

DVD Studio Pro 1.5

Introduction - What is DVD Studio Pro?

DVD Studio Pro is a professional DVD authoring program made by Apple—and, therefore, only available on the Macintosh Platform. It allows the user to create multi-layered, multi-track DVDs in the DVD video format. DVDs created using DVD Studio Pro will play on most standard computer and consumer TV-connected DVD players.ⁱ It has become the standard for professional DVD authoring on the Mac platform. The 1.0 version of the program was first unveiled at the MacWorld Expo in 2001, just before Mac started shipping G4 desktops with its CD-RW/DVD-R “Superdrive.”ⁱⁱ Currently in the 1.5 release, it Apple has successfully marketed DVD Studio Pro as the ideal complement to its Final Cut Pro digital video editing software. Apple has poised Macintosh as the dominant platform for digital video editing and DVD authoring for everyone from the home user to the mid-budget media professional. Apple has mirrored its marketing of iMovie and iDVD suite shipped free with every Mac equipped with a DVD-R drive and its marketing of Final Cut Pro and DVD Studio Pro—touting the former as the choice for lay users and the latter as the standard for professionals and technically proficient amateurs.ⁱⁱⁱ In fact, the two suites have been marketed so aggressively that they have nearly elbowed out all competition.

Significance - What are the capabilities of DVD Studio Pro?

Video capabilities

- *Accommodates up to 99 video tracks in a project*
- *Includes up to nine angles per track*
- *Allows for chapter markers within tracks to facilitate jumping directly to various points in a DVD*

- *Contains multistory feature to create alternate versions*^{iv}

DVD Studio Pro allows for 99 video tracks--more than any ordinary user would ever want to use and depending on the file size of the tracks more than most DVDs could possibly hold. That means that you can create 99 separate, full-featured video tracks or options. These could be linked together in any way you choose: through menus or without menus, as consecutive pieces or as alternate viewing options.

Within each track, the author has the option of creating up to 9 different “angles” for the viewer. If you think of a track as a timeline for video, angles are different video options on the same track or timeline. By pressing the “angle” button on a DVD player remote, a viewer can access the different video options that the DVD author has encoded on a given track.

You can think of chapter markers as index points on a DVD track. The viewer most commonly experiences chapter markers as the stopping points on a track when he or she “fast forwards” or “rewinds.” Alternately, most commercial DVD’s have menus that allow the viewer to skip directly to a given chapter within a work. But for the author, chapter markers can mean much more. DVD Studio Pro allows authors to create multiple “storylines” within a track. To create an alternate story, the author uses chapter markers to indicate and string together stopping and starting points to virtually re-edit a track. Using the story feature, an author can create a highlight reel or trailer by referring to the video source file already on a track, saving file space on the DVD. He or she can even totally re-edit or re-sequence the original track, telling a different “story” by re-arranging and or omitting parts of the original track, as long as all the source video is on the original track.

Audio capabilities

- *Allows up to eight audio streams per video track*

- *Accepts MPEG audio, PCM audio, and AC-3 streams*
- *Allows marking of audio streams with a language for automatic selection by DVD players^v*

DVD Studio Pro allows for up to eight audio streams per track. These audio streams are the audio equivalent to video's "angles." Pressing the "audio" button on a DVD player's remote allows the viewer to switch between the different audio tracks that the author has created.

These alternate tracks are often used for dubbing a piece in various languages or for filmmakers or critics commentary on a piece. DVD Studio Pro also allows the author to mark audio tracks by language if desired. This option allows DVD players to specify the default language that plays.

Menu and interactivity capability

- *Supports unlimited menus with up to 36 buttons per menu*
- *Allows making still menus and buttons from layered Photoshop files*
- *Allows making motion menus from video streams*
- *Permits buttons to be placed over video tracks*
- *Inserts Web links in any part of the DVD using DVD@CCESS (for computer playback only)^{vi}*

