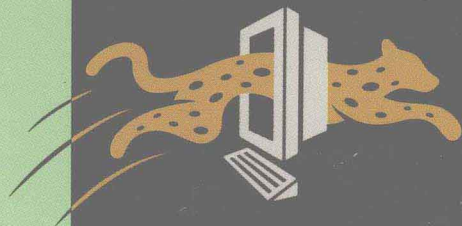


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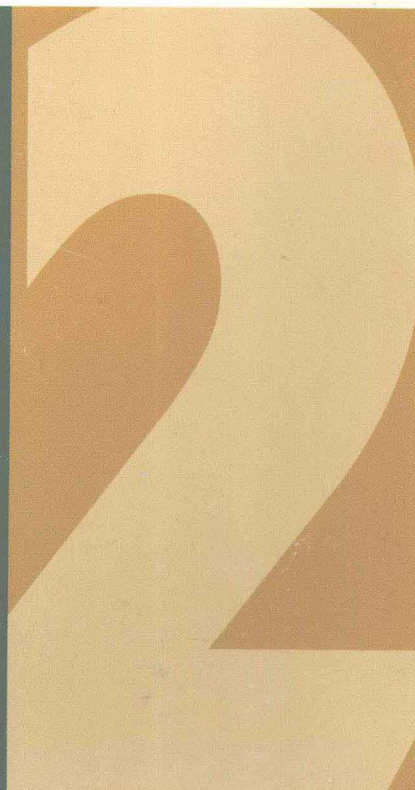


VISUAL
QUICKPRO
GUIDE

LISA BRENNIS

FINAL CUT PRO FOR MACINTOSH

*Learn Final Cut Pro the fast,
efficient way! This Visual
QuickPro Guide uses
illustrations and in-depth
explanations. You'll be a
master in no time!*



VISUAL QUICKPRO GUIDE

FINAL CUT PRO 2

FOR MACINTOSH

Lisa Brenneis

Visual QuickPro Guide

Final Cut Pro 2 for Macintosh

Lisa Brenneis

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Dedication

To family and friends.

My land, sea, and sky.

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INTRODUCTION

When the two Steves started Apple back in 1976, they dreamed of making a computer that people could use as a tool to change the world. Final Cut Pro is an Apple program worthy of the founders' vision. A community has formed around this tool, and people are making movies who weren't able to before. FCP is changing the way stories are told, because it changes who's telling them.

Final Cut Pro 2, released in Spring 2001, is the first major upgrade since April 1999, when Apple debuted this remarkable desktop video editing, effects creation, and compositing program.

Wow. A lot has happened in two years.

If you are already using FCP 1, the good news is that FCP 2 is still Final Cut Pro as you know and love it. The Final Cut Pro team has built on its great beginning, adding significant new features that many of us have been requesting, and many, many small thoughtful gifts that editors will love as they live with the program.

Even though the basic operation of Final Cut Pro has not changed, there are changes scattered throughout the program, and major revisions in a couple of areas. This book, *Final Cut Pro 2 for Macintosh: Visual QuickPro Guide*, is a revision of the original *Final Cut Pro for Macintosh: Visual QuickPro Guide*. This edition describes the operation of FCP 2 only. If you are using Final Cut Pro version 1.2.5 or earlier, you'll need a copy of *Final Cut Pro for Macintosh: Visual QuickPro Guide*.

"New in 2" sidebars appear throughout this revision, pointing out significant feature changes in FCP 2.

But the changes won't stop here; the Final Cut Pro team is still relentlessly adding features as I write this introduction (and probably as you're reading it). For example, we should be seeing a Mac OS X version of FCP in the near future.

