# Chapter 10 Jaz Drive Option

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## Jaz Drive Overview

This optional feature can be added to any Audicy. It provides fast, limitless storage of library elements or complete productions — including all the individual tracks, mixer settings, production notes, and even the last Undo — using the popular Iomega Jaz drive. Each Jaz disk can hold 1GB of productions and library sounds — nearly 4 hours of audio — and there's no limit to how many disks you can have.

The Jaz drive combines the performance and uses of a regular hard drive, with the benefits of removable media. The Jaz option is somewhat different from the DAT option in the following ways:

- A) It is nearly (but not quite) as fast as a fixed hard drive, and much faster than a DAT. It can do anything on your Audicy that a hard drive can do.
- B) The Jaz drive shows up as an additional hard drive in any list of productions or library sounds. You can Shadow directly to it or Dub library sounds from it, just like you would with your main hard drive.
- C) Any library sound can be converted to or from the Wave file format directly on a Jaz disk. You can then plug that disk into any Jaz-equipped desktop computer for multimedia or Internet use.
- D) Jaz disks cost about 12 to 15 times as much as DAT tapes, so they're not as cost effective as DATs if you just want a basic archive system.
- E) For short and intermediate term storage, keeping individual sound libraries for clients, or "sneaker net" applications, the Jaz option is an ideal system.

Accessing a Jaz disk is just like selecting any other drive from Job Controller forms such as Make New, Edit Old, Copy, Erase and others.

#### **Preparing Jaz Disks**

New Jaz disks must be prepared to hold Audicy productions and library sounds.

To prepare a Jaz disk, insert a new one in your Jaz drive, then select the System Utilities:Prep Disk menu choice in the Job Controller and press *Enter*. From the form that appears, select Jaz (removable), proceed to the confirmation field and press *Enter* again. Prepping a disk takes only a few seconds to write the proper directory structures and ID information, so that Audicy can use it to store both productions and library sounds.

#### Using the Jaz Drive

Using a Jaz disk is simple: Insert a disk in the Jaz drive, and you're practically ready to go. Once you open any form that lists productions or library files, use your arrow buttons to get to the drive selection field, select D: Jaz (removable) and press *Enter*.

- Once you select the Jaz drive, it will spin up (if it was "asleep" in idle mode) then display that disk's list of productions or library sounds.
- If you select the Jaz drive in the Make New or Edit Old forms, you can Shadow directly to it.
- You can do anything with a Jaz disk that you would with Audicy's main hard drive. Copy, Erase, Rename, Sort, and other functions work the way you're used to. The only differences have to do with ejecting or locking the Jaz disk.
- You can even Backup a Jaz disk to a DAT tape, if you have both options.
- The System Utilities:Check Up and Optimize<sup>1</sup> features work with a Jaz disk just like they do with your fixed hard drive. Use these utilities to defragment a Jaz disk, or to check the integrity of a disk and repair errors.
- You can save, preview, or dub library sounds on a Jaz disk while editing a production.
- You can store and transport Wave files on a Jaz disk, and transfer them to/from a Jaz-equipped desktop PC using the Library Manager:Import Wave or Export Wave menu choices.

#### About Jaz Disks

Jaz disks are small cartridges, about the size of 3 floppy disks stacked on top of each other. They come in protective cases, and should always be stored in a case when not inserted in a drive.

Jaz disks are manufactured by Iomega, and may be purchased from most major computer stores, or through mail order shops. At this writing, disks cost between \$100 and \$130 USD each, but are generally cheaper if purchased in packs of 3.

<sup>&</sup>lt;sup>1</sup> Special versions of Norton Disk Doctor and Speed Disk.

Specify "PC Formatted" (Macintoshes can also read this format, so MAC users can work with .WAV sounds created on Audicy).

Jaz disks are actually cartridges containing rotating magnetic platters, similar to those in hard disks. The head assembly is part of the drive mechanism. When you insert a disk, a door in it opens to give the head access to the platters. These then spin up to speed — the "whirring" you hear when you first load a disk into a drive.

#### **Precautions**

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 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.

#### About Jaz Hardware and Software

Orban's version of the Jaz drive comes in a much more rugged enclosure than desktop computer versions, and includes its own fan, full-size connector, and heavy duty, internal power supply. It comes with a very high quality SCSI cable and active terminator. Termination power is provided by Audicy's System Unit. The SCSI cable should not be extended more than six feet.

Orban's Jaz drive is fully compatible with the plastic-cased Iomega external drive available from computer stores, and you can even connect the Iomega version to Audicy if necessary (using appropriate SCSI adapters). We don't recommend this, for the following reasons:

- Jaz disks can get hot, and this has caused reliability problems in computer-store drives. Orban's version includes a cooling fan to keep this from happening.
- Orban's steel enclosure provides better shielding from magnetic fields than plastic-cased external models.

