

# Table of Contents

- 1 Introduction
- 2 Installation
- 3 The 4+ Windows
  - 3.1 Program Window
  - 3.2 Compositor Window
  - 3.3 Resources Window
  - 3.4 Viewer Window
  - 3.5 Controls, Timebar, and Other Windows
    - Transport Controls
    - Timebar
    - Zoombar
    - Show Overlays
    - Sound Level Meters
- 4 Project and Media Attributes
- 5 Load, Save, and the EDL
  - 5.1 EDL – Edit Decision List
  - 5.2 Supported File Formats
    - 5.2.1 Working with Still Images
    - 5.2.2 Timelapse Sequences of Images, and Animation
  - 5.3 Loading Files
    - 5.3.1 Sort within Sort in File Load Dialog
    - 5.3.2 Size Numeric Format Displayed in File Load
    - 5.3.3 Probe Order when Loading Media
  - 5.4 Saving Project Files
    - 5.4.1 Export Project – Save or Moving Project to another Computer
    - 5.4.2 Information about Backups and Perpetual Session
- 6 Editing
- 7 Rendering
  - 7.1 Single File Rendering
  - 7.2 Batch Rendering
  - 7.3 Background Rendering
  - 7.4 Render Farm Usage
    - 7.4.1 Basic Steps to Start a Render Farm
    - 7.4.2 Render Farm Menu and Parameter Description
    - 7.4.3 Detailed Setup Descriptions
    - 7.4.4 Quick and Easy Render Farm Setup – The Buddy System Way
    - 7.4.5 Multi-core Computers Render Farm Setup (the “Epyc” method!)
    - 7.4.6 Troubleshooting Tips and Warnings
  - 7.5 Some Specific Rendering
    - 7.5.1 Ffmpeg Common H.264 Rendering
    - 7.5.2 Lossless Rendering
    - 7.5.3 Extra “cin\_” options for Render with Ffmpeg\
    - 7.5.4 Two-Pass Encoding with Ffmpeg
    - 7.5.5 Piping Video to a Command Line
    - 7.5.6 Faststart Option for MOV type files
- 8 Keyframes

- 8.1 Automation Keyframes / Autos
  - 8.1.1 Using Autos
  - 8.1.2 Speed / Fade Automation Usage and Auto Gang
- 8.2 Plugin Keyframes
  - 8.2.1 Default Keyframe
  - 8.2.2 Keyframes “Edit Params” for Plugins
- 8.3 Generate Keyframes while Tweaking / Automatic Keyframe Mode
- 8.4 Compositor Keyframes
- 8.5 More about Editing Keyframes
- 9 FFmpeg Interactions
  - 9.1 Ffmpeg Early Probe Explanation
  - 9.2 How to Create Ffmpeg Options Files
    - 9.2.1 File naming convention
    - 9.2.2 Option File Format / Content
    - 9.2.3 Complete Options File Example
    - 9.2.4 Viewing and Modifying ffmpeg format options inside Cinelerra
  - 9.3 The Ffmpeg Image2 Streams
  - 9.4 Raw Input Opts File for Video/Audio
  - 9.5 Fmpeg Items of Note
- 10 Effect Plugins
  - 10.1 How to Use Plugins
  - 10.2 Editing Effects
  - 10.3 Shared Effects and Shared Tracks
  - 10.4 Saved Plugin Presets
  - 10.5 Some specific details concerning Plugins
    - 10.5.1 How to see short Description of a Plugin
    - 10.5.2 Delete Plugins to save Resources Space or make them Unavailable
    - 10.5.3 Updatable Icon Image Support
    - 10.5.4 Details on where to put your own Plugin Icons
    - 10.5.5 Example of new Plugin Icon Testing
    - 10.5.6 Plugins/Effects Visibility
    - 10.5.7 Expanders for Plugin Subtrees in the Resources Window
    - 10.5.8 Speed-up of Ffmpeg plugin usage with OPTS files
  - 10.6 Audio Effects – Native
  - 10.7 Audio Ladspa Effects
  - 10.8 Audio LV2 / Calf Plugins (Optional Feature – OS dependent)
  - 10.9 Video Effects – Native
  - 10.10 Video Find Object and other plugins from OpenCV – Stylize, Puzzle, Flow, Gabor, Move
    - 10.10.1 How to Build OpenCV Plugins
    - 10.10.2 Using OpenCV Plugins from the Automatic Builds
    - 10.10.3 Description of Find Object Plugin
    - 10.10.4 An example of how to use Find Object
    - 10.10.5 Additional OpenCV – MoveObj, FlowObj, GaborObj, StylizeObj, PuzzleObj
  - 10.11 FFmpeg Audio and Video Plugins
    - 10.11.1 FFmpeg Icons and how to Replace
    - 10.11.2 How to use FFmpeg Audio/Video Plugins
    - 10.11.3 FFmpeg Audio Plugins
    - 10.11.4 FFmpeg Video Plugins
  - 10.12 Rendered Effects

- 10.12.1 Rendered Audio Effects
  - 10.12.2 Rendered Video Effects
  - 11 Transition Plugins
    - 11.1 Audio Transitions
    - 11.2 Video Transitions
  - 12 Overlay Modes, Alpha Blending, and Porter Duff
  - 13 Capturing and Recording Media
    - 13.1 Recording
    - 13.2 TV Capture
    - 13.3 DVD and Bluray Creation
  - 14 The 5 Multi-s
    - 14.1 Multi-Camera / Mixer
    - 14.2 Multi-Pane
    - 14.3 Multi-Screen / Playback Configuration
    - 14.4 Multi-Session
    - 14.5 Multi-Viewer Window Support
  - 15 Shortcuts with Keyboard and Mouse
  - 16 Configuration, Settings and Preferences
    - 16.1 Playback A / B
    - 16.2 Recording
    - 16.3 Performance
    - 16.4 Interface
    - 16.5 Appearance
    - 16.6 About
    - 16.7 Environment Variables for Customization
  - 17 How Some Stuff Works
    - 17.1 Copy/Paste and Highlight Usage with Cinelerra
    - 17.2 Playing is Different than Seeking/Positioning!
      - 17.2.1 Always Show Next Frame
      - 17.2.1 Examples
      - 17.2.3 Seeking Issues
    - 17.3 Color Space and Color Range Affecting Playback
    - 17.4 Repeat Play / Looping Method
  - 18 Troubleshooting
    - 18.1 What to Include in Problem Reports
    - 18.2 Crash Dumps for Analysis
    - 18.3 When Things go Wrong
  - 19 Performance Tips and Tips
    - 19.1 Optimized Playback of Large Format Video – X11 Direct
    - 19.2 Proxy Settings
    - 19.3 Some Settings Parameter Values
    - 19.4 General Crash Handling Tips
    - 19.5 Usage Tips for specific Operations
  - 20 Language Translations
  - 21 Licenses
- Appendix
- Appendix A – QuickStarts
    - A.1 Cinelerra-GG Quick Start Guide

## A.2 YouTube with Cinelerra + Basic Video Creation in 8 Steps

### Appendix B - Developer's Section

B.1 How builds really work and even more options

B.2 Thirdparty Parallel Build

### Appendix C - Auxiliary Programs

C.1 Using ydiff to check results