

# Jaz Disk Precautions and Tips

## Use Iomega 2GB Disks in 2GB Drives Only

Orban recommends using only 2GB Jaz disks in a 2GB drive, even though Iomega's 2GB drives technically support both 2GB and 1GB disks. We have found (and Iomega has verified) that the newer 2GB drives are more sensitive to dirt and dust than the Jaz 1GB drives are. When you insert a 1GB cartridge recorded on a 1GB drive into a 2GB drive, you run the risk of contaminating the 2GB drive; dirt that was tolerable in a 1GB drive is intolerable in a 2GB drive, and may ruin the recording head. Furthermore, dirty heads could contaminate otherwise clean cartridges, which could further contaminate other drives and (ultimately) other cartridges.

The best way to maintain a 2GB drive in working order is to never introduce a cartridge previously recorded in a 1GB drive. We suggest your facility standardize on a single drive/disk type when using Iomega drives, to reduce problems.

Note that you can “daisy chain” 2 Jaz drives together on a single Audicity, so long as you pay attention to proper SCSI termination, and keep external cable lengths to a minimum. This will allow you to migrate productions and library files from 1GB drives to 2GB drives using the Job Controller Copy functions.

You can also move a Jaz drive from machine-to-machine, but only after first powering down the system, and verifying proper termination. Never remove a SCSI connection with the unit powered on.

You should also consider Audicity Networking options if you need to move productions, library sounds and Wave files between several different machines.

Finally, read/write performance of a 1GB disk in a 2GB Jaz drive is far slower and more error-prone than a 1GB disk in a 1GB drive, or a 2GB disk in a 2GB drive.

## Running Jaz on 1GB-Only SCSI Controllers (DSE Systems)

Some earlier DSE 7000 workstations have SCSI controllers which can't address 2GB disks. Such systems will not work with 2GB Jaz drives. To check if your system is in this category, reboot the system and view the messages on startup. A startup message that begins “Adaptec AHA 1520/1522...” and displays a firmware date of 1991 will not support 2GB Jaz drives.

Some later (1993 firmware Adaptec 1520/1522) SCSI controllers may be able to support 2GB drives, but may not have extended drive translation jumpers set properly. In this case jumper settings must be altered. Call (510/351-3500) or e-mail Orban technical support (custserv@orban.com) for details.

## Errors Running “Checkup” (Norton Disk Doctor) on Jaz Disks

Like virtually all hard drives on the planet, Iomega Jaz disks come with sector headers pre-recorded on the disk. However, they may not contain valid data written on those sectors (that is: the error correction code for the data may be wrong from sector to sector). Due to this fact, if you run Checkup on a new Jaz disk, you may get lots of “bad cluster” errors, and your Jaz disk will appear to be in tough shape.

There are 3 things you can do to work around this property of Jaz disks:

- 1) Ignore Checkup errors on unwritten clusters.
- 2) Fill the disk up with productions or library sounds before you run Checkup.

- 3) Write to all sectors by using the Iomega utilities installed on your workstation hard drive when the Orban Jaz installation disk was installed. This latter option should be performed by a system administrator, or someone familiar with computers, and should be done before you write production data on the disk.

Quick directions: Drop to DOS by pressing *Ctrl+Alt+F10* from the Job Controller screen. Go to the C:\OMEGA directory and run the GUIUTIL utility. From within the utility, select your Jaz drive from among the drives found, then select Drive: Disk Format, and choose to “format with surface verify.” This will take about half an hour, and will write every sector of the Jaz disk. All data on the disk drive will be erased. If you select the wrong drive to format (C:) you may render your workstation unusable, so please refer this procedure to a qualified person!

## General Jaz Maintenance

Here are a few general guidelines to help you avoid problems with the Jaz storage option:

Jaz disks are not “big floppy disks” and should not be tossed around, subjected to pressure, left in the sun, dropped, or stored on large magnets. Any of these things can destroy data and ruin a production. Besides, at over \$100 each, they deserve to be treated nicely.

While you can shadow projects directly to a Jaz disk, fixed hard drives remain a safer bet for data integrity: Since they're sealed in the system unit, they're unlikely to be dropped, crushed or have Coke spilled on them.

After you eject a Jaz disk from a drive, always store it in its case, even if you are just transporting it down the hall.

Keep Jaz disks away from dusty environments, and make sure the disk isn't dirty when you insert it in the drive. Dirt or dust that gets into the drive can find its way inside the disk itself and damage disk sectors or permanently ruin the drive's heads. Note that if the drive heads become damaged, subsequently inserting a disk into the drive can damage the disk as well.

## If You Can't Eject a Jaz cartridge

If you are ever unable to eject a Jaz disk while you're in the Job Controller's main screen, and the message window continually tells you the drive is in use (even if it is not) your Jaz drive may be “hung,” or inaccessible to the Orban workstation software. To unlock the disk from the Job Controller, press *Enter* on the Disk Usage menu choice, then select drive C: and press *Enter* to read its usage. Now *Esc* to leave the form; the Jaz disk should now eject. If you are in the middle of a production, you will need to properly quit the production and return to the Job Controller, then go to Disk Usage and follow the steps above.

## Avoid Turning the Jaz Drive Off During a Session

Turning a Jaz drive off after you have powered a system up may result in error messages such as “Drive error 0x840c on drive E” or a “hardware disk error” Help screen. This is because once the Jaz drivers are loaded on startup, Audicy considers it an error if it doesn't find the registered drive present on the SCSI chain. Moreover, if you then attempt to power the Jaz drive back up, you may not be able to find that drive in your selection screens, or you may see further error messages, which will not be cleared until you reboot.

To clear this problem, power down both your workstation tower and your Jaz drive, then restart both. If you know you don't want to use the Jaz drive during a session, you can power the system up with the Jaz drive turned off, then press a key on the computer keyboard when the system halts on startup complaining that the Jaz drive is not present. (Note that you'll have to restart both tower and Jaz drive later to be able to see the drive).