Chapter 3

Job Control Screen

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Finding Your Way Around

Audicy has controls, choices, and readouts designed to help you edit and mix a multi-track production. In other words, it works like a studio.

To keep that analogy, the Job Control screen acts like the studio's intern or librarian. From this screen, you can:

- Start working on new or existing productions.
- Keep track of productions and library sounds, filing or renaming them, adding or saving sound files usable on other systems, adding pages of notes, or tossing the ones you don't need any more.
- Keep the system running efficiently.

The Job Control Screen

When you first turn on Audicy it goes through a self-test sequence. The screen will be black, while some computer text scrolls by. In a few moments, the screen will turn blue and you'll see the Job Control screen:

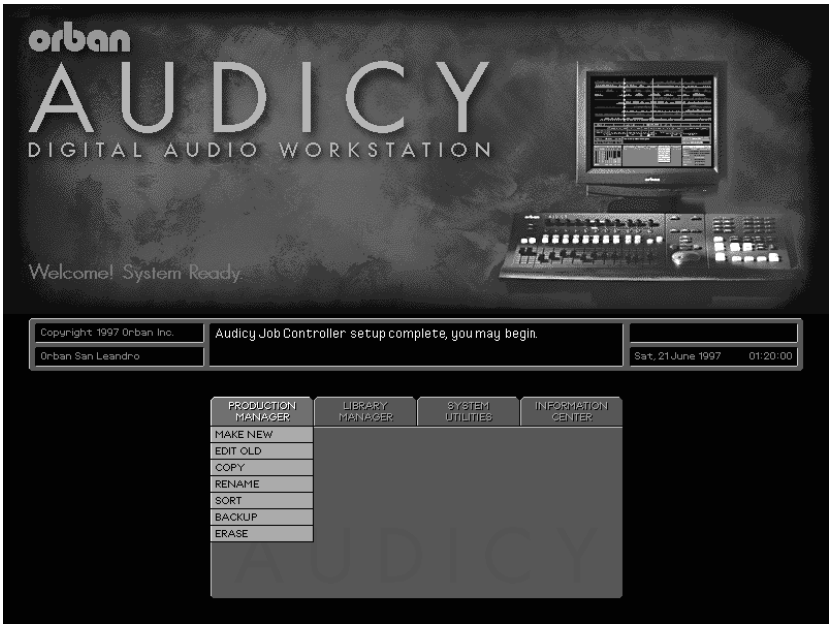


Figure 3-1: Job Control Screen

During startup, the system sends current software to the Console and tests its functions. If a notebook, tape, or anything else is leaning on a button, the system will think it's broken and ask you to reset. Clear any junk off the Console before you turn the system on.

- All the white buttons on the Console should light brightly for a few moments. Any that don't are burned out. Many of the other buttons are equipped with red or green LEDs; these will light also.

- A green bar graph will appear next to the Message Window to show you how setup is progressing. After about thirty seconds, you should see this message: Job Controller setup complete, you may begin.

Near the top of the screen, you should see

Orban

Audicy

Digital Audio Workstations

Welcome! System Ready

Now you're ready to work. You can do any of the following:

- Start a new or old production, name the production, choose whether to save it on disk or not, and set various options including its maximum size or sampling rate;

- Set optional *defaults,* automatically providing standard choices for productions and other system characteristics to save time;

- Read or edit production notes and text files;

- Sort productions and library sounds for faster access;

- Convert computer ".wav" sound files to and from Audicy library sounds, changing sampling rate and resolution if desired;

- Rename, copy, or erase productions or library sounds from Audicy's hard drive or any External drives;

- Save or read multi-track productions or library sounds on low-cost data DAT;

- Fine-tune your system's hard disk for faster performance;

- Send a library sound to an on-air cart replacement system[1].

[1] External drives, Multi-Track DAT backup, and on-air cart compatibility systems are optional.

Job Control Screen Map

Use the arrow buttons to select the menu, submenu, and individual choices you want. This map of choices might help you find your way around:

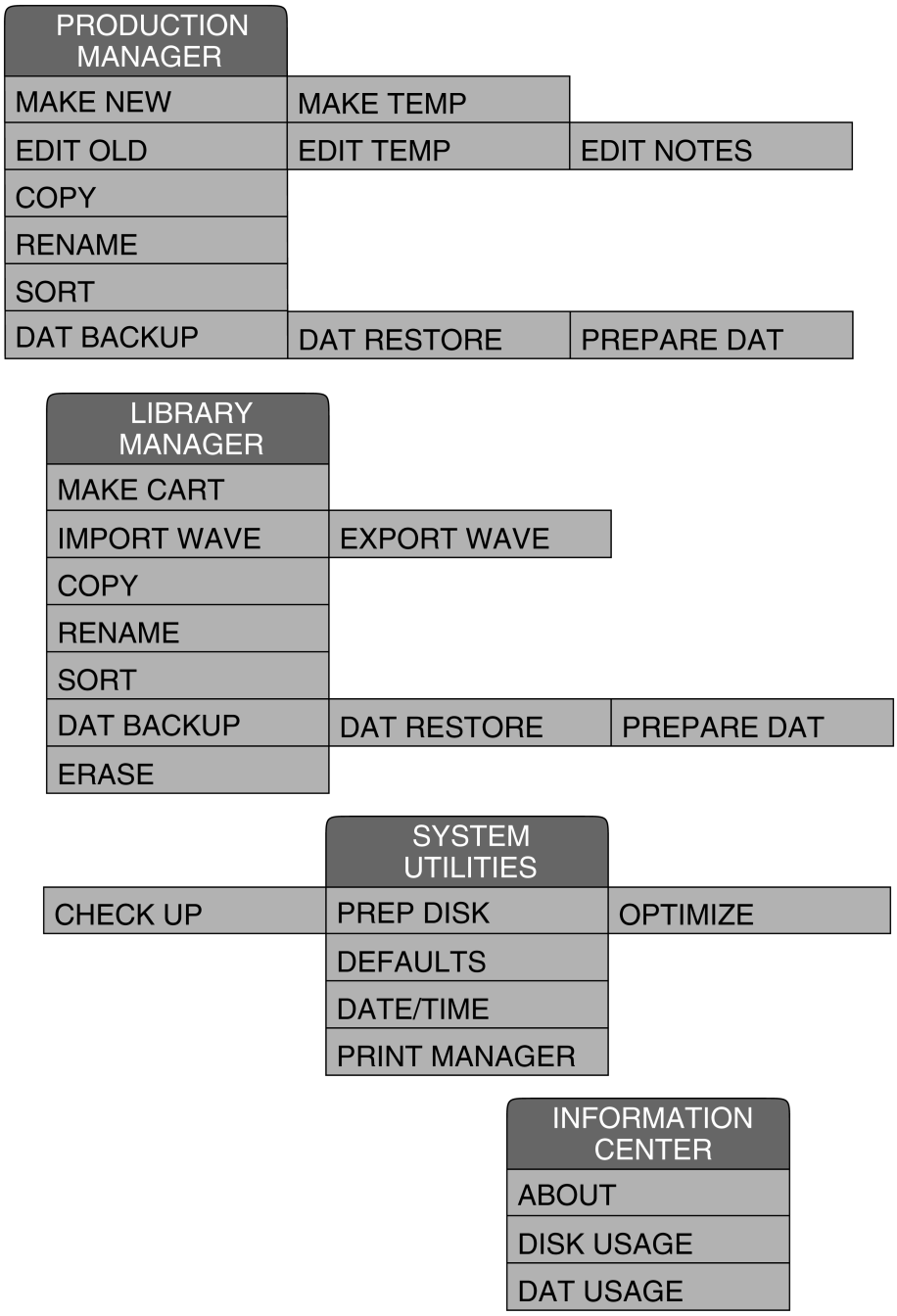


Figure 3-2: Job Controller Menus and Submenus

Using Input Forms

Some operations — like setting the Job Controller's time and date or starting productions — need more than a simple "yes/no" response. For these operations,