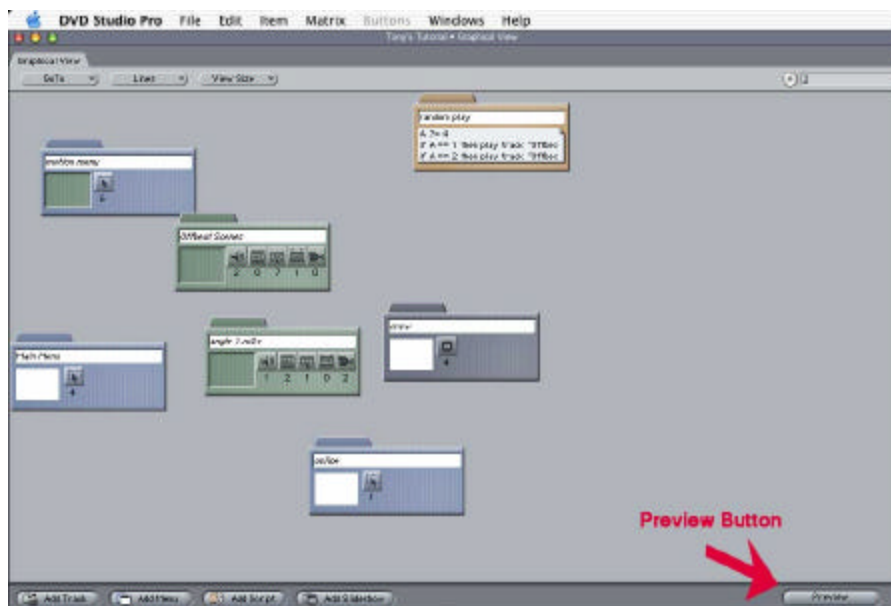
Menus are the navigation devices within DVDs. Using the arrow and "OK" buttons on a DVD player remote, the viewer can navigate "buttons" on a DVD menu page much like links on a Web page. In DVD Studio Pro, disk space is the only limitation to the number of menus, and each menu can have up to 36 links or "buttons." These features amount to nearly limitless navigation capabilities.

The author can create still menus from PICT files or Adobe Photoshop PSD files or motion video menus from MPEG 2 video files. Buttons within these menus can link to other menus, video tracks, chapter markers within video tracks, alternate storylines within video tracks, scripts or slideshows in DVD Studio Pro. But perhaps the most exciting development in DVD Studio Pro 1.5 is that it can link buttons to any page on the World Wide Web on computers whose DVD player programs are DVD@CCESS compatible. The significance of this feature is that DVD's are no longer static. While you can't change the information on DVD after it's been created, you can update the information on the Web pages it's linked to. What's more, these outside links offer a partial solution to the space limitations on DVD media.

Testing and verification

- *Built-in preview function emulates DVD functionality*
- *Included Apple DVD Player application plays completed projects directly from your hard disk*

DVD Studio Pro supports two kinds of previews. While working within DVD studio pro, the preview button spawns an internal viewer that emulates a DVD player:



This previewer only approximates an actual DVD player. Alternately, once the author is ready to render or “multiplex” the DVD Studio Pro file--that is, prepare the file for burning to a DVD—he or she can preview the rendered file on the Apple DVD Player program included in OS 9 and OS X. This preview shows exactly how the DVD would play on a Mac, and a closer approximation of what it would look like on a TV-connected consumer DVD player before burning the DVD. Both preview modes allow the author to test all navigation, audio and video tracks and features of the DVD.

Discussion based on research - Pros and cons of DVD Studio Pro

So far, all of these capabilities sound like a dream come true for anyone wanting to author DVD's. It begs the question, “what are the drawbacks?”

Well, there are quite a few.

1. First and foremost the documentation for the program is severely lacking.

The manual included with DVD Studio Pro does not show you how to use the program. It only lists some of the features of the program. Furthermore, this list is only a partial one. It does not even begin to hint at the true capabilities of the program. Compared to Apple's four voluminous manuals for its similarly priced Final Cut Pro, the skimpy manual for DVD Studio Pro seems like an afterthought.

2. Apple's lack of tech support for the program—phone, email and online—has been universally criticized in reviews and forums.