Who should use this book

Final Cut Pro 2 for Macintosh: Visual QuickPro Guide is designed to be used by intermediate to advanced Mac users with some basic knowledge of video editing terms and procedures; explaining basic video production and editing is beyond the scope of this book. Final Cut Pro is designed to be easy to use, but it's still a professional level video editing and compositing program. If you are not new to the Macintosh, but you're completely new to video editing, consider some basic training in the fundamentals of video editing before you plunge into this program. Try Apple's free iMovie program—it's a great way to get a taste of basic video editing in a stripped-down program that's a little easier for beginners to use.

What's in this book

The first part of the book covers hardware setup, program installation, and specifying program preferences. You'll also find "A Tour of Your Desktop Post-Production Facility," a quick feature overview of the entire program.

The next section introduces the Log and Capture, Browser, and Viewer windows—the Final Cut Pro tools you use for logging, capturing, and organizing media in preparation for an edit.

The third part of the book details the variety of ways you can use Final Cut Pro's editing tools to assemble and refine an edited sequence. This section covers basic editing procedures and the operation of the Timeline, Canvas, and Trim Edit windows; and it includes a chapter on rendering techniques and strategies.

The last section includes chapters on creating final output, on making the best use of Final Cut Pro's media management tools, and on the program's special effects and compositing tools.

How to use this book

This guide is designed to be a Final Cut Pro user's companion, with an emphasis on step-by-step descriptions of specific tasks. You'll encounter some of the following features:

- ◆ **"Anatomy" sections** introduce the major program windows with large annotated illustrations identifying interface features and operation. If you are not a "step-by-step" kind of person, you can pick up quite a bit of information just by browsing these illustrations.
- ◆ **"FCP Protocol" sidebars** lay out the protocols (the programming "rules") that govern the way Final Cut Pro works. These sections are highly recommended reading for anyone interested in a serious relationship with this program.
- ◆ **Sidebars** throughout the book highlight production techniques, project management ideas, and tips for streamlining your workflow.
- ◆ **Tips** are short bits that call your attention to a neat trick or a cool feature, or that warn you of a potential pitfall in the task at hand.

Learning Final Cut Pro

Here are some tips to help you get up and running in Final Cut Pro ASAP.

Basic theory

Two sidebars, one in Chapter 2 and another in Chapter 4, are referred to throughout this book. You don't absolutely have to read these to operate the program, but understanding some of the basic concepts underlying the design of the program is going to make Final Cut Pro much easier to learn.

“What is Nondestructive Editing?” in Chapter 2 explains how nondestructive editing works and how it impacts the operation of Final Cut Pro.

“FCP Protocol: Clips and Sequences” in Chapter 4 explains the protocols governing clip and sequence versions, which is one of the keys to understanding how Final Cut Pro works.

FCP is context-sensitive

The Final Cut Pro interface is context-sensitive, which means that the options available in the program’s menus and dialog boxes can vary depending on any of the following factors:

- ◆ The external video hardware you have attached to the system
- ◆ The setup configuration you specify when you install the program
- ◆ What program window is currently active
- ◆ What program selection you just made

The logic behind the context-sensitive design is sound: to simplify your life by removing irrelevant options from your view. However, because the interface is context-sensitive, the menus and dialog boxes in your installation of Final Cut Pro may occasionally differ from the illustrations shown in this guide.

Test, test, test

Many times, what you are able to produce with Final Cut Pro depends on the capabilities of your external video hardware and the video format you are working in. So before you rush out and submit a budget or sign a contract, take your entire Final Cut Pro system, including your external video gear, for a test drive.

Keyboard commands

Final Cut Pro was designed to support a wide variety of working styles ranging from heavy pointing, clicking, and dragging to entirely keyboard-based editing. More keyboard commands are available than those listed in the individual tasks in this book. You’ll find a comprehensive list of keyboard commands in Appendix B.

Shortcut menus

Final Cut Pro makes extensive use of shortcut menus. As you are exploring the program, Control-clicking on items and interface elements is a quick way to see your options in many areas of the FCP interface, and it can speed up the learning process.

