



**Aurora Igniter™**  
**Final Cut Pro™ Addendum**

Copyright © 2000  
Aurora Video Systems, Inc.  
All rights reserved.

Aurora Video Systems, Inc.  
13957 Hall Road  
Suite 302  
Shelby Township, MI 48315  
www.auroravideosys.com  
(810) 798-2932

## Copyright Information

The information contained in this user guide is subject to change without notice. While every effort has been made to ensure that the enclosed documentation and software is correct, Aurora Video Systems, Inc. assumes no responsibility for errors which may appear in this user guide or software, nor does Aurora Video Systems, Inc. assume any liability resulting from omissions or inaccuracies in them, or from the use of the documentation or software contained herein. Further, Aurora Video Systems, Inc. makes no commitment to update the information contained in this user guide.

No part of this manual may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without the prior written consent of Aurora Video Systems, Inc.

The included software is being provided under license from Aurora Video Systems, Inc. The software is provided for the sole purpose of use with the Aurora Igniter™ hardware, and no disassembly, reverse engineering, or modification is allowed.

Apple, Macintosh, PowerMacintosh, MacOS, Finder, PlainTalk, QuickTime, and Final Cut Pro are trademarks of Apple Computer, Inc., registered in the United States and other countries.

Adobe, Adobe Premiere, Adobe After Effects, Adobe Photoshop, Adobe Acrobat, and Adobe PDF are trademarks of Adobe Systems Incorporated, which may be registered in certain jurisdictions.

SMPTE is a registered trademark of the Society of Motion Picture and Television Engineers.

All other trademarks in this user guide, registered and unregistered, are the sole property of their respective companies.

# Table of Contents

<b>Introduction</b> .....	3
Conventions .....	3
<b>Configuring Final Cut Pro™ 1.x</b> .....	4
General Preferences .....	4
General Settings .....	4
Device Control .....	5
Capture Settings .....	5
Sequence Settings .....	6
Scratch Disks Settings .....	7
Sequence Preferences .....	8
General Settings .....	8
Timeline Options .....	8
Making a Project .....	9
Analyzing a movie .....	10
Conclusion .....	11

## Introduction

This addendum for using the Aurora Igniter™ with Final Cut Pro™ assumes that the user has already read, and followed the instructions in the Aurora Igniter™ User Manual. If you have not, please do so at this time.

This addendum is not meant to be a tutorial on the usage of Final Cut Pro™, but rather a guide to using the Aurora Igniter™ with the Final Cut Pro™ application. For a full description of the Final Cut Pro™ application, refer to the documentation that came bundled with it.

## Conventions

This manual uses certain conventions throughout to aid the user in setting up and using their Aurora Igniter™ system. Some of these conventions are used to convey information to the user, while others are to alert the user of a potential hazard. These conventions are as follows:



This symbol is used to express a potential point of interest to the user about a feature or operational aspect of the Aurora Igniter™ system. These are provided for informational purposes only.



This symbol is used to express a potential issue with a certain aspect of the operation or installation of the Aurora Igniter™ system. These warnings are not catastrophic, but should not be ignored.



This symbol is used to express a potential hazard with a certain aspect of the operation or installation of the Aurora Igniter™ system. These warnings are critical, and should not be ignored.

Also, when viewing this manual on-line, all the included images are at half scale. For the best possible view of these images, Adobe® Acrobat® can be zoomed up by 200% to increase their resolution.

