

# MULTIMEDIA

# AMADEUS II

## WHO ?

MARTIN HAIRER

## WHAT ?

AUDIO EDITOR

## WHERE ?

[WWW.UNIGE.CH/MATH/FOLKS/HAIRER/MARTIN/](http://WWW.UNIGE.CH/MATH/FOLKS/HAIRER/MARTIN/)

## HOW MUCH ?

\$25

## WHAT ELSE ?

Amadeus II is an application for recording, manipulating, and analyzing sound files. You can manipulate or analyze audio files in several different ways. You can view your sound as a graphic representation in a Sonogram window, which shows the amplitudes of different frequencies as different colors. A Spectrum window displays a vertical slice of a sonogram, a graphic representation of the sonogram at a point in time. You can view an animation of this in the Animated Spectrum window (which displays the spectrum as you play your sound), or in the 3D Spectrum (which draws different spectra simultaneously to condense the information). Other views include Real-time Spectrum, Oscilloscope, and Waterfall.

Amadeus II offers numerous effects, including echo, amplify, and filter (which are built-in), and ten sound processing plug-ins, including Denoising, Fadings, Normalize, Repair, Reverse, and Simple Generators (which allow you to create silence, sine waves, or white noise). Amadeus II also supports VST plug-ins.

You can save your finished sound file as an AIFF, QuickTime movie, AVI,  $\mu$ -Law, System sound, MP3 (using the free LAME encoding engine), the new Ogg Vorbis format (similar to MP3), SoundDesigner, or WAVE file. Each format (with the exception of WAVE) allows you to tweak settings before saving.

## SO WHAT ?

Amadeus II is a solid program offering some features available only in professional, and significantly more expensive, applications.

# FINAL CUT PRO

## WHO ?

APPLE

## WHAT ?

VIDEO EDITOR

## WHERE ?

[WWW.APPLE.COM/FINALCUTPRO/](http://WWW.APPLE.COM/FINALCUTPRO/)

## HOW MUCH ?

\$999

## WHAT ELSE ?

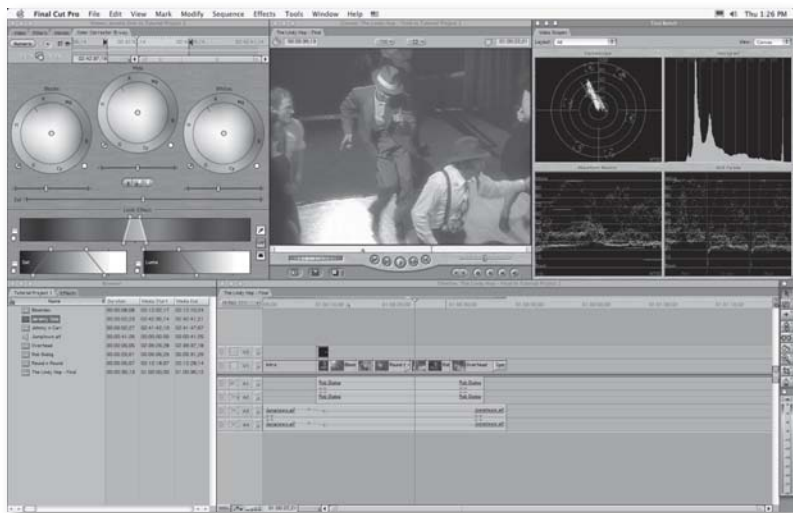
Final Cut Pro offers professional video editing features at a price a dedicated home user can afford. Final Cut Pro manages to be one of the easiest video editing applications, and now it's even more powerful. In addition to being the first video editing application for OS X, this version adds several powerful new features, including G4 real-time effects, the new OfflineRT format for storing more video in less hard drive space, color correction tools, Voice Over tool, Media Manager, and Autosave Vault.

Final Cut Pro has the same familiar elements you'll find in most video editors: a Browser (for storing the source material for your project), a Viewer (your source monitor; where you preview clips for editing), a Canvas (your record monitor; where you view your edited sequences), a Timeline, a Tool Palette, and Audio Meters. Windows are tabbed so you can open multiple projects, clips, sequences, and timelines. You can select from several preset layouts and create and save two of your own. And Final Cut Pro's "mode-free" interface means you don't have to switch between programs for editing, trimming, effects, and compositing (you can use Adobe After Effects plug-ins within Final Cut Pro).

The three most exciting features in this new version are the OfflineRT format, G4 real-time effects, and the new color correction tools. The OfflineRT format lets you store over 40 minutes of video per gigabyte at 320 x 240 resolution (DV is 720 x 480, and a gigabyte holds only about five minutes of DV). You can capture directly to OfflineRT or capture DV and convert to OfflineRT for editing. Final Cut Pro and a PowerBook G4 make the perfect portable postproduction suite, but OfflineRT is also great news for home users who don't want to give all of

their hard drive over to their digital video hobby. OfflineRT also means better performance on slower machines.