Audicy puts an input form on the top of the screen to help you see your choices. These rules apply every time you see a form:

- In general, use the scrubwheel or the *up* and *down* arrows (or ↑ or ↓ on the keyboard) to get from one field to another; in fields with lists, use these controls to scroll through the list.
- Things in dimmed letters can't be changed.
- In general, use the *left* or *right* buttons (or ← or → on the keyboard) to select among multiple choices within a field; in forms (like Edit Old) that have both a list and single line fields, these buttons also function to move between fields and lists.
- Use *Undo* to do the same thing.
- Save information by pressing *Enter* from the last field, or pressing *Shift*+*Enter*[2] on the Console any time.
- Cancel the whole thing by pressing *Esc* on the Console or keyboard any time.

Keyboard

Figure 3-3: Keyboard

- The cursor and *Esc* keys on the keyboard work just like arrow and *Esc* buttons on the Console, and can be used interchangeably with them.
- The keyboard's *Enter* key works the same as the Console's *Enter*, and can be used interchangeably with it. Keyboard *Shift*+*Enter*, however, doesn't give you the same shortcut as Console *Shift*+*Enter*.
- The *Ins* (Insert) key lets you switch between adding new text in a field, and replacing existing text. It does for text what Copy In versus Copy Over does for sound. You can usually ignore this key.

[2]However, *Shift*+*Enter* on the keyboard doesn't save information.

- When selecting from long lists, *Page Up* or *Page Down* jumps a screen's worth of choices at a time (you get the same effect with *Page Up* or *Page Down* on the Console). *Home* or (*Head* on the Console) takes you to the first selection on the list; *End* (or *End* on the Console) takes you to the last.

Production Manager

Make New

Use the *up*, *down*, *left* and *right* arrows (or the cursor keys on the keyboard) to

select this menu. When the Production Manager:Make New choice is highlighted, press *Enter* to start a new production with Shadowing, a process that automatically saves everything to hard disk while you work[3].

Before you can start a new production (or edit an existing one with Shadowing), Audicy makes sure there's enough space on the hard disk to completely save all its changes. If disk space is getting tight, the system gives you a choice. You can:

- Start the production as a temporary, un-Shadowed one. No part of it will be saved to hard disk.
- Start the production with Shadowing turned on, but limit it to the length set by Record Limit (discussed below).
- Start the production with Shadowing, but limited to the available space on your hard disk.
- Cancel and Erase some productions on your hard disk to make more room[4].
- Choose a different drive[5].

Use the arrow buttons to select your choice, and press *Enter* again.

[3]For more about this process, read "The Shadow Knows" on the next page.
[4]The system will politely remind you to make protection copies of productions before erasing them.
[5] Requires the optional Jaz drive system or Audicy Networking.

If you're going on with the production, you'll see an input form like this:

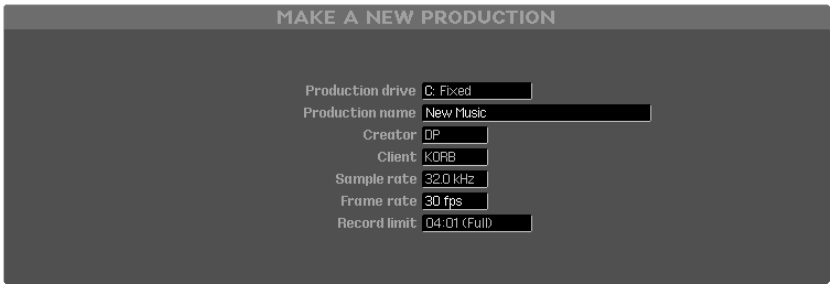


Figure 3-4: Make New Form

Production Drive

Your local hard drive appears in this field as C: Fixed. If you have any external drives connected, they'll be listed as well. If a drive is listed, but missing its cartridge or otherwise busy, its name is followed by the word "none," in yellow.

Use the *left* and *right* arrows to toggle to the drive you want. Then use the *up* and *down* arrows to move to another field.

(Production Manager continued on page 3-10)

Sidebar: The Shadow Knows

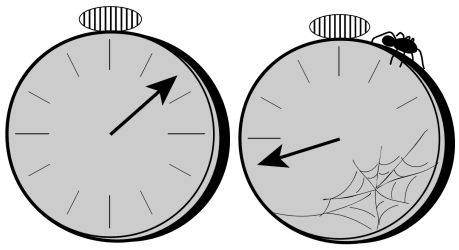
The next two pages are about Audicy's "Shadowing" process.

Shadowing gives you the speed of RAM-based editing, with the security and long-term stability of hard disk audio files. You never have to worry about a save button, file formatting, or other computer hard-disk operations.

You also don't have to worry about these two pages to work Audicy. But you'll probably find them interesting, and you'll be a better operator if you know what's going on in the system.

If you've worked with other digital audio workstations, you've noticed how much faster Audicy operates. That's because Audicy keeps your entire production in RAM — Random Access Memory — at all times.

Computers use two kinds of memory. RAM memory is electronic and instantly available (well, not exactly instantly: Access times are measured in nanoseconds — fractions of a millionth of a second). Hard disk memory is magnetic and mechanical, and takes as much as a hundredth of a second. This tiny difference becomes significant very quickly, when you consider that Audicy may have to store and retrieve as many as a million and a half bytes each second.



RAM is fast… ***…but disks are slow.***

Most workstations keep your production on hard disk only, and merely copy sections into RAM as they're needed. This slows the system down.

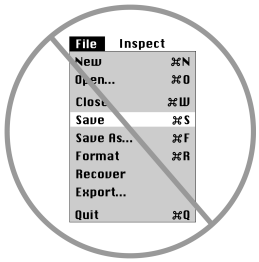
RAM is why Audicy operates so quickly.

> Unlike other workstations, you don't have to take time to load "sections" or "reels": Everything in your production is available at all times.
>
> Even "worst case" edits — those involving non-adjacent tracks, all ten tracks at once, or both ends of an hour-long production simultaneously — are super-quick... less than a second, in most cases. No disk-based workstation can match this.