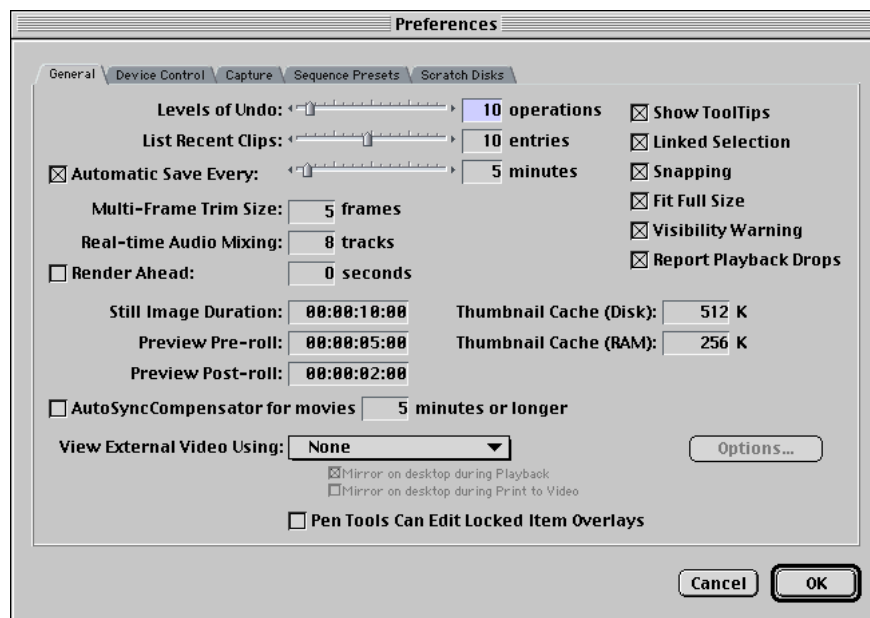
## Configuring Final Cut Pro™ 1.x

You will first need to have Final Cut Pro™ installed on the system that the Aurora Igniter™ is installed in. Follow the installation procedure that came with this software. The software should be installed on the hard drive with the rest of your applications, and not on the hard drive that will be used for video editing.

### General Preferences

Since Final Cut Pro™ does not utilize preset files, the specific settings for the Aurora Igniter™ will need to be entered the first time. Once all these settings are entered, “Igniter” profiles can be saved for future use.

Once you have launched Final Cut Pro™, select the *Preferences* item from the *Edit* menu. This will bring up the *Preferences* settings panel. The first tab in this panel is the *General* settings tab (see below).



Most of the settings in this panel are not specific to the Aurora Igniter™, and can be set to your individual preference. The *AutoSyncCompensator* should be disabled, as this is not required by the Aurora Igniter™ hardware.

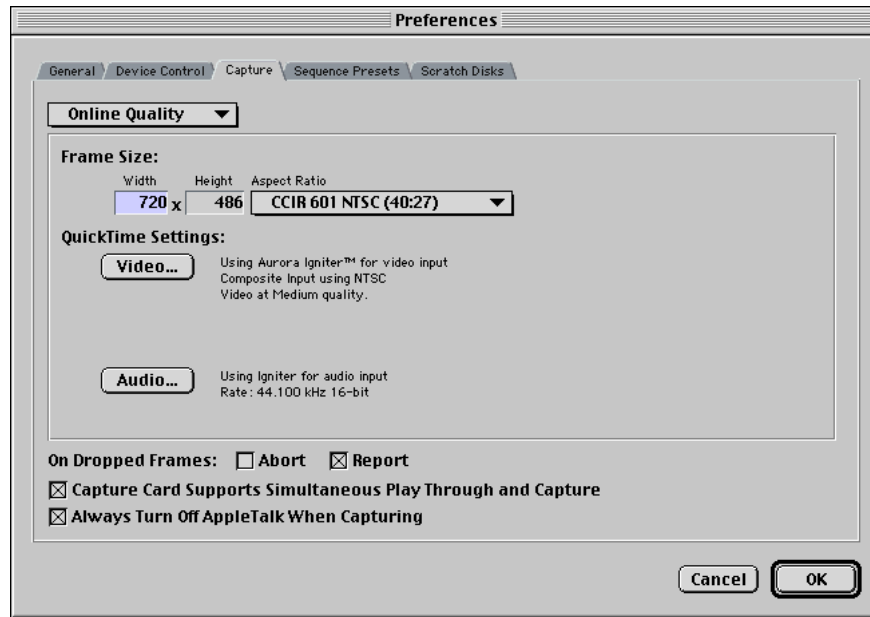
The next panel is the *Device Control* settings panel (see below). This panel should be set to the specific Device Control hardware you are using, or disabled if no Device Control is available. For use with most professional decks, this should be set to the *RS-422* setting, and the deck connected to the appropriate serial port on the Macintosh™. The Aurora Igniter™ does not contain any deck control hardware or serial ports, so these need to be added through a third party solution.



The next panel is the *Capture* settings panel. This panel is specific to the Aurora Igniter™, and its settings are critical to proper operation (see picture below).

You can select separate profiles for *Offline* and *Online* work. This is convenient, for example, to set the Offline profile to MJPEG, and the Online profile to Uncompressed, allowing you to work with relatively small files during Offline editing, and full Uncompressed for the final Online work.

Before making any settings, select the designated profile, i.e. *Offline* or *Online*. Next select the desired frame size. For full frame NTSC work, select *CCIR 601 NTSC (40:27)* or *NTSC DV (3:2)* depending on the desired size. For full frame PAL work, select the *CCIR 601 / DV PAL (5:4)* setting. You may also select the *Custom* setting and enter any of the valid Aurora Igniter™ sizes as outlined in the *Aurora Igniter™ User Manual*, such as 360x243 for half frame NTSC work.

