

Hard Drive Configuration and Maintenance

It is recommended that you start with a newly initialized audio drive. You should also periodically defragment your audio drive to ensure continued system performance.

⚠ *Always back up any important data on your drive before initializing it, as it will erase all data on the drive.*

Avoid Recording to the System Drive

Recording to your system drive is not recommended. Recording and playback on a system drive may result in lower track counts or fewer plug-ins.

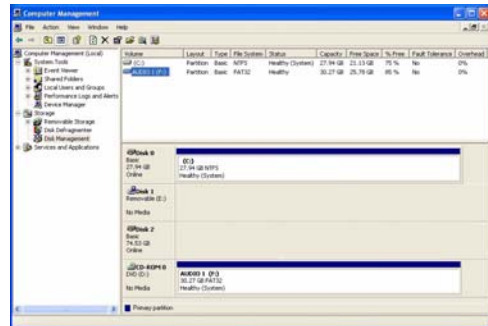
Formatting an Audio Drive

Formatting Windows Audio Drives (Windows Only)

For optimum performance, audio drives should be formatted as FAT32 or NTFS.

To format an audio drive:

- 1 Right-click My Computer and choose Manage.
- 2 Under Storage, choose Disk Management.



Disk Management window (Windows XP)

- 3 In the Disk Management window, right-click the hard drive you will use for audio and choose Format.

4 Do one of the following:

- Select the Quick Format option. Quick option should be sufficient for qualified mechanisms.

– or –

- For optimal disk performance, you can select 32K from the Allocation unit size pop-up menu (make sure Quick Format is not selected). Though this option takes longer to complete, it can increase efficiency of drive recording and playback.

5 Click Start, and follow the on-screen instructions.

⚠ *Pro Tools only supports Basic drive Types.*

6 When formatting is complete, close the Format window.

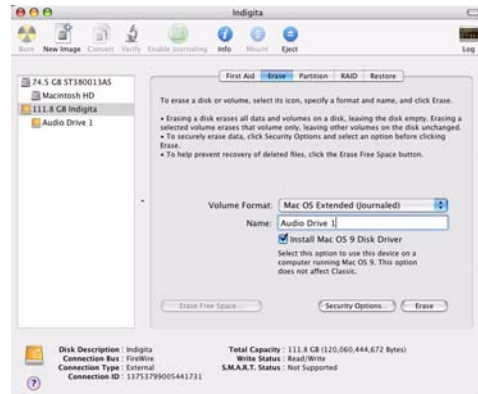
Formatting Mac Audio Drives

(Mac Only)

For optimum performance, audio drives should be formatted as Mac OS Extended (Journaled).

To format an audio drive:

1 Launch the Disk Utility application, located in Applications/Utilities.



Disk Utility (Mac OS X)

2 Click the Erase tab.

3 Select the drive you want to initialize in the column on the left side of the window.

4 Choose the Mac OS Extended (Journaled) format.

⚠ *Do not choose the “Case-Sensitive” format option. Pro Tools will not operate properly with case-sensitive formatted drives.*

5 Type a name for the new volume.

6 If you plan to connect the drive to a Mac OS 9 computer, select Install Mac OS 9 Drivers.

7 Click Erase.

The drive appears on the Desktop with the new volume name.

Audio Drives and Disk Cleanup

(Windows Only)

The process of recording and editing can quickly decrease overall drive performance. It is suggested that you regularly use Disk Cleanup (or an equivalent utility) to assess the condition of drives and, if necessary, delete temporary files and other unused data.

To use Disk Cleanup:

- 1 Choose Start > Control Panel.
- 2 Double-click Administrative Tools.
- 3 Double-click Computer Management.
- 4 Double-click Storage.
- 5 Double-click Disk Management.
- 6 Select the desired volume in the list, then choose File > Options.

Disk Cleanup determines how performance is being affected by drive conditions, and lets you review and delete unnecessary files from the selected volume. For more information, see your Windows XP documentation.

Defragmenting an Audio Drive

(Windows Only)

Periodically *defragment* audio drives to maintain system performance.

To defragment an audio drive:

- 1 Right-click My Computer and choose Manage.
- 2 Under Storage, choose Disk Defragmenter.
- 3 In the Disk Defragmenter window, choose the drive you want to defragment
- 4 Click the Defragment button and follow the on-screen instructions.
- 5 When defragmenting is complete, close the Computer Management window.

Hard Disk Storage Space

Mono audio tracks recorded with 16-bit resolution at 44.1 kHz (CD quality) require approximately 5 MB of hard disk space per minute. The same tracks recorded with 24-bit resolution require about 7.5 MB per minute.

Stereo audio tracks recorded with 16-bit resolution at 44.1 kHz (CD quality) require approximately 10 MB of hard disk space per minute. The same tracks recorded with 24-bit resolution require about 15 MB per minute.

Table 4 lists the required disk space for certain track numbers and track lengths, to help you estimate your hard disk usage.

Table 4. Required hard drive space for audio tracks (44.1 kHz and 48 kHz sessions shown)

Number of tracks and length	16-bit at 44.1 kHz	16-bit at 48 kHz	24-bit at 44.1 kHz	24-bit at 48 kHz
1 mono track, 1 minute	5 MB	5.5 MB	7.5 MB	8.2 MB
1 stereo track (or two mono tracks), 5 minutes	50 MB	55 MB	75 MB	83 MB
1 stereo track (or two mono tracks), 60 minutes	600 MB	662 MB	900 MB	991 MB
24 mono tracks, 5 minutes	600 MB	662 MB	900 MB	991 MB
24 mono tracks, 60 minutes	7 GB	7.8 GB	10.5 GB	11.6 GB
32 mono tracks, 5 minutes	800 MB	883 MB	1.2 GB	1.3 GB
32 mono tracks, 60 minutes	9.4 GB	10.4 GB	14 GB	15.4 GB