RAM has only one problem:

If you're working in digital memory only, and somebody kicks the plug, everything you've done is gone. Zapped. And there's no chance for recovery.

This happens in every computer, big or little. That's why computer users are always hitting "save" and waiting while the file is being copied to disk. Once things are on hard disk, they're relatively safe.



Audicy Users Never Have To Press Save!

Shadowing is Audicy's automatic saving operation: It saves everything you do on hard disk, without making you press any buttons. And it doesn't make you wait: You can finish the job at your normal pace, without slowing down your editing or waiting while files are being opened or manipulated. You temporarily disable Shadowing by choosing Make Temp or Edit Temp when you start a production.

You can turn Shadowing on from a temporary production, if you decide you want to keep your work. Just press *Enter* on Shadow, in the production's System menu.

If you do turn on shadowing this way, the system might need a few seconds to finish shadowing after everything is edited, before you can go on to the next production.

Shadowing happens in the background. Audio engineers don't move as fast as computers (at least, this author doesn't). Audicy has lots of spare time between button and key presses, or while you're looking at the screen.

Whenever you press *Stop*, Shadowing takes over.

Shadowing pauses when you move the audio. This way, Audicy can devote its full power what *you* want to do.

When you press *Stop* again — or just leave the Console alone for more than three seconds — Shadowing continues.

If you're using a lot of memory and working very fast, Shadowing may lag a few moments behind you. But it'll catch up when you pause, or when you quit the production.

If something disrupts the system before Shadowing finishes (such as a power failure) some audio will be lost. When you restart the production with edit old, Audicy will warn you that parts have been damaged and try to rebuild them. Some damage may be recoverable. At the worst, you may have to re-record some elements.

If your local electricity is unreliable, we recommend an Uninterruptable Power Supply (described later in this book). These gadgets are available from your dealer and computer stores, and will save wear and tear both on your disk and on your patience.

(continued from page 3-7)

Name/Creator/Client

The boxes on the screen are entry fields. You can type in the Name, Creator and Client fields to respectively name the production and to define the production's creator and client; this information appears when you select a production to re-edit. Move from one field to the next by pressing *Enter*, or use the *up* and *down* arrow buttons.

- If you press *Enter* while in the last field, the form closes and the information is saved.
- If you press *Shift*+ *Enter* from any field, the form also closes and saves its information.

Custom information, such as your name or station call, can appear in these fields automatically. Use the "Defaults" selection, explained in a few pages. You can still type over default information if it doesn't apply to a particular production.

Sample Rate

Audicy productions can be in one of two sample rates, 32.0 kHz and 44.1 kHz. You can use the *left* or *right* arrow buttons, or press *Undo*, to cycle the field between 32.0 kHz and 44.1 kHz.

Audicy also supports other sampling rates, when recording via the optional Intelligent Digital Input/Output Module, or importing/exporting wave files.

The Digital I/O converts input and output rates continuously while you work. You can specify either a 32.0 kHz or 44.1 kHz production rate, and still record digitally from CDs or DATs... even if the sound source is in varispeed mode. You can switch the digital output to any standard digital rate or format at any time, no matter how you set the production rate.

That's one reason we call it "Intelligent."

The 32.0 kHz rate is ideal for broadcast production. It uses memory very efficiently, while still giving a full frequency response of 20 Hz to 15,000 Hz (±.5 dB) — the legal maximum, in most countries, for FM stereo.

The 44.1 kHz sample rate extends the .5 dB point to 20,000 Hz. This uses a third more memory, but the extra highs might be important in music production[6].

Frame Rate

Audicy productions can support the following common frame rates: 24, 25, 29.97DF, 29.97ND, or 30 fps (frames per second).

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[6]Is there a sonic difference between the two sample rates? Not as much as you'd expect from other equipment. The Audicy's 64x oversampling filters are effectively flat to the Nyquist limits, with no phase distortion anywhere in the band. This means the musical difference between 32 kHz and 44.1 kHz on the Audicy is less than four notes!

Frame rates and formats can be changed when you Rename a production, without disrupting the relationship between audio elements or tracks.

Record Limit

Record Limit is discussed later in this chapter, under System Utilities:Defaults.

Make Temp

Enter this choice if you do not want the production automatically saved to hard disk.

A form appears like the Make New form described above, where you change the drive, sample rate and frame format. Record Limit is grayed out. It will update automatically whenever you change the Sample Rate.

- The form will ask if you're sure you want to work on a production that isn't being saved; press *Enter* again to confirm.
- Press *Esc* if you change your mind.

High-quality audio needs lots of hard disk space. If you don't think you'll ever work on these tracks again, Make Temp will save space and time.

When working on a temporary production, you can always decide you want to keep your production, and can change the temporary to a permanent production at any time you're working on it. See Chapter 5.

Edit Old

Enter this to put up an existing production, so you can edit the tracks or add new material.

- Press *Esc* if you decide not to restart a production.
- After you *Enter*, you'll see a list of available productions on the screen:

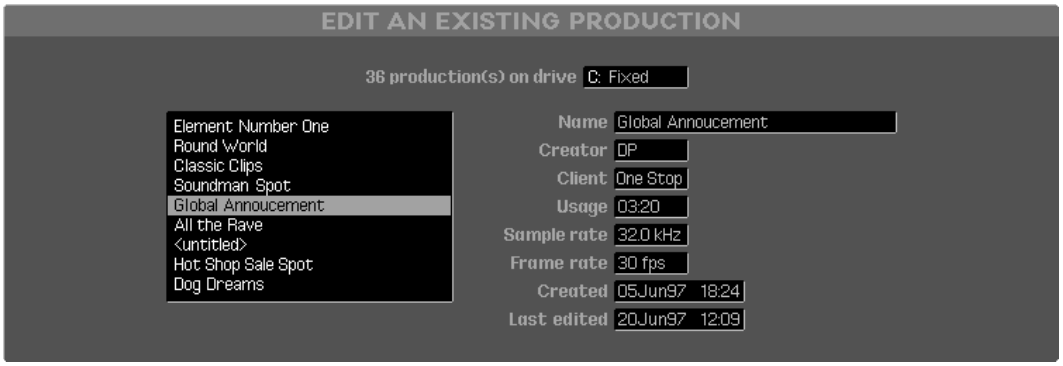

Figure 3-5: Edit An Existing Production

Use the scrubwheel or *up* or *down* arrow buttons to highlight a production. *Head* takes you back to the top of the list, and *Tail* takes you to the bottom. *Page Up* or *Page Down* shows you a screen's worth of productions at a time.

After you've found the production you want, highlight it and press *Enter*. All the tracks will be reloaded in place, ready for re-editing and mixing.

To the right of the list are a number of grayed-out fields to describe the production. These show the information you typed when you first started the production, along with displays of the production's memory usage, sample and frame rate, and when it was last edited.

"Usage" tells you how much storage space is used for all the recorded material in a production (along with a small amount of memory for savings edits and mixer and effects settings) This is *not* the production's running time[7]. Use Usage to judge how long a production will take to reload, and how much more work you can do on it.