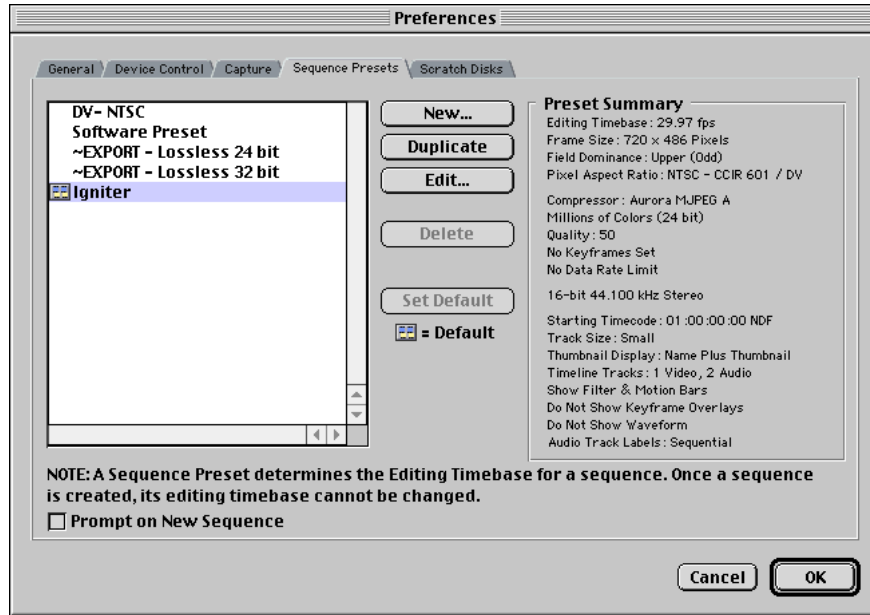


Selecting the *Video* or *Audio* button will bring up the standard QuickTime™ dialog panels for setting up the capture hardware. These are shown in detail in Chapter 5 of the *Aurora Igniter™ User Manual*. The *On Dropped Frames: Abort/Report* should be set to the users individual preference. The *Capture Card Supports Simultaneous Play Through and Capture* should be enabled, as the Aurora Igniter™ hardware supports this feature. Likewise, the *Always Turn Off Apple Talk When Capturing* should be enabled, as this can seriously degrade system performance, leading to dropped frames.

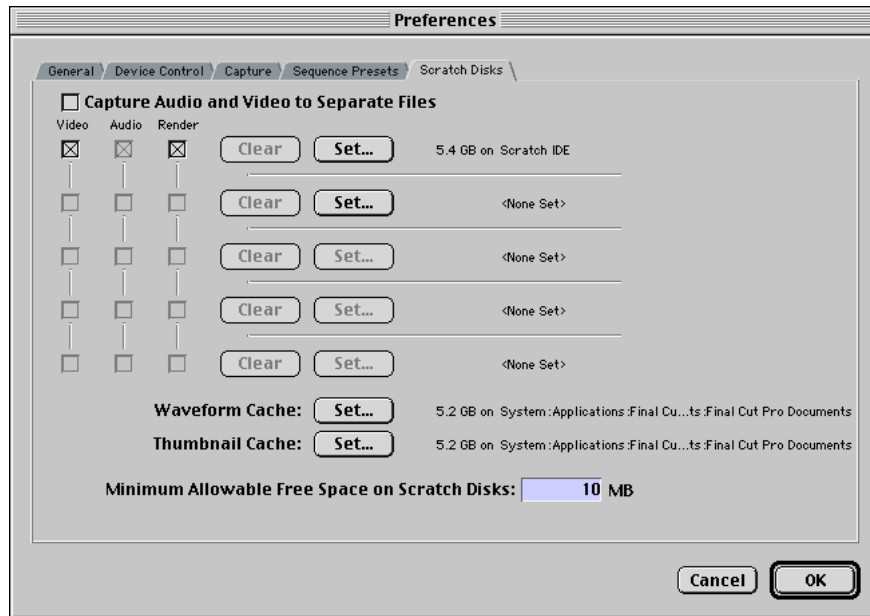


When selecting the capture size, make absolutely certain that your selection is a supported size of the Aurora Igniter™. If you select an unsupported size, such as 640x480, QuickTime™ will report an error that the digitizer does not support the requested operation. Supported sizes for the Aurora Igniter™ are shown in *Appendix A - Technical Specifications of the Aurora Igniter™ User Manual*.