To take advantage of the real-time G4 effects, however, you'll need just that: a 500-MHz or faster single or dual processor Power Mac G4 or PowerBook G4, and at least 384MB of RAM (Final Cut Pro will run on a PowerPC G3 with a 300-MHz or faster processor, but you won't be able to enjoy the whiz bang real-time effects). Final Cut Pro supports real-time effects for transitions, composites, titles, and color correction for DV and OfflineRT, without rendering, and without an expensive PCI card. Only a subset of available effects will play back in real time (and only at preview resolution), but they include the most common transitions, filters, and effects. How many effects you can play in real time depends on your computer (a dual processor will give you a significant advantage over a single processor). For full quality and additional effects, you'll still need additional hardware (like Matrox's RTMac).



Final Cut Pro now includes some advanced color correction and image control tools. Color correction lets you fix problems created during a shoot (like color balance or exposure errors), match scenes shot under different lighting conditions, add special effects, or manipulate the mood by changing saturation or contrast. Final Cut Pro's range-checking options (including zebra striping) warn you about problems with luminance and chrominance levels that might be in your footage,

or the result of adjustments you're currently making. You'll also find the standard video scopes: a Waveform Monitor (showing the relative levels of brightness and saturation), a Parade Scope (which breaks the red, green, and blue components of the image into separate waveforms for easier comparison), and a Vectorscope (showing the overall color distribution of the image). There's also a Histogram (showing the relative strength of luminance values in the image).

Final Cut Pro includes four new filters for correcting color. The Color Corrector and Color Corrector 3-way filters use color wheels that let you change the mix of red, green, and blue in your clip (the Color Corrector 3-way filter lets you make separate adjustments to the color balance of the blacks, mids, and whites in your image). The Desaturate Highlights and Desaturate Lows filters eliminate unwanted colors from the highlights and blacks in your clip that sometimes appear when you apply color correction, and the Broadcast Safe filter lets you apply the proper settings for NTSC or PAL so your clips don't exceed broadcast limits for luminance and chrominance.

These three new features—OfflineRT, G4 real-time effects, and color correction—make Final Cut Pro an astounding value, and the new features don't stop there. A Voice Over tool lets you record audio while playing back a sequence from the Timeline, and Final Cut Pro comes bundled with Bias Peak DV for more advanced audio editing and processing. A Media Manager helps you stay organized, making it easier to manage your files. You can use Media Manager to transcode media (for example, you can recompress your DV files to OfflineRT before transferring to your PowerBook for mobile editing). An Autosave Vault saves copies of your projects as you work, so you can roll back changes to previous versions, before you made a mess of everything playing around with various effects.

Final Cut Pro has a user-friendly interface that belies its power, and comprehensive documentation makes it easy for beginners. The printed *User's Manual* spans three volumes, a *Tutorials* book walks you through all of the basics, and a *What's New* book introduces the new features in detail.

## **SO WHAT ?**

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**Apple has aggressively pursued the professional postproduction market, and this version raises the bar with some advanced features, while holding the line on price. Even if you're not a pro—but just a serious video enthusiast—you'll find Final Cut Pro is worth the investment.**



A Live document is called a Set. There are two main views: Session View and Arranger. Session View displays a column for each track. You can add any number clips to a track and any number of tracks to a Set. Play any clip in a track (you can play only one clip in a track at a time) by clicking the mouse, with a keyboard shortcut, or playing a MIDI note. A single row cutting across all tracks is called a Scene. Arrange clips that sound good together on the same row, then click the Scene to play them together. The music continues to play as you fire off clips so you can compose in real time. Live keeps recording as you change and rearrange clips on the fly.

The Arranger is a timeline showing all of the clips you've added to your performance. Hit Record to capture your improvisations in Session View and then view them in Arranger. You can edit any adjustments to the controls (like volume and fade), which are displayed as envelope curves. Edit your improvisations in Arranger or lay out arrangements in Arranger and edit as you go.

Edit individual clips in the Clip view, where you can adjust gain, pitch, and loop settings. The Time-Warping Engine lets you stretch and shrink clips, while ensuring that all files play in tempo with the song. Warp markers align a sample to a particular time in the song, and the Time Warp Engine expands or compresses the clip while maintaining the tempo.

Live comes with several effects and also supports VST effects. Drag and drop any number of effects to apply them to the music, then move them around and adjust settings, all while the music plays on and on...