If you want to be able to see a production's on-air length in this screen, save this information as part of the job's name.

Loading all the tracks in a production takes time: depending on the condition of your hard disk and the sample rate, about 20% to 60% of its Usage[8]. Under ideal conditions, a six-track sixty-second stereo spot, with separate jingle, announcer, and sound effects, takes less than a minute. While the production is reloading, you'll see the moving bar graph progress indicator.

- Press *Esc* while the production is reloading, if you change your mind and want to stop the reload process.

Restarting Your Last Production

The last shadowed production you've worked on stays in *electronic* memory as long as Audicy is turned on, and can reload much faster — usually in just a few seconds[9].

If the last production you worked on is still in memory, its name will be automatically highlighted when you first get the Production Selections form. Just press *Enter* to start the editing software and check its integrity.

Edit Notes

Enter this choice to read or edit text in the Notepad screen.

The Notepad is a great place to keep information about your production, copy scripts or your spot's live tag.

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[7]Memory was covered in the previous chapter. Remember?

[8]You can speed things up considerably by running the Optimize utility, described later in this chapter, or by selecting a Sample Rate of 32.0 kHz.

[9]Assuming you haven't turned off the power, started a temporary production, or used the About function (which clears the memory in the process of checking it).

You'll be shown a list of productions; select one as described above (under Edit Old). If you've already saved any notes with this production, they'll appear on the screen. If you haven't, Audicy will give you a blank page to write new notes.

You can also edit using Notepad from within a production.

The Notepad uses the pull-out keyboard, and has only a few special commands using keys on the computer keyboard:

F10: Save and Exit

Prtsc: Print Notes

Esc, then Esc again: Cancel Edits and Exit

Copy

This choice lets you make a copy of a production on hard or removable disk. You can also copy a production from your hard disk to a removable one, for storage or move it to another Audicy. You can then edit the copy, and still have the original intact[10].

To use it, press *Enter*, and specify the source drive. You'll see a list of productions on that drive.

Choose one or more productions to copy.

> **Note:** To tag multiple productions for a batch copy, highlight your selections and press *Set*. Checkmarks will appear on each entry. To de-select a tagged entry highlight it and press *Set* again.
>
> You can rename a copy later (using Rename) if you want it to have a different name.

Select a destination drive to copy productions to. A destination drive can be the same as your source drive. Press *Enter* when you're ready to begin copying. Or, press *Esc* if you change your mind.

If copying is stopped once it's underway — because the power is interrupted, or because you press *Esc* — the original production is unharmed. But the copy will probably be missing some files, and will be automatically named Copy Incomplete!

If you try to edit an incomplete copy, Audicy will attempt to make sense of its files. This might take a few moments, and some sounds might be missing or scrambled. It makes more sense to Erase the incomplete copy, and start copying it again (if necessary).

- You can also make a single master for multiple versions of a spot, saving time and disk space. This technique is described in Chapter 8.

[10] Copying requires lots of hard disk space. In some cases, you may be better off saving parts of the spot in the library, or making your changes as Edit Temp.

Rename

Use this to change the name or frame rate of a production without changing its tracks or using additional disk space.

Rename shows you a list of productions on the hard disk. Select one and *Enter*, and you'll see fields for a new Name, Client, or Creator, as well as Frame Rate. Press *Enter* to save changes, or *Esc* to keep the old information.

Sort

Use this to rearrange the list of productions that appears when you choose other menu choices.

New productions are always added to the bottom of the list, forcing the oldest productions to the top. You can sort anytime to put the newest ones on the top, alphabetize titles, or group them by client or creator.

To do a sort:

A) Press *Enter*, to open the Sort form.

B) Use the arrow buttons to choose which drive you want to apply sort to.

Note: If you are not using multiple drives, only drive C: Fixed will be available for sorting.

C) Then use the arrow buttons to select whether you want to sort by Name, Creator, Client, Usage, Sample Rate, Create Date, or Last Edit Date.

D) Next, choose a sort direction:

Ascending puts lower numbers or letters at the top of the list. For example, names beginning with "A," very short usage times, or the oldest-dated production would appear first.

Descending does the reverse. Newer productions, or ones that use the most disk space, appear first.

E) When you're ready to sort, press *Enter* again. If you decide you don't want to, press *Esc* or select No, don't sort on the bottom of the form.

Sorting is almost instantaneous, and the sorted list will appear the next time you choose a Job Controller function that has a list.

There are some tricks you can do with sorting, to make production management easier.

- Numbers and punctuation come before letters in an Ascending sort. You can force a production to the top of a sorted list by putting an extra character before its name.

For example a simple Name/Ascending sort would make your list alphabetical, like this:

Bargain Sale

Dog Town SPEC

Organ Concert Spot

Weekly Promo Master

You can force "Weekly Promo Master" to the top of the list by renaming it with an asterisk and sorting again:

*Weekly Promo Master

Bargain Sale

Dog Town SPEC

Organ Concert Spot

This works because "*" comes before "B" in Audicy's sorting alphabet.

Individual digits in the text fields are sorted in the order they appear[11]. This can lead to some odd results, if you like to put numbers in your production name.

10/97 Concert Promo

8/97 Concert Promo

9/97 Concert Promo

To get around this, use leading zeros:

08/97 Concert Promo

09/97 Concert Promo

10/97 Concert Promo

DAT Backup/DAT Restore/Prepare DAT

The system lets you store productions efficiently on standard DDS data cartridges[12]: All the tracks, mixer settings, locators, production notes, and even the last *Undo* can be archived and retrieved easily.

> **Note:** This and its submenu choices aren't active unless you have Orban's optional Multi-Track DAT Backup System.

Use DAT Backup to transfer productions from hard disk to data DAT, and DAT Restore to get them back again. The Prepare DAT command is for tape management. To check DAT usage, refer to the Information Center.

Since the Multi-Track DAT system is optional[13], it's discussed separately in Chapter 9.

---

[11] Date, usage, and sample rates are sorted correctly since Audicy actually saves them in a different format.
[12] They look just like audio DATs.
[13] See your dealer — paid announcement.

Erase

- Erase permanently wipes productions off the hard disk.

Press *Enter*, choose a drive, then select one or more productions, and follow the instructions on the screen.

> **Note:** To tag multiple productions for a batch erase, highlight your selections and press Set. Check marks will appear on each tagged entry. To de-select an entry so that it is not erased, highlight it and press *Set* again.

Before you Erase, Audicy will remind you if the production hasn't been backed up to a data DAT with a caution message in yellow — CAUTION: This production has not yet been archived to DAT. When you start an Erase, Audicy asks Are you sure? Use the arrow buttons to select Yes, erase this production, and *Enter*. Or cancel by selecting No or just pressing *Esc*. If you proceed, a second warning screen will give you another chance to change your mind, so you don't accidentally erase important productions.

> **Note:** The archive caution refers to Data DATs only. If you are using an external drive for archiving, Audicy will have no record of this.

After erasing many productions it's a good idea to use *Optimize*, discussed in a few pages. This will keep your hard disk working as fast as possible.