Refer to the manual

I’m happy to be able to recommend the official *Final Cut Pro 2 User’s Manual* that ships with the program (that’s why the box is so heavy). Apple documentors packed this book with basic FCP information, and added explanatory sections for beginning editors, complete lists of FCP filters, shots of every shortcut menu in the program, 126 pages devoted to working with audio, and so on. I’ll occasionally refer you to specific sections of the official manual that cover a topic in much more detail than this book can accommodate. (Still, they did miss a few items covered here, and this Visual QuickPro Guide is much easier to carry around.)

Check out the Tech Info Library

Apple posts a steady stream of valuable Final Cut Pro articles and updates in its Technical Information Library (TIL). The company also posts information about FCP “known issues” (that’s corp-speak for “bug”) as TIL articles. See Appendix A for information on locating the TIL online.

The Web is your friend

Using the World Wide Web is an essential part of using Final Cut Pro. Apple, as well as the manufacturers of the video hardware you'll be using with Final Cut Pro, rely on the Web to inform users of the latest developments and program updates and to provide technical support. You'll find a starter list of online resources in Appendix A and specific Web references sprinkled throughout this

book. There are some great sources of information, technical help, and camaraderie out there. If you get stuck or encounter difficulties getting underway, go online and start asking questions. After you've learned the program, go online and answer questions. Helping other people is a great way to learn.

Where to find more information

Check out Appendix A, "Online Resources," for a listing of helpful Web sites.

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1

BEFORE YOU BEGIN

This chapter walks you through the process of assembling the necessary hardware, hooking everything up, and installing Final Cut Pro. Topics include Final Cut Pro system requirements, as well as the hardware components and configurations for both a basic setup and a more full-featured system.

Note that hardware selection, configuration, and installation can involve a wide range of input and output devices and several manufacturers' hardware protocols. This chapter covers Apple's recommended configurations and suggests some sources for getting up-to-the-minute information and advice on hardware.

This chapter also introduces you to Apple's FireWire protocol, the high-speed data transfer protocol underlying the powerful digital video handling in this program.

At the end of this chapter are suggestions for optimizing performance, including recommendations for running Final Cut Pro on a minimal "base-case" system, and tips for troubleshooting Final Cut Pro.

New in 2: More Hardware Options

Final Cut Pro's open program architecture is designed to allow video hardware manufacturers to develop products that integrate smoothly with FCP operation. In the years since FCP's release, the list of compatible hardware has grown to include decks, cameras, and capture systems that range from simple consumer-quality DV camcorders to systems capable of editing uncompressed high-definition (HD) video.

Hardware-assisted real-time video effects are the latest addition to Final Cut Pro's open architecture. Here's what you need to know before diving in:

FCP program design allows video card developers to pick and choose which individual effects their real-time system will support. Effects that aren't programmed into that system's hardware are handled by Final Cut Pro's software, but they don't play back without rendering. Because different real-time systems offer different capabilities, you need to pay close attention to the specifications of any system you are considering.

Some developers are adding real-time effects support to their existing analog video capture systems. Matrox's RTMac and Pinnacle's Targa CinéWave are two examples of combination capture/real-time effects systems.

The bottom line? There's a wide world of hardware available to expand your FCP system, but do your homework (and ask your mom to check it for you) before you buy.

A good place to start your investigation is Apple's Final Cut Pro Web site, which offers a list of compatible products and news of upcoming developments: <http://www.apple.com/finalcutpro/specs.html>.

What's the Difference Between DV and Digital Video?

When you refer to *digital video*, you could be talking about any video format that stores image and audio information in digital form—it's digital video whether you store it on a D1 tape or on a DVD disc.

DV is a specific digital video format whose identifying characteristic is that conversion from analog to digital information takes place in the DV camera. So *DV* is a camera-based digital video format.

There are a few different flavors of DV; the differences between them come down to tape format and tape speed.

- ◆ DV usually refers to MiniDV.
- ◆ DVCAM prints the same DV bitstream to a larger, more robust tape stock.
- ◆ DVC Pro uses a professional-grade tape as well and also supports a high-quality mode—DVC Pro 50—which supports digitizing at twice the data rate.