The next panel is the *Sequence Presets* panel. This panel is used to save the presets into a named profile. As seen in the panel below, all the above settings were saved into a Sequence Preset called *Igniter*. This profile can now easily be restored at any time, restoring all the previous settings back to their Aurora Igniter™ state.



The final panel is the *Scratch Disk* panel. This panel is used to set the target disk(s) for data storage. These should point to your dedicated video capture disk, and never the system disk. None of these settings are Aurora Igniter™ specific, and should be set to match your system.



## Sequence Preferences

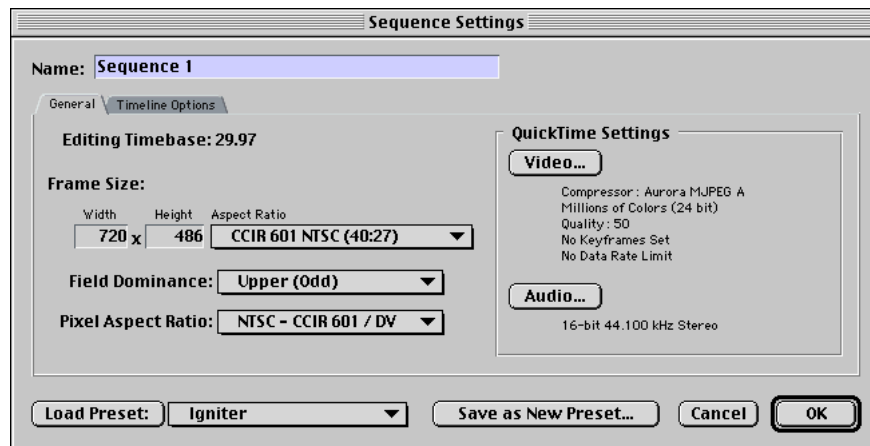
The next set of panels are used to setup Final Cut Pro™ during editing. Several profiles can also be created and saved for these settings.

The first panel is the *General* panel. First select the desired frame size. For full frame NTSC work, select *CCIR 601 NTSC (40:27)* or *NTSC DV (3:2)* depending on the desired size. For full frame PAL work, select the *CCIR 601 / DV PAL (5:4)* setting. You may also select the *Custom* setting and enter any of the valid Aurora Igniter™ sizes as outlined in the *Aurora Igniter™ User Manual*, such as 360x243 for half frame NTSC work.

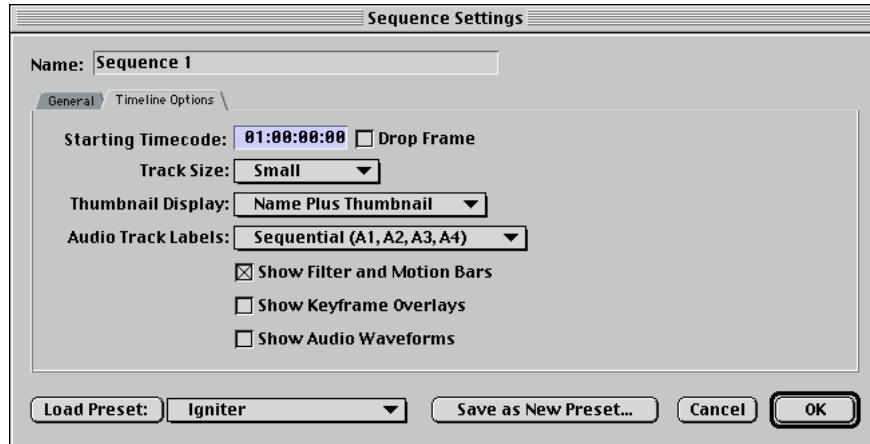
*Field Dominance* should be set to *None* or *Upper (Odd)*. If it is set to the wrong selection, the resulting movie will have the fields reversed, causing severe shaking of the image.

The *Pixel Aspect Ratio* should be set to *NTSC - CCIR 601 / DV* when doing NTSC work, and *PAL - CCIR 601* when doing PAL work. The Aurora Igniter™ does not support *Square* pixel aspect ratio's.

Selecting the *Video* or *Audio* button will bring up the standard QuickTime™ dialog panels for setting up the capture hardware. These are shown in detail in Chapter 5 of the *Aurora Igniter™ User Manual*.