Library Manager

If you've been using Audicy for a while, you've probably built up a hard disk library of jingles and sound effects. These choices let you manipulate these sounds on the disk.

Most of these picks work just like their counterparts in the production menu, except — obviously — they're for sounds saved in Audicy's library.

See Chapter 5 for information on how to create, use and preview library sound files from within a production. To create a library sound from a .WAV file, see below.

Make Cart

Audicy can talk directly to station-wide high-speed audio networks, sending a finished production directly to a central server, faster than real-time, with all the formatting codes necessary for the system. Just press Make Cart, and use the on-screen form.

This feature requires low-cost optional hardware and software, and is pre-programmed at the factory for specific brands of server. It's available for the

ENCO DAD486x Digital Audio Delivery System and Broadcast Electronics' AudioVault, with other brands being introduced. See your dealer for details.

Import Wave/Export Wave

Audicy can convert its proprietary Library-format files to and from industry-standard .WAV (Wave) files for use with other systems. Wave files can be accessed in nearly every audio program for Windows or Macintosh, and these programs can typically convert to their own formats and to standard Internet and compressed formats.

Audicy handles a wide variety of .WAV file characteristics:

- High-quality sample rate conversion between Audicy's internal rates of 32 and 44.1 kHz and .WAV sample rates of 8, 11.025 kHz, 22.05, 32, 44.1 and 48 kHz. Internally, the sample rate conversion process uses 32 bits of precision.

- Your choice of truncation or selectable dithering when converting a 16-bit Library file to 8-bit .WAV, as well as automatic expansion of 8-bit files during import. Of course, Audicy also works with 16-bit sound files.

- Support for mono or stereo linear PCM format files.

All of this high-quality conversion, in fact, takes a great deal of system computing horsepower to do well. If you are using sample rate or format conversion, it may take a little while longer to complete an export or import operation.

Importing .WAV Files

From the Job Controller's Library Manager menu, select Import Wave to activate the .WAV file selection form. On the left side of the form, you can select a drive (including drive A:), one of several directories that might hold a .WAV file, and either only those files with the standard .WAV extension or any file extension. On the right hand side of the form, you'll see a list of all the files that meet the criteria for drive, directory and file type you've selected. Use the *up* or *down* arrow buttons on your Console, the keyboard, or the Console scrubwheel to select one of the files displayed. Then select Yes in the confirm field and press the *Enter* button.

The Import form is divided into two sections. The top half shows details about the .WAV file you have selected, including its sample rate and sample width, format, mode (number of channels), length in seconds and file size.

The lower half displays the library sound characteristics for the imported sound. You can choose which drive to place the resulting sound on, its name and sample rate (choosing from one of Audicy's internal rates of 32 or 44.1 kHz).

Audicy will suggest a name for the imported sound, based on the file name of the .WAV file you've chosen. You can use that name or change it to any other name. Once you have selected the characteristics for the target library sound, confirm by selecting Yes and pressing the *Enter* button. Alternatively, if you decide that the .WAV file you chose isn't the right one, you can go back to the selection form to choose another. You can also abort the process at any time by pressing the *Esc* button.

As mentioned above, Audicy will automatically convert the audio form the .WAV file to the highest possible quality 16-bit, 32 or 44.1 kHz library sound file. You can use the resulting library sound like any other.

As always, you can press the *Help* button at anytime to get more information.

Exporting .WAV Files

To convert a library sound to .WAV format, choose the Export Wave choice in the Job Controller's Library Manager menu. This will activate the library sound selection form. Select a drive and library sound and confirm the selection by pressing *Enter*.

Next, you'll see the Export Wave Setup form. This form is divided into three sections.

The top section summarizes the library sound you've chosen to export.

In the middle section, you can choose the audio properties for the .WAV file you are creating. You can select any one of these sample rates: 8, 11.025, 22.05, 32, 44.1 or 48 kHz, and Audicy will provide sample rate conversion. You can also choose to export the file as 16-bit or 8-bit files. If you choose 8-bit files, you'll be able to select what type of Dither is used when truncated. Dithering is a process that removes the nasty audible artifacts of truncating 16-bit audio to 8-bit audio[14]. Choose from None, Residue, or TPD Noise. Each choice has its own subtle effects, so don't hesitate to play around and try different settings.

The third section lets you set the destination drive and name for the exported .WAV file. Audicy will suggest a file name based on the library name, but you're free to use any name you want[15].

---

[14]To be precise, dithering removes the signal-correlated artifacts of truncation by adding a small signal, usually somewhat random in nature, to the audio before it is truncated. The result can sound just like a little background noise. But the noise, or dithering, is not *covering up* the quantization artifacts; it's actually *changing* their character altogether so they are no longer correlated to the audio signal itself. In addition, dithering increases the resolution of the resulting audio so that you can hear audio below the 8th bit. It's all very technical and not terribly intuitive (the subject has occupied the attention of some of the best practitioners in the digital audio field), but it works!

[15]Within, of course, the limits imposed by the DOS, the operating system running under Audicy software. That means 8 character file names, 3 character extensions, and use of only letters, numbers, underscores and dashes.

Copy

This choice lets you make a copy of a library file on hard or removable disk. You can then edit the copy, and still have the original intact.

To use it, press *Enter*, and specify the source drive

Choose one of more library files to copy.

> **Note:** To choose multiple library files, select each and press *Set*. Check marks will appear next to each selected entry. To un-select an entry highlight the entry and press *Set* so that the checkmark is removed.
>
> You can rename a library file later (using Rename) if you want the copy to have a different name.

Press *Enter* when you're ready to begin copying. Or, press *Esc* if you change your mind.

If copying is stopped once it's underway — because the power is interrupted, or because you press *Esc* — the original library file is unharmed. But the copy will probably be missing some audio, and will not be usable. It will appear on system lists as Copy Incomplete!, and should be erased.

- Copying usually doesn't requires lots of hard disk space, unless you've created a large audio file.

Rename

Use this to change the name of a library file without changing its audio or using additional disk space.

Rename shows you a list of library files on the hard disk. Select one and *Enter*, and you'll see fields for a new Name, Client, or Creator, as well as Frame Rate. Press *Enter* to save changes, or *Esc* to keep the old information.

Sort

Use this to rearrange the list of library files that appears when you choose other library menu choices.

New library files are always added to the bottom of the list, forcing the oldest files to the top. You can sort anytime to put the newest ones on the top, alphabetize titles, or group sounds by client or creator.

To do a sort:

A) Press *Enter* to open the Sort form.

B) Use the arrow buttons to choose which drive you want to apply sort to.

> **Note:** If you are not using multiple drives, only drive C: Fixed will be available for sorting.

C) Use the arrow buttons to select whether you want to sort by Name, Creator, Client, Usage, Sample Rate, Create Date, or Last Edit Date. Then choose a sort direction:

Ascending puts lower numbers or letters at the top of the list. For example, names beginning with "A," very short usage times, or the oldest-dated library file would appear first.

Descending does the reverse. Newer files, or ones that use the most disk space, appear first.