System Requirements

Except for maybe long-range weather forecasting, editing digital video on a desktop computer remains one of the most power-hungry tasks you can ask your system to perform. Final Cut Pro 1.0 was conceived as a DV post-production system that would run on a Macintosh G3 computer. Introduced two years after the program's initial release, FCP 2 has slightly stiffer minimum system requirements.

With the support of FireWire technology to move the video data at 400 megabits per second, ATI video support, and multiprocessor CPUs, the G4 has reached a performance level capable of handling uncompressed HD (high-definition) video, as well as DV. Final Cut Pro 2 supports a wider variety of video hardware and heftier video formats.

Apple is continuously testing and qualifying third-party software and third-party external devices for compatibility with Final Cut Pro. To review the latest list of Apple-approved video hardware and software, go to the Final Cut Pro Web site: <http://www.apple.com/finalcutpro>.

Final Cut Pro 2 minimum system requirements are:

- ◆ Macintosh computer Power Macintosh with a 300-megahertz (MHz) or faster G3 or G4 processor. Apple specifies Blue and White G3/300s as the low end of their minimum standard. Beige G3 models are not officially supported.

- ◆ PowerBook G3/300 MHz or faster, with a Final Cut Pro–qualified video capture card.
- ◆ iMac DV, 350 MHz or faster.
- ◆ Mac OS9.1 or later. FCP 2 is not certified for Mac OS X or OS X Classic mode.
- ◆ 192 MB of RAM, or 105 MB of RAM available for FCP 2.
- ◆ CD-ROM or DVD-ROM drive.
- ◆ 6 GB A/V (audio/video rated) drive (16 GB recommended).
- ◆ True-color (24-bit) display.
- ◆ ATI built-in video support on G3/4 models (required for DV).

If you want to be able to capture and output video from the computer to an external video device (a video deck or camcorder), you'll also need *one of the following*:

- ◆ A DV source connected to a computer equipped with an Apple FireWire port. Most blue and white G3 and all G4 models come equipped with FireWire ports, but you can add FireWire to an older G3 with an Apple PCI card.
- ◆ An analog video source and a Final Cut Pro–qualified video capture card or device.

In addition to one of the above video devices, you'll also need the correct FireWire or device control cable and any additional cables you may need for connecting your deck or camcorder to your computer.

Real-Time Effects: About Matrox RTMac

Matrox RTMac is the first (but not the last) real-time hardware available for Final Cut Pro. The RTMac package includes a PCI board, cable, and breakout box and lists for an additional \$999 over the price of FCP 2.

Here's what the Matrox RTMac will do for you: The breakout box has analog video and audio inputs and outputs (S-video and composite RCA jacks), so you can connect the output from the breakout box to an analog deck and monitor analog previews of the RTMac's output. You also can capture analog video through the breakout box's analog inputs and transcode it to DV in real time. RTMac's PCI card can also drive a second computer monitor.

What does the RTMac process in real time? RTMac supports up to three layers in real time—two video and one graphics layer, or two graphics layers and one video layer. You can do text superimposition and video-stream scaling and motion, with keyframes, but no filter processing. You can crop, scale, or reposition the video image and adjust opacity, but you can't alter the individual pixels in real time, like you can with color correction, blurring, and stylizing filters.

Details on the Matrox RTMac Board can be found at the Matrox site: <http://www.matrox.com>.

Real-Time System Requirements

If you want to enhance your Final Cut Pro setup with video hardware (such as the Matrox RTMac) that supports real-time effects, you'll need a beefier system. Current minimum requirements call for a G4 400 MHz system equipped with 256 MB of RAM.

For more information on real-time system capabilities, see Chapter 10, "Rendering."

For details on FCP-compatible real-time systems, visit Apple's Final Cut Pro web site: <http://www.apple.com/finalcutpro>.