## **SO WHAT ?**

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**Close the door and crank up the volume. Playing with this program is flat out fun.t**

# SONICFIRE PRO

**WHO ?**

SONIC DESKTOP SOFTWARE

**WHAT ?**

SOUNDTRACK CREATOR

**WHERE ?**

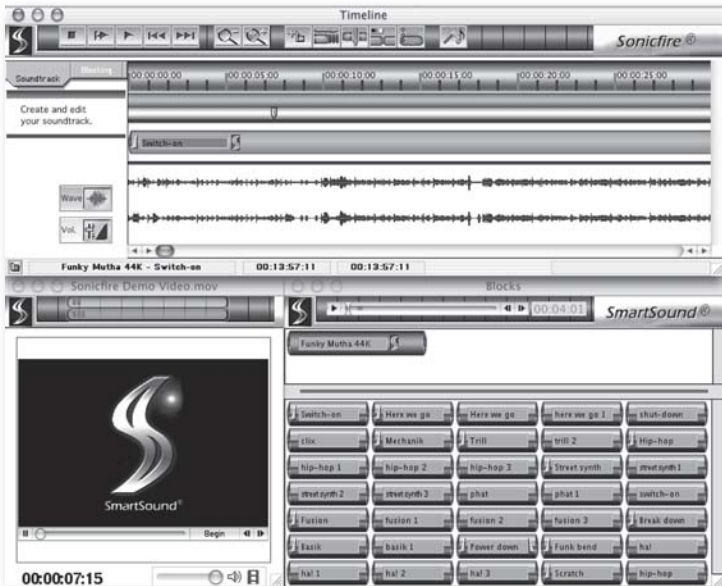
WWW.SONICDESKTOP.COM

**HOW MUCH ?**

\$349.00

**WHAT ELSE ?**

Sonicfire Pro is an application that enables you to create professional soundtracks quickly and easily. With Sonicfire Pro's SmartSound technology, you don't need to be a musician or an audio engineer to create great musical scores for your next video, multimedia project, or Web site.



Creating a soundtrack is incredibly simple. You can import your video into Sonicfire Pro, and then synchronize your audio automatically using the Maestro. The Maestro is a wizard that helps you create the perfect soundtrack by making a few simple choices, beginning with how you plan to use the music. Do you need background music? Or music to set a mood, add drama, or build energy for an action sequence? After you've made that decision, you can select from several possible styles (including Country/Folk, Jazz/Fusion, New Age/Easy, Pop/Dance, Rock, and Specialty), then from all of the selections available for that style. Sonic Desktop publishes SmartSound content palettes—collections of high quality royalty-free music (there are over 35 CDs in their library, with a new disk added every month)—so there's a wide selection to choose from.

After deciding on a style and selection, you enter the time for the soundtrack. The Maestro then presents you with several variations on your selection, all of them arranged to fit your time limit. Sonicfire Pro doesn't fade your music to make it fit; it actually creates an arrangement with a beginning, middle, and end. You can also create a piece that's designed to loop smoothly.

Once you've created your soundtrack, making changes is as easy as drag and drop. Every score is composed of blocks of music, which you can change or rearrange. If you're working with video, you can watch your clip in Sonicfire Pro while the soundtrack plays in the timeline, then add markers on the timeline where you want the music to change. Use the Maestro to automatically create a different arrangement for each scene. You can also import your own audio files, edit them, and use them with your soundtrack.

Sonicfire Pro supports most common audio and video file formats, including DV, AVI, MPEG, and QuickTime. You can export your finished file as an audio file or complete QuickTime movie, ready to be streamed from the Web or burned to CD-ROM.

## **SO WHAT ?**

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**Sonicfire Pro's ease of use, flexibility, and high quality royalty-free music, make it the perfect solution for adding polish to your presentation or video production.**

# SOUNDHACK

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**WHO ?**

TOM ERBE

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**WHAT ?**

AUDIO EDITOR

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**WHERE ?**

WWW.SOUNDHACK.COM

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**HOW MUCH ?**

FREE

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**WHAT ELSE ?**

SoundHack is a sound recorder, player and processing program. If you're looking for a way to add sounds to your system, this is a great little program (and it's free!). OS X allows you to use any AIFF file as a System sound. SoundHack reads and writes most common audio formats, including AIFF, WAVE, Sound Designer II, SND, AU,  $\mu$ -Law, and several more (unfortunately, there's no support for MP3 files). In addition to recording and playing various audio formats, SoundHack allows you to apply numerous effects, like time stretching or pitch shifting, cross-synthesis between two different sound files, noise reduction, spectral expansion or compression, and several other esoteric permutations that a true audiophile would love. You can even export a sonogram of your audio file as a QuickTime movie.

Don't be intimidated if all of this sounds technical. While the interface is not the most elegant or user friendly, a tutorial and basic instructions for each menu option are available on the Web. If you're into audio, you'll have a pretty good idea of what the program is about, and if you're not you can still have fun hacking around.