D) When you're ready to sort, press *Enter* again. If you decide you don't want to, press *Esc* or select No, don't sort on the bottom of the form.

Sorting is almost instantaneous, and the sorted list will appear the next time you choose a Job Controller function that has a list.

There are some tricks you can do with sorting, to make Library management easier. They're thoroughly discussed under Production : Sort, above.

DAT Backup/DAT Restore/Prepare DAT

The system lets you store library files efficiently on standard DDS data cartridges[16].

Important: These choices aren't active unless you have Orban's optional Multi-Track DAT Backup System.

Use DAT Backup to transfer library files from hard disk to data DAT, and DAT Restore to get them back again. The Prepare DAT command is for tape management. To check DAT usage, refer to the Information Center.

Since the Multi-Track DAT system is optional[17], it's discussed separately in Chapter 9.

Erase

- Erase permanently wipes library files off the hard disk.

Press *Enter*, choose a drive, then select one or more library files, and follow the instructions on the screen.

Note: To tag multiple sounds for a batch erase, highlight your selections and press *Set*. Checkmarks will appear next to each tagged entry. To de-select an entry so that it is not erased, highlight the tagged entry and press *Set* again.

Before you Erase, Audicy will remind you if the library sound hasn't been backed up to a data DAT with a caution message in yellow — CAUTION: This Library file has not yet been archived to DAT. When you begin the Erase, by pressing *Enter*,

[16]They look just like audio DATs.
[17]See your dealer — this is another paid announcement.

Audicy asks Are you sure? Use the arrow buttons to select Yes, erase this library file, then press *Enter* again. Or cancel by selecting No or just pressing *Esc*.

> **Note:** The archive caution refers to Data DATs only. If you are using an external drive for archiving, Audicy will have no record of this.

After erasing many sounds it's a good idea to use *Optimize*, discussed directly below. This will keep your hard disk working as fast as possible.

System Utilities

We've included some utility features to help you use the hard disk better and faster.

Check Up and Optimize

Here's where we talk about (gasp) the Disk Operating System.

You can ignore these functions if you want. Audicy will record, edit, and mix perfectly well, even if you never use these choices.

However, if you use them regularly, your Audicy will almost certainly run more efficiently.

These functions are special versions of two very powerful disk tools from Norton Utilities:[18] Disk Doctor and Speed Disk. While we've made them virtually foolproof, they can damage your system software if improperly halted:

- Never shut down Audicy while using Check up or Optimize.
- Never turn off the power while using these functions.
- Never press the *Reset* button while using these functions.
- You can stop these functions safely by pressing the *Esc* button on the keyboard, and then following the instructions.

The buttons on the Console are locked out while these functions are running.

We suggest you pull the next page out of the manual, and leave it propped up on the Console when using Check up or Optimize.

[18]Registered trademark of Symantec Corp., Cupertino, CA, and built into the Audicy with their permission.

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That's so you can pull it out and leave page 3-21 on the Console when running Check Up or Optimize.

Warning!

This Audicy is running a disk optimization utility.

It may take a while to complete.

Don't turn off the power.

Don't press RESET.

Here's how to stop the utility safely:

1. **Press *Esc* on the keyboard.**

2. **Use the cursor keys to highlight Don't Continue.**
3. **Press *Enter* on the keyboard.**

In a few moments, Audicy will be ready to use.

There's nothing on the back of this page.

Pull this page out of the manual, and leave it on the Console when running Check Up or Optimize.

This page intentionally left almost blank.

That's so you can pull it out and leave page 3-21 on the Console when running Check Up or Optimize.

Check Up

Enter this to diagnose and repair damage or corrupted clusters on your hard disk. Check Up is our name for Norton's Disk Doctor utility. Read the following for detailed information concerning Check Up.

Audicy's hard disk is its only constantly moving part, and we've chosen a particularly reliable type. Unfortunately, we can't revise a rule of physics: moving parts will wear out.

Wear is usually due to environmental factors, particularly shock and vibration. If you move your Audicy while it's turned on, it's especially vulnerable.

Check Up tests the entire hard disk for damaged sections, tries to recover data that might have been stored on them, and then locks out those sections so they can't be used again. Check Up also diagnoses problems such as crosslinked files, and corrupt allocation tables. Since this involves checking a lot of digital locations[19], the utility can take an hour or more to run.

Check Up alerts you to any damage it finds, and asks your permission before fixing it. So you'll need to be around for the first fifteen minutes or so[20] while it's running.

When you first open the Check Up form, you can specify which drive you want to run Disk Doctor on. Then follow on-screen instructions, keeping in mind the following:

- If Check Up asks permission to do something, say "yes" by pressing *Enter* on the keyboard. The Console's *Enter* button won't work in this case.
- Never try to stop Check Up by switching Audicy off, or by pressing *Reset*.
- You can stop Check Up by pressing *Esc* on the keyboard. *Esc* on the Console doesn't work in this case.
- After you press *Esc*, the screen will ask you if you want to Continue or Cancel Test. Use the keyboard's arrow keys to highlight your choice and press *Enter*. If you choose Cancel Test you'll be returned to the Job Control screen momentarily.

In cases where Check Up finds new bad clusters or sectors every time you run it, you may have a disk which is going bad.

---

[19]Between several hundred million and a couple of *billion*, depending on the hard disk installed.
[20]This may be slightly longer if your disk needs a lot of fixing.

Optimize

This utility rearranges the data on your hard disk so the system can retrieve it faster. Optimize is our name for Norton's Speed Disk utility. Here's how it works.

Hard disks can slow down because of the way they pack data. Imagine you've recorded something on a reel of analog tape, and then erased part of it.

Before:	***Mary had a little lamb.***
After Erase:	*Mary had lamb.*

Most engineers would start the next job on the blank tape after *lamb*. But this wastes two words' worth of tape. If you could punch in very efficiently, you could re-use the tape in the middle of the sentence:

New Material:	*The quick brown dog.*
Final Result:	*Mary had The quick lamb brown dog.*

Audicy's hard disk does this kind of punching dozens of times when Shadowing a typical production. Unfortunately, it has to jump around the disk to save and reload the new sounds back in their proper order, just as you'd have to jump around the tape to play back Mary's lamb without her dog.

Optimize shuffles the files so jumping isn't necessary, effectively splicing Mary and the dog back the way they belong. Since the disk head doesn't have to move around as much, Audicy can work faster.

- In a busy production environment, you should Optimize once a week. It will noticeably speed things up.

When you first open the Optimize form, you can specify which drive you want to run Speed Disk on. Then follow on-screen instructions.

Optimize may take a while to run, depending on how many files it has to move. It doesn't need to be supervised, however, so you can run it overnight or during a lunch break.

Important: Never try to stop Optimize by switching Audicy off, or by pressing *Reset*.

- You can stop Optimize by pressing *Esc* on the keyboard. *Esc* on the Console doesn't work in this case. (You'll hear some beeps from the computer; this is normal.)

