Audiomaster IV and the A4000

Ray Dabkowski of Chesterland, OH sent EMail with a note regarding Audiomaster IV, the Perfect Sound digitizer and the Amiga A4000/40. He writes, *I'm using Audiomaster IV with a Perfect Sound digitizer. On the 4000/40, it samples okay, but plays back the audio at a fast rate. I called Oxxi and asked if the new update (for AmigaDOS 3.0) would fix this problem, and they said ''no'' and coldly told me to use some other product! Anyway, I've tried tweaking the 'CPU' setting to accommodate faster processors, but it makes no difference. Anyone else report this problem?*

At this point, no one else has reported the problem or any possible work-arounds. How about it readers, any ideas?

1960 Monitor Driver Revisited

James R. Ollick and Dan Knowlton both wrote via EMail to suggest another alternative monitor driver originally mentioned in the June, 1994 Bug Bytes. Mr. Ollick writes, *I have a 4000/040 and a 1960 monitor. I have had the same problem with DblNTSC not centering on my monitor. I used MonEd, a PD program that has sliders that let you change the position of the screen and other parameters, then saves the changes to the monitor file. I suggest copying the monitor file first, to save an unaltered version just in case. MonEd can be found on CompuServe. It worked just fine for me.* Dan noted that he found the program on the ImageNet BBS, (401) 822-3060.

Slow Spin-up Problems With A4000 Hard Drives

Mr. Ollick also has a problem with an IDE hard drive. He writes, *I added a second hard drive to my 4000. It is a 540MB IDE Seagate. It takes longer to spin up than the 4000 allows itself to check for hard drives connected to the system, therefore I have to warm boot in order to use it. There are several PD programs (i.e.: BATTMEM) for the 3000 to change the time the 3000 looks for hard drives. They change the battery backed RAM (or is it ROM) and make it look for hard drives for 2 seconds, thus resolving the problem. These programs do not work on the 4000. I was wondering if there was someone that knew of a 4000 specific program to fix this or if there is a programmer out there that could address this problem. Posting this problem on CompuServe has revealed that there are others who have this problem with large hard drives on their 4000s.*

Quarterback Technical Support

Gordon Hadyk sent EMail regarding an upgrade note for Quarterback in the July 94 Bug Bytes. He writes, *I read in the July issue of* Amazing Computing *about the Quarterback 6.0.1 upgrade that allows an A2000 with Supra Turbo 28 to work with Quarterback using compression. I have such a configuration and Quarterback 6.0. Unfortunately, Central Coast Software/New Horizons seem to be gone. Do you know of any way to get a 6.0 to 6.0.1 patch, or a copy of 6.0.1?*

Any comments from anybody that might know of either Central Coast's whereabouts, or of the possible licensing of their products to any other vendors?

Multiple Hard Drives and the A3000 revisited

John Korczyk sent EMail with a simple solution to adding an additional hard disk internal to the A3000. He writes, *I added a hard drive to use with my Golden Gate card. I just placed it on top of the floppy drive. I used a thin piece of plastic screwed to the normal mounting holes on the hard drive to keep it from moving around and slid it down between the floppy drive and the support for the daughterboard.*

Chinon High Density Drives and the A4000

Terry Booher of St. Petersburg, FL sent a fax regarding comments by other Bug Bytes readers who have noted their use of Chinon 357 drives in Amiga 3000 CPUs. He writes, *Recently I had a group of individuals who came in and purchased the Chinon 357 1.44 drives. After several attempts at trying to get the drives to work, I contacted Chinon. At Chinon I talked to a Mr. Noguchi who told me the drives would not work as a 1.44 in the Amiga. I then returned to the group and asked them where they got the information. They referred to an article you wrote in Amiga Computing August 93 issue. In an effort to try and help them I told them I would contact you.*

In addition to the August '93 issue, I also received reader mail regarding the Chinon 357 drives that was published in the February 1994 issue. In that issue, Mark Odell identified two specific models, the FB-357A (for the A3000) and the Chinon FZ-357 (for the A4000, but it will fit in the A2000). It would appear that the 357 series drive has more than one design, some of which are Amiga compatible, and some of which are not. If you have found Chinon drives that work in your Amiga, let me know the specific model number, being sure to include any prefix or suffix letters, so that others wishing to order drives can obtain a working replacement.

A1000 Floppy Drive Issues

Pat Fish of Utica, NY writes regarding the A1000, Workbench 2.x and floppy drives. He notes, *I'm running an A1000 with version 2.04 of the Kickstart OS, ZKicked into RAM (no ROMs) and WB 2.1 with a DF1: (AirDrive) and Spirit Technology's 8MB X-RAM card and their HDA-506 hard-drive interface using a 130MB RLL hard-drive. The HDA-506 lets the Amiga use IBM XT hard-drive controllers like the Scientific Micro Systems, OMTI and DTC controllers. This let early Amiga 1000/500 users use cheap IBM hard disks.*

Though I have far fewer crashes under 2.1 than I did under 1.3, I have been experiencing the floppy R/W errors mentioned in the past few AC Bug Byte *columns. Mostly the errors are during a write; the system complains about sectors 880, 881, 882, etc. This happens so often that my floppy drives are nearly useless for writing. Though it happens before a disk is full, I get the (unscientific) impression that a full disk exacerbates the problem. I'm using SetPatch 1.38 (24-Sep-90), should I have a higher version? I bought this system used, so I can't be sure that every command used (like SetPatch) is 2.1 software (maybe SetPatch 1.38 is a 2.04 leftover?). Despite what's said on page 30 of the July '94 issue of* Amazing Computing, *typing in ''SetPatch'' doesn't get me a list of patches. It merely says that SetPatch is already installed.*

Extra note: Due to the Spirit system's limitations I have to boot off the 1.3 ABOOT: partition first. My Startup-Sequence ZKicks 2.04 into RAM, then reboots.