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**SO WHAT ?**

You don't have to be an audio geek to appreciate SoundHack. If you just want to add System sounds without shelling out for a commercial program, or want to play around with some sophisticated audio effects, SoundHack has a lot to offer.

# SOUND STUDIO

**WHO ?**

FELT TIP SOFTWARE

**WHAT?**

AUDIO EDITOR

**WHERE ?**

WWW.FELTTIP.COM

**HOW MUCH ?**

\$49.95

**WHAT ELSE ?**

Sound Studio is a digital audio recording and editing application. Sound Studio gives you several recording options, including manual recording, or the option to record files automatically. There are several presets included for automatic recording (including a preset for recording vinyl records and tapes), and you have control over several options to create custom settings. For example, you can adjust the settings to start recording at a certain decibel level and to pause when it's below a specified level for a set period of time. This is a nice feature for automatic recording, but you'll have to play with the settings to get the right results for your system.



Sound Studio's filters and effects are what you would expect, including the ability to create fades, normalize, adjust volume, compress or expand, add noise, interpolate (repair), invert, reverse, flange, reverb, echo, and several more. There are numerous settings to tweak, and you can save custom settings for most filters.

Sound Studio includes basic documentation, which describes most of the features and menus. Help messages under each setting in dialog windows provide quick explanations that make it easy to experiment.

## **SO WHAT ?**

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Sound Studio is a full-featured audio recorder and editor, with a refined interface, the ability to save custom settings, and handy auto recording features.

# TOAST TITANIUM

**WHO ?**

ROXIO

**WHAT ?**

CD & DVD BURNER

**WHERE ?**

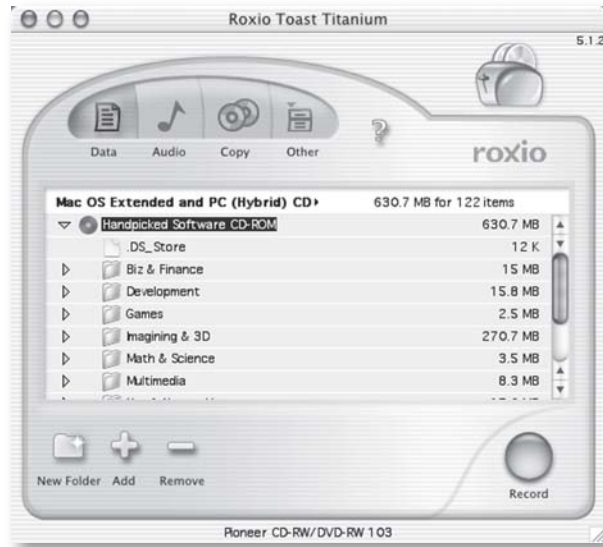
WWW.ROXIO.COM

**HOW MUCH ?**

\$99.95

**WHAT ELSE ?**

The Toast Titanium package actually contains several different applications and sample files, including iView Media (a digital asset manager; see page 44), Panic Audion (an MP3 player), and Magic Mouse Discus (a label printing program).



When you launch Toast Titanium, the main window appears. You can drag and drop your files into the window, then choose from one of four conspicuous buttons to begin squishing your disc. According to Roxio's research, 94% of CDs

burned are data CDs, audio CDs, or copies of CDs, and the first three buttons are for each of these choices. Burning a CD in one of these formats is as simple as drag and click.

The fourth button is for advanced formats, like Video CD, DVD, ISO 9660 (for cross-platform discs), and Enhanced Music CDs (for combining audio and data). You can also copy a Mac volume or disc image and create bootable CDs. To create a Video CD, just drag a QuickTime movie into the Toast window. Toast converts it to MPEG. When you install Toast, it also installs a plug-in that allows you to export your iMovie projects directly to Video CD format.

Toast has some real advantages over OS X's built-in burning capabilities. While iDVD allows you to burn DVDs, Toast allows you to burn data as well as video to DVD. If you want an exact copy of a CD, use Toast instead of iTunes (which has to rip the audio CD to MP3 first). Toast is also faster than iTunes, and CD Spin Doctor includes some nifty tools for reducing noise and pop from your old records.

There are also a couple of pleasant surprises in the box: a printed *Getting Started Guide* that's probably all you need to know, and a printed *User's Guide* that's probably *more* than you need to know (but it's reassuring when you want to try one of the less common formats). There's even a cable for hooking your stereo up to your Mac (so you can record analog audio to CD Spin Doctor). With most software publishers skimping on stuff like this, it seems downright generous.

## **SO WHAT ?**

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**Faithful copies of your audio CDs, a multitude of formats, and true cross-platform compatibility make Toast Titanium a must-have upgrade to OS X's built-in burning abilities.**