After you press *Esc*, the screen will ask you if you want to Continue or Cancel. Use the keyboard's arrow keys to highlight your choice and press *Enter*. If you choose Cancel you'll be returned to the Job Control screen momentarily.

Prep Disk

This choice is for preparing secondary hard drives, or Jaz disks[21] or floppy disks. Preparing creates the proper directory structure on a disk so it is ready to accept Productions or Library files. (Note that floppy disks cannot be used to store Productions.)

Press *Enter* on this menu pick From the Prep Disk form, select a drive, then answer Do you want to proceed? with Yes, prepare disk or No, cancel prepare. Prepping a disk takes only a few moments.

If a drive/disk has not been prepared, you won't be able to use it; the message window will alert you when you to try to access it.

Defaults

Enter this choice to customize your Audicy. Use it to:

- Set a standard Name, Creator, and Client for New productions;
- Set a standard Sample Rate, Frame Format and Record Limit for New and Temp productions[22]:
- Set a standard Name and Creator for library sounds;
- Specify how sensitive the automatic *Help* facility will be.
- Set the brightness of the incandescent (white) lamps in the Console buttons.
- Set the Site Name that appears on the Job Control screen.

A default is a computer's fallback choice: If you do nothing, it automatically still takes effect. The user can always ignore the default, and supply custom instructions. For example, most microwave ovens default to "high power" when you start them — even though you can change to "medium" or "defrost."

When you *Enter* Defaults, you'll see an input form like this:

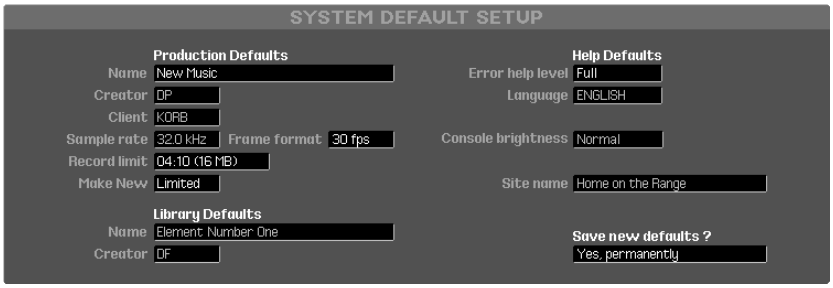

Figure 3-6: System Defaults

[21] Jaz and Zip drives require optional software.
[22] Depending on the input and memory options on your system.

Text Defaults

Information you type in the fields on the left will appear whenever you start a new production, save a library sound, or attempt to rename either a production or library sound.

- If you leave a Name field blank, Audicy will call new productions and library sounds <untitled>.
- If you leave other text fields blank, Audicy will keep them blank when you start a new production or save a library sound.

Remember, you can replace any of this information — just by typing over it — when you start a production or save a library sound.

Sample Rate

Use the *left* or *right* arrow buttons to choose the rate that first comes up when you start a new production, either 32.0 kHz or 44.1 kHz. You can still choose another rate when you start any particular production.

Frame Rate

Use the *left* or *right* arrow buttons to choose the rate that first comes up when you start a new production, either 24, 25, 29.97DF, 29.97ND, or 30 fps (frames per second). You can still choose another rate when you start any particular production.

Record Limit

Use Record Limit to select the maximum recording time for limited productions. The *left* and *right* arrows (or the cursors keys on the keyboard) let you cycle through choices ranging from very small to the full size of your Audicy.

Audicy automatically limits recording time if your hard disk doesn't have enough room for a full production. If you have a single unit, you can ignore Record Limit. If you plan on sharing productions among multiple machines with different amounts of memory, you need to consider Record Limit.[23]

Orban's Multi-Track DAT Backup system and removable drives let you move productions from one Audicy to another easily; productions can be used on both machines if both machines have the same amount of memory. If you move a production from a small Audicy to one with a lot of memory, there's also no problem.

But if you start a production on an Audicy with a lot of memory, you may not be able to move it to a smaller one. That's because we store information at specific locations, all through the system's audio memory.

[23]Some production directors set a record limit to keep trainees from wasting too much hard disk space while they're learning the system.

Your production might use four minutes' total audio across its ten tracks. But if you produced it in an Audicy with half an hour of memory, there could be little pieces of sound scattered throughout that half hour. Unless you take special precautions, it just won't fit in a seventeen-minute Audicy.

Limited productions are deliberately restricted, so they use less memory and simulate a smaller Audicy. Refer to the next entry.

Make New (Record Limit)

This field determines which Record Limit you first see in the Information box when you start a new production. It can be either the Full Record Time available in your machine, or the Limited Record Time you chose with the function above.

If the times are equal, or if Record Limit is set for Full Size, this choice is automatically turned off.

If the Record Limit was set below the system's maximum, you can always toggle between Limited and Full Size.

These two functions — along with the optional Multi-Track DAT option or a removable drive — make it easy to share productions among Audicys of different sizes.

- Use Record Limit to choose a size matching the smallest machine.
- Set a Make New Default of Limited, so new productions normally use this size.

Help Level

Use the *left* or *right* arrow buttons to choose how serious a situation has to get before *Help* flashes.

- Full is best for new operators, because it gives hints on how to use Audicy most efficiently.
- Warnings is for more sophisticated users, who may need occasional help with unusual editing situations.
- Errors is for experts, and won't flash unless there's a major hardware or system failure.

Since each level also includes those below it, Full also flashes if there are Warnings or Errors.

When Audicy sees one of these situations, the *Help* button will start flashing. This is its way of letting you know that there's information waiting. Press *Help* when it's flashing, and you'll see special tips on how to deal with that situation. Press *Help* when it's not flashing, and you'll get Audicy's on-screen guide to menu choices and system status.

Language

Use this multiple-choice field to set which language will appear for messages and help screens.

Audicy translation kits are available for Roman-character languages. Contact your dealer for more information.

Console Brightness

Compensate for the lighting level in your studio by choosing Dim, Normal, or Bright for the lamps in the white Console buttons. Those lamps will turn on while you're adjusting this setting. The red or green LEDs in other Console buttons are not affected.

Site Name

This text appears to the left of the Message Window when the Job Control screen is active. This is a good place to put the name of your studio or facility.

Save New Defaults?

Use this field to set temporary, as well as permanent, defaults.

If you're going to be doing lots of productions with similar titles or other choices during the same session[24], this feature can save you a lot of data entry.

Enter any name, creator, or client information, or set any other option you'll be using just for this session. Then select one of the following and *Enter*:

- Yes, temporarily — This makes new productions match the new default information for this session only. When you restart Audicy, your old defaults will be restored.
- Yes, permanently — This saves the defaults to hard disk, and makes new productions match the defaults until you change them.
- No, restore old ones — This brings back the defaults you've stored on hard disk, canceling any temporary ones without having to restart Audicy.
- No, leave unchanged — This cancels the Defaults screen without changing anything. It has the same effect as *Esc*.

Don't worry too much about defaults. No matter how you set them, you can still enter different information when you start a new production.

[24]That is, before you turn off the Audicy for the day.

Date/Time

Enter this choice to set Audicy's internal clock.