The next panel is the *Timeline Options*. None of these settings are specific to the Aurora Igniter™, and should be set to the user's individual preference. At this time, the *Sequence Settings* can be saved into a user preset file. Select the *Save as New Preset* button, and name the preset (*Igniter* in the example shown).



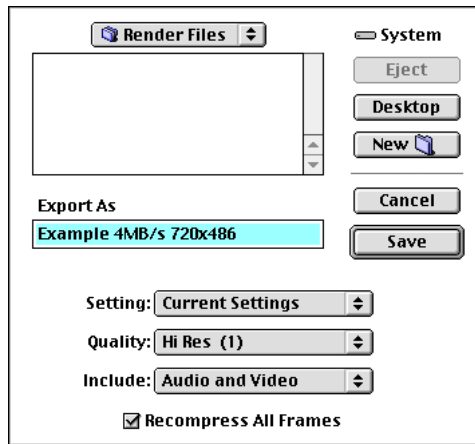
While any values can be entered into the *Sequence Settings* panels, these values should usually match the capture settings exactly. For example, if the size, or compression type set here are different from the actual clips entered in the timeline, Final Cut Pro™ will warn you that the timeline needs to be rendered. This is normal since the *Sequence Settings* don't match the settings used to capture the clips. Sometimes this is desirable, like when converting from MJPEG to Uncompressed.

## Making a Project

Once you are satisfied with your project and are ready to create the actual output movie, you can either play directly from the *Timeline*, or you can build the movie into a single file. Playing from the Timeline saves the time of having to create the entire movie as a single file, but requires a faster system and hard drive to be able to keep up with the constant hunting for the the next piece of the movie. When a movie is built as a single file, it is played out in order, requiring less performance from the system. To build the movie, select the *File > Export > Final Cut Pro Movie...* menu item in Final Cut Pro™. The Export Movie setting box (shown below) contains all information for making the movie.



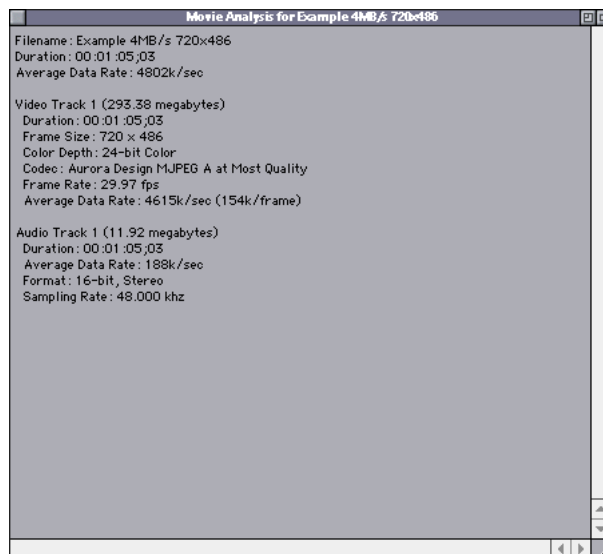
While playing video directly from the timeline is desirable, it requires considerably more performance from your system than building the movie into a single file, and then playing it back does. When playing directly from the timeline, the last frame of one clip may be across the disk from the first frame of the next clip. If the disk does not seek fast enough, the movie will stutter. If this happens, you need a faster system, or you need to build the movie.



With this panel, you can make all the desired output settings for the movie. The *Recompress All Frames* is usually not required by the Aurora Igniter™, and will slow down the rendering process. If the movie is in MJPEG A format, and it is desired to have a fixed data rate in the output movie, then enable this option. This option will have no effect on Uncompressed movies, and should always be disabled.

## Analyzing a movie

Final Cut Pro™ provides a method for analyzing the makeup of a movie file. To use this tool, select *Tool > Analyze Movie*, and select the desired movie. The following panel will appear.



As can be seen, a great deal of useful information is presented, ranging from the number and types of tracks included in the file, the average data rates for each track, the movie timebase, etc. This information can be invaluable when trying to pinpoint a problem in a clip, or to verify that the clip is exactly as it should be based on your settings.

## ***Conclusion***

This concludes the tutorial on setting up your Aurora Igniter™ system in a Final Cut Pro™ environment. We hope that this manual was helpful, and that your Aurora Igniter™ provides a satisfying and useful production tool for the creation of your content. Please refer to the Aurora Igniter™ User Manual, and the Final Cut Pro™ User Manual for more detailed information than contained herein.



**AURORA**  
V I D E O   S Y S T E M S