• Iomega's external drive must be turned on at all times to properly terminate the SCSI chain; turning it off can cause problems elsewhere in the chain and even affect Audicy's ability to read its own internal hard disk. Orban's version provides termination whether the unit is on or off, so long as the termination plug is properly inserted in the back of the drive enclosures.

Custom Orban software drivers communicate directly with the drive's firmware. These drivers are included as part of the Jaz option, and are loaded on a special Audicy/Jaz installation disk. Note that the Jaz Drive must be on when you power up your Audicy system unit, or the system will think the Jaz drive is not there.

If you power up the system unit with the Jaz drive turned off, you will need to turn the entire system off, power up the Jaz drive, then turn the system back on in order for it to recognize the Jaz drive. You don't need to have a Jaz disk in the drive for the system to recognize the Jaz system during this startup procedure.

The Jaz drive goes to sleep after 15 minutes of inactivity. You may notice the sound of it spinning down if you haven't accessed it in a while. This is normal, and saves wear. The disk will spin back up the next time you access it.

#### Jaz Disk Usage

To check how a Jaz disk is being used, *Enter* on the Job Controller's Information Center:Disk Usage menu choice. A form will appear; select the Jaz drive within the form. The same display you see for your fixed hard drive will let you know how storage space is being used on your Jaz disk.

## Ejecting A Jaz Disk

Press the Eject button on the front of the Jaz drive to eject a cartridge. If the Jaz disk is spinning, it will wind down, and the disk will pop part way out once it has slowed to a stop (this takes about 8 seconds). The amber "disk activity light" on front of the drive will flash whenever the disk is winding up, down, or being accessed. Once the drive has released the disk, pull it k gently from the drive. Store the Jaz disk in its case whenever it is not in the drive.

Whenever you do anything that uses a Jaz disk — whether it's loading a production or just checking the disk's usage — Audicy locks the drive. If you press the Eject button while a disk is locked, the message window will warn you: Drive D: (Jaz) is in use, select another and try again. Until you select another drive, such as C:, the system will continue to keep the Jaz disk locked

If you are editing a Shadowed production stored on a Jaz disk, you will not be able to eject the disk until you Quit the production and leave the Editor screen, since the disk will be locked. This means that in this particular case, you will not be able to load in library sounds located on a different Jaz disk.

# **Transporting Audio Between Systems**

Audicy's Jaz option can be used to:

- Share productions and library sounds;
- Move productions from one studio to another, so different producers can work on them;
- Make staff more portable, and less dependent on one particular room. A producer can edit a production in Studio A in the morning, take their work with them to lunch on their Jaz disk, then use a different studio in the afternoon.

#### **Memory Limits**

Different Audicys might have different amounts of audio memory installed. Any production created on a smaller system can be opened on an equal or larger one with no trouble.

Productions from bigger Audicys, however, can't be opened on smaller systems unless the memory has been deliberately limited. This applies even if a production doesn't use a lot of audio, since Audicy saves important information throughout the available memory.

To check how much memory is installed in any Audicy, select Information Center:About in the Job Controller and press *Enter*.

When you start a new production, you can set a Record Limit as part of the naming process. Choose a limit that's small enough for the smallest system that will work on the production. This forces the larger system to keep its information where the smaller one can find it. (It also means you can't use all the memory of the larger Audicy for this production.)

For more information, see "Record Limit" or "defaults" in Chapter 3.

Library sounds aren't affected by system memory size, unless the sound itself is bigger than the system's total memory.

# **SCSI Precautions**



Audicy requires an Orban Active SCSI Terminator. This must be connected at all times. Running the system without a terminator may cause total system failure!

The terminator is a small connector that plugs into a SCSI connector, either on the Jaz drive or on the System Unit.

Each system must have a terminator whenever it's turned on. If a Jaz drive is connected, plug it into the back of the drive. Otherwise, plug the terminator directly into the System Unit. If you have a backup DAT drive as well as a Jaz drive, they can be connected as a daisy chain with the terminator on the last physical device in the chain.

Each Audicy system must have a single Active Terminator connected at all times — either to the drive, or to the System Unit itself.

If you're using a single Jaz drive with multiple Audicys, get additional Active Terminators from Orban. Most terminators sold at computer stores are passive, and don't have the proper circuitry inside them to protect Audicy's high-speed data.



Always turn both Audicy and the external drive <u>OFF</u> before changing SCSI connections. Failure to do so can cause serious hardware or file damage.