This controls the date and time that will be stamped on productions whenever you edit them, and on library sounds when you save them. This field also sets the system clock which appears on the Job Controller.

There are separate fields for hours, minutes, and seconds (in twenty-four hour "military" format), and for the day, month, and year.

Use *left* and *right* arrow buttons to move from one field to the next, and *up* or *down* to raise or lower the information in any field. You can use the arrow buttons on the Console, or the cursors on the keyboard.

The clock is set to the time you specify when you press *Shift*+*Enter*. If you're in the Years field, you can just press *Enter* to set the clock.

Print Manager

You can hook up a printer to your system's parallel (printer) port and print notes files and lists of productions or library sounds.

- To print a list of productions or library sounds, pull up a selection screen for any drive or DAT tape (e.g., Edit Old, or Restore), and press *Print Screen* on your computer keyboard. The file will be sent out the parallel port to your printer. This feature is very useful in helping you keep track of what you've stored on your DAT archive tapes or JAZ disks.

- The Print Manager menu choice under the System Utilities category in the Job Controller lets you view the status of your printer hardware, and cancel pending print jobs.

- You can print production notes files from the Job Controller or from within a production by pressing *Print Screen* while viewing the Notepad Editor.

Audicy printer features utilize basic DOS print commands, so there are no printer drivers to install or support. Any basic printer should work for this application, but we cannot guarantee that all printers will work. Simply connect your parallel printer to the printer port on the back of the Audicy System Unit. If your printer does not respond when you attempt a print command, check the printer and printer cable, and replace as necessary. If you already have a printer in your studio, we suggest you buy a printer switch box and share the device, since you probably won't need to use a printer that often with Audicy.

Information Center

About

Enter About to check the configuration of your particular Audicy. You'll see a screen like this:

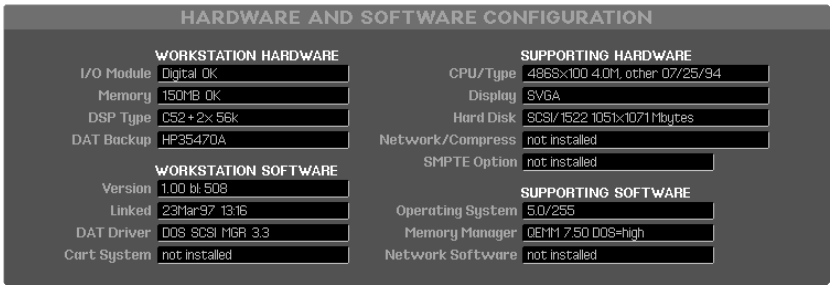

Figure 3-7: About Screen

About is useful if you've just updated hardware or software, to verify proper installation. If there's an installation problem, you may see Error in red letters on one or more fields. Try re-installing the software, following the instructions that came with the latest update disk.

You should also have this information handy if you ever need to call Orban Service, or if you're ordering options for an existing Audicy.

Write the system specifications below, exactly as they appear on your screen. For simple reference, or if your system ever fails, you can use this information to help technical support. We suggest you write this information down now.

Workstation Hardware

I/O Module: _____

Memory: _____

DAT Type: _____

DAT Backup: _____

Workstation Software

Version: _____

Linked: _____

DAT Driver: _____

Cart System: _____

Supporting Hardware

CPU Type: _____

Display: _____

Hard Disk: _____

Network Compress:_____

SMPTE Option:_____

Supporting Software

Operating Software: _____

Memory Manager:_____

Network Software: _____

Information Gathered By: _____ on this date: _____ .

Disk Usage

Enter this to see how much space is left on the hard disk. You'll see a display of what's on your disk on the top portion of the screen. If you have additional fixed or removable drives connected, you can select the appropriate drive letter and check them also.

While all the information in this display is useful, you'll probably check the sixth line, currently free, most often: It tells you how much disk space is available for new audio. Think of it as checking how much clean tape is left on a workreel. This line is always highlighted so you can find it immediately.

Figuring The Available Time

Hard disks are calibrated in megabytes, not seconds. Disk Usage interprets these megabytes based on the Default Sampling Rate.

If the default is set to 32 kHz, each megabyte represents 16 seconds of audio[25]. If you select 44.1kHz, each megabyte will equal roughly 11.6 seconds.

If you change the default rate and *Enter* Disk Usage again, it will show revised times based on the changed rate.

Disk Usage also tells you many more productions you'll be able to fit on a hard disk. But this figure is a minimum only, and you can probably fit more than it says.

On the example above, one hour and thirty seven minutes (01:37:07) is described as enough to hold seven more productions.

Since the system has no way of guessing how long a production will be, it has to be ready for the longest possible one; this shows up on the screen as Maximum usage for each full production, which is based on the number of memory cards in your Audicy. Chances are, you won't need the maximum for any production. In

[25]If you've got a pocket calculator handy: The Audicy runs 32,000 or 44,100 samples per second at two bytes (16 bits) per sample. Don't forget, a megabyte is really 1,048,576 bytes.

the example above, you could probably save ten or eleven more short productions before you run out of disk space.

Audicy compares how much memory you've got with how much disk space is left, every time you start working on a shadowed production. If there isn't enough disk space to save everything, the system alerts you with a few choices:

- You can work as a Temp production (but the Shadow choice will be inactive);
- You can start it with a Record Limit[26] matching the available space;
- You can start it with a standard Record Limit you've chosen in Defaults (if that limit is less than the available disk space);
- You can cancel, and Erase things from your disk to free up more space.

What To Do When The Disk Is Full

- Backup productions or library sounds to the Multi-Track DAT Backup System or Copy them to an additional drive, and then erase them from your hard disk. You'll be able to bring them back when you need them, with no signal degradation and with all the tracks, locators, and other Audicy features in place.
- Save pairs of tracks to analog tape or audio DAT, and then erase the production. If you ever want to work on the production again, you can re-record the tracks into Audicy. (You'll probably have to erase all the silences to make it fit your Audicy's memory.)
- Check Usage. It's likely there are still a few minutes left on the disk: you can start a Temp production, and save the finished mix as a library sound.

DAT Usage

DAT Usage is the same as Disk Usage, discussed directly above, except that it refers to the DAT tape currently installed in the optional DAT drive.

If you do not have this option, this menu pick will not be available.

[26]Essentially, the Fuel Gauge won't show all the memory in your machine.

Shutting Down

When you're ready to shut down Audicy at the end of the day, just check two things:

- Can you see the Job Control screen's artwork at the top of your monitor? If you're in a production, you must first highlight the System: Quit menu pick, then press *Enter* before proceeding.

- If you've got the Multi-Track DAT Backup System, check the two LEDs on its front panel. If they're not flashing, everything's fine. If they are flashing, wait until they stop. **Always** check the DAT drive before turning off the power. If you see a flashing green or flashing amber light on the drive, WAIT! (A chart of flashing-light conditions appears in Chapter 9: Multi-Track DAT Option, as well as in Chapter 15: Troubleshooting.)

When the above situations are fine, then you can turn off the power.