Reading old disks written under 1.3 seem to work fine. I never use the FFS on floppies. The occasional read error seems only to occur on floppies which have previously had the above-mentioned write errors. Sometimes clicking on retry works; other times hitting cancel allows the write operation to finish with no sign of error (strange eh). I have my other A1000 which I swapped in place of the second-hand A1000. The same errors occurred so I really doubt that it's a CIA chip problem, as has been hypothesized by an AC *reader. Incidentally, my original A1000 has an internal Spirit Ram/Clock board with 1.5 MB installed. It also has the PLA chips on the Kickstart daughterboard properly grounded-just in case. It's noteworthy to repeat that both A1000s act the same. (I doubt it matters but the only programs in my WBStartup drawer are: AssignX ClickToFront DragIt PowerSnap SM ToolsDaemon.)*

I wonder if anybody has tried testing DiskCopy to see if it runs into the same sort of errors. If my experience is any benchmark, the problems don't show up during the diskcopy, but only after you try to use the copy of the disk. Maybe other AC *readers can test this, so we can track down the root of this 2.1 Floppy problem once and for all.*

Any comments, readers?

More Comments on WB 2.1 and Floppy Drives

Pat Fish also notes, *One reader claimed that 2.1 increases the step rate of the drive heads, causing the problems. This seems unlikely for several reasons: The early Amigas (all 1000's) had high quality drives which could handle exceedingly fast step rates. Later Amigas weren't always as lucky. Incidentally many earlier DD drives have NO trouble using a HD floppy as a DD floppy. Later DD drives have reliability problems when using these HD floppy disks, assuming they can even format them.*

The PD ''StepRate'' program reduces the number of cycles between step-pulses from 3000 down to 1200. The change was very audible: the drives went from the usual Amiga sound of ''gronk gronk'' to ''biz zip''. I have never seen an A1000 have problems with the low step rate of 1200 cycles. Most 500's and 2000's and the models that followed them require their step rates be no lower than 2600 to 1600 if they're lucky. If one replaces the 1000 drive with a newer model, the low (faster) step rates may cause errors (and HD floppies stop working reliably as DD floppies).

I have personally used ''StepRate'' at it's minimum value of 1200 on both of these A1000s (the original is a 1985 non-EHB model) under KS 1.2/ 1.3 and WB 1.2/1.3. Never have they given me R/W errors. Nor have any of my 1000-owning friends who use copies of my customized WorkBench disk. My A500 with KS 1.2 and WB 1.3 however, can't take a step rate under 2600 without occasionally running into a problem. I used to sell Amigas, and the 1000's seem impervious to low step rates.

The step rate is a big factor in giving the Amiga it's distinctive drive noise. 2.1 actually sounds like the step rate is SLOWER, not faster. At worst, if it does lower the step-pulse delays, it's not doing it by much. Certainly not enough to account for these errors.

When multitasking w/floppy drive activity (under 2.04 and above) the drives seem far less responsive than under 1.3. This may imply that something in the OS was changed that gives the drives somewhat lower priority. Even checking for a disk and reading the disk.info is slower. If you're doing something, and insert a disk, it can take surprisingly long for the Amiga to notice it, read the disk info and place it's icon on the WB screen. Also, floppy activity can come to a temporary halt under 2.1. (Example: take a disk with a lot of files on it; ShowAll by Filename, snapshot the window to show as many files as possible. Close it's window and eject the disk. Open up heavily populated partitions or other disks and view all by file- name. Now re-insert the previous floppy, open it to get a directory listing. As soon as your pointer becomes available, try moving around one of the other windows. Your floppy will stop as the system re-lists the contents of the window. Even dragging a window around quickly can cause the floppy drive to stall or stutter. It appears that the Blitter's priority modes are being used differently.

I have a theory which is beyond my ability to substantiate. Maybe other developers can look into it. Using SysInfo2, I benched the speed (not drive speed) under KS 1.3 and 2.04. 2.04 seems to ''throw away'' 10,000 cycles per second, which could explain why 2.04 and above seems so much slower. Amigas using the 7.159 MHz 68000's are visibly slower under 2.04. Users on faster Amigas might not have noticed the change. I also know that the way in which multitasking is handled has become more conservative; supposedly more reliable, which is why multitasking becomes so sluggish and jerky under 2.04 (and above). Often, multitasking seems to halt: when under 1.3 the same actions are nearly fluid. It's possible that the combination of changes to the multitasking prioritization, changes in DMA allocation, and the step rate all combine to give us the errors we 2.1 users have been seeing. I also have a sneaking (but again unsubstantiated) suspicion that HD controllers may play a factor, depending on how they handle DMA. Maybe all 2.X users experiencing the infamous floppy errors could mail in their configuration along with a list of peripherals. If any other users have A1000s with the Spirit peripherals, they can contact me at: pfish@erc.cat.syr.edu More from Pat next month.

New Internet Address!

That's all for this month. If you have any workarounds or bugs to report, or if you know of any upgrades to commercial software, you may notify me by writing to:

John Steiner
c/o Amazing Computing
Box 2140
Fall River, MA 02722
...or leave EMail to
John Steiner on Portal
73075,1735 on CompuServe
Internet mail can be sent to
73075.1735@compuserve.com
FAX John Steiner at (701)280-0764
(8:30 A.M. to 5:30 P.M. Central time, Monday-Friday)

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