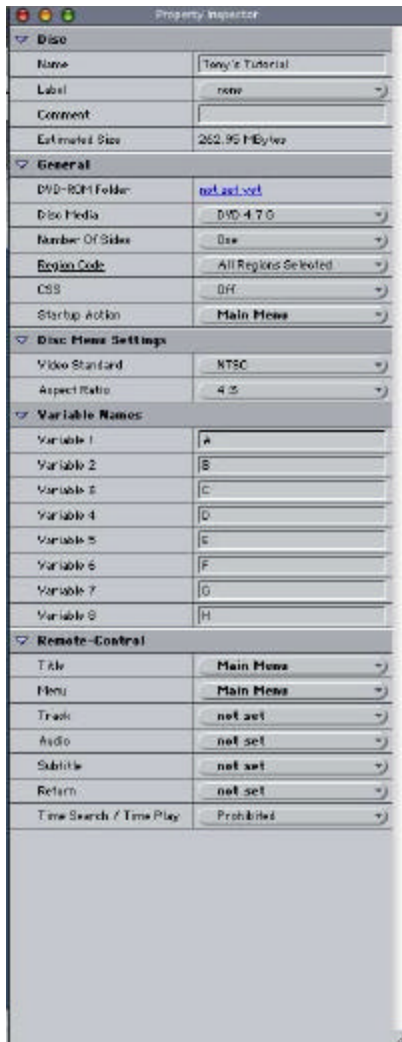
Those who have tried to get help directly from Apple report that the company has been uncooperative and unresponsive. Further evidence that support for the program is an afterthought.

3. The only way to begin to learn using the program is to buy commercial books or pay for commercial tutorials or classes.

Because it is such a new program, because of its complexity, and because its applications are so commercially lucrative, there is very little third party documentation or instructional material available free online. Even user groups and forums are relatively inactive compared to those for other comparable programs.

4. The interface is heavily text dependent.

Almost all the features of DVD Studio Pro are accessed through the context-dependent property inspector:



The property inspector is so text-dependent and dense with information that it is very easy to make mistakes and very hard to troubleshoot mistakes.

Summary - Why choose DVD Studio Pro?

Why then, given all these shortcomings, would one use DVD Studio Pro? The short answer is that there isn't much of a choice.

- The only other viable option on a Mac is the free iDVD, which does not give any flexibility in creating a DVD. Although iDVD is extremely simple to use, it is closer to DVD burning software than DVD authoring software.
- Once you master the program, there's nothing out there with comparable capabilities for a comparable price on any platform. There are high-end professional programs, but their interfaces and prices make them an unviable option for non-specialists.

The best option for those of us who want to create interactive DVDs is to spend the time—and most likely the money—to learn DVD Studio Pro, and to hope that subsequent versions are more user-friendly and offer better documentation.

This paper is written by Antony Cherian for the course EDC385G [Interactive Multimedia Design & Production](#) at
the University of Texas – Austin.

References & Related Links

Web Pages:

<http://www.apple.com/dvdstudiopro/> - Apple's page for the product. Gives tech specs, prices, updates and resources.

<http://www.apple.com/dvdstudiopro/faq.html> - Apple's DVD Studio Pro FAQ

<http://docs.info.apple.com/article.html?artnum=61587> - Apple's knowledge base document. More DVD Studio Pro FAQ.

<http://www.apple.com/pr/library/2001/feb/19super.html> -early press release on DVD Studio Pro

<http://www.macaddict.com/issues/0210/rev.dvdstudiopro.html> - A recent review of DVD Studio Pro 1.5

<http://www.techtv.com/screensavers/showtell/story/0,24330,3384355,00.html> - Thorough but older review of DVD studio pro, with useful checklist for making better DVDs.

<http://www.wiley.com/cda/product/0,,0764536338,00.html> - Wiley Publishing's Page for its *DVD Studio Pro Bible* Book.

<http://www.computervideo.net/aug1.html> - An old but informative review of DVD Studio Pro.

<http://www.creativepro.com/story/feature/13864.html> - In depth feature on DVD Studio Pro.

<http://www.arts.ucsb.edu/classes/122/dvdchal.html> - The challenges of DVD Authoring

http://www.maxent.org/video/dvd_software.html - A comparison of various DVD authoring programs.

<http://www.dvddemystified.com/> - All things DVD. Especially valuable for its FAQ.

<http://www.postforum.com/forums/list.php?f=52> - DVD Studio Pro post forum.

Books:

Kelsey, Todd and Fahs, Chris. DVD Studio Pro Bible. New York: Wiley Publishing, 2001.

Sitter, Martin. DVD Studio Pro 1.5 for Macintosh: Visual Quickpro Guide. Berkeley, CA: Peachpit, 2002.

ⁱ For a list of supported devices see <http://www.apple.com/dvd/compatibility/>

ⁱⁱ <http://www.apple.com/pr/library/2001/feb/19super.html>

ⁱⁱⁱ <http://www.computervideo.net/aug1.html>

^{iv} <http://www.apple.com/dvdstudiopro/specs.html>

^v <http://www.apple.com/dvdstudiopro/specs.html>

^{vi} <http://www.apple.com/dvdstudiopro/specs.html>