and electronic technology, most of your time will be spent troubleshooting problems and reading manuals.

Bring back the days of acoustic music! And best of luck....

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including the International Festival du Jazz de Montreal, North Sea Jazz Festival (Holland), Montreux Jazz Festival (Switzerland), and Mellon Jazz Festival (Pittsburgh).