
F65RAW Viewer Operation Guide

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1. Overview

F65RAW Viewer supports the CinaAlta F65 camera with an SR-R4 memory pack. It allows playback and basic color grading of MXF files in F65RAW format that have been transferred using an SRPC-5 or SR-PC4 Data Transfer Unit.

In addition, files may be exported in DPX or OpenEXR format to facilitate file-based post-production workflows.

Note

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2. Hardware Requirements and Installation

2.1. Requirements

OS: Mac OS X Lion (10.7)
HDD: More than 100 MBytes free space
CPU: Intel Core 2 Duo, Core i3, Core i5, Core i7, Xeon
Memory: 2GB or more
OpenCL-capable GPU/CPU

Recommended Environments

CPU: Intel Core i7 or Xeon
Memory: 4GB or more
GPU: Radeon HD with 1GB Memory
Display: 1920x1200 or higher
Storage: Thunderbolt RAID

Tested Environments

OS: Mac OS X Lion 10.7.2
CPU: Intel Core i5 / Core i7
Memory: 4GB
GPU: Radeon HD 5750 1024MB
iMac, MacPro Mid 2010 and later

2.2. Installation

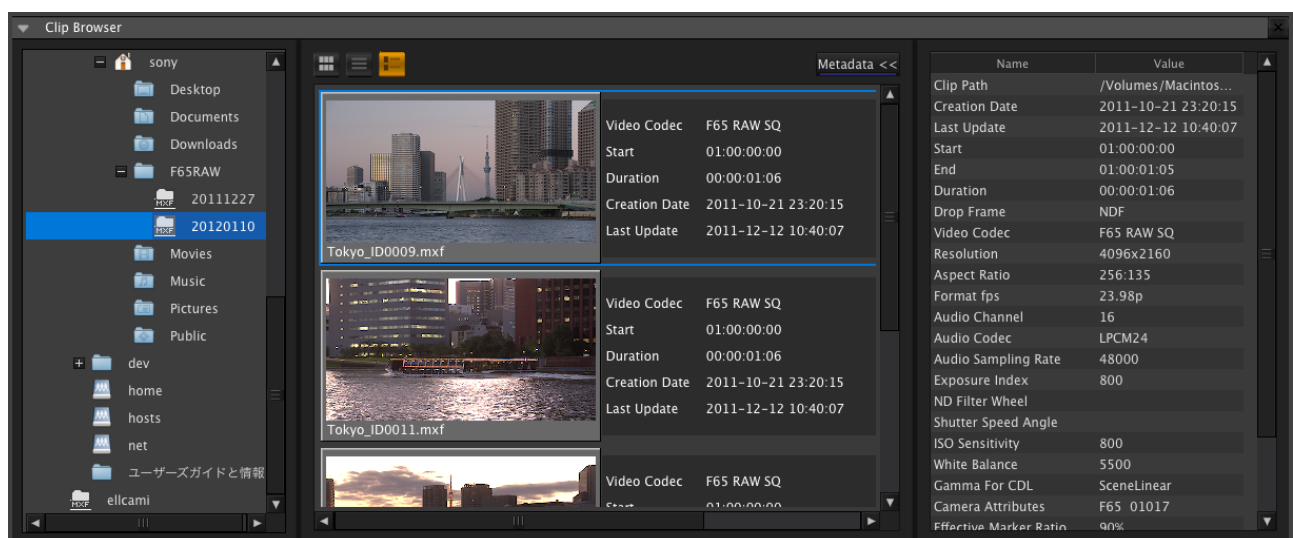
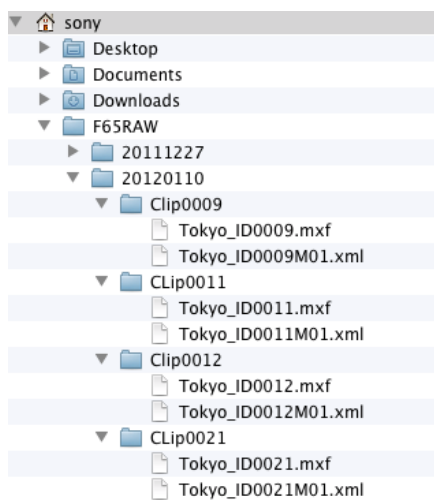
Please copy the application bundle in the downloaded disk image locally. As configuration and user settings are saved within the application bundle, it is recommended that you copy it to a user-specific location such as your desktop.

3. Importing and Browsing F65RAW MXF Media

F65RAW Viewer plays MXF files in F65RAW format that have been transferred with an SRPC-5 or SR-PC4 Data Transfer Unit. An xml file containing metadata displayed by F65RAW Viewer is imported along with each MXF file. If there is no xml file associated with an MXF file then an xml file is generated from the metadata contained in the MXF file itself.

3.1. Clip Browser

F65RAW Viewer expects each clip and its associated files to be contained in an individual folder. Therefore, the MFX files in the folders one layer below the selected folder are listed in the Clip Browser. For instance, selecting the folder named '20120110' in the following example would result in four clips being listed in the Clip Browser.



4. Clip Viewer

When a clip has been selected, it is displayed in the Clip Viewer.



4.1. View Selection

The button clicked determines how the clip is displayed.

- Before button (Short-cut key "b")
 - The clip is shown without the parameters in Settings applied
- After button (Short-cut key "a")
 - The clip is shown with the parameters in Settings applied
- Compare A button (Short-cut key "c" toggles between Compare B)
 - Before and After versions of the clip are shown side by side
- Compare B button (Short-cut key "c" toggles between Compare A)
 - A split view of the Before and After versions of the clip is shown
 - The position of the split may be adjusted as desired with the mouse

4.2. De-Bayer Setting

Selects the algorithm used when reading 4K full-resolution content.

- Speed unchecked
 - Prioritize quality

-
- Speed checked
 - Prioritize speed

4.3. Resolution Setting

Selects the resolution at which the essence is read from the file (Full, 1/2, 1/4, 1/8, 1/16).

4.4. Zoom Setting

Sets the size at which the video is displayed. The aspect ratio is always fixed.

- Fit Both
 - Automatically scale to fit inside the Clip Viewer
- Fit W
 - Automatically scale to fit horizontally inside the Clip Viewer
- Fit H
 - Automatically scale to fit vertically inside the Clip Viewer
- 25%
 - Reduce to 25%
- 50%
 - Reduce to 50%
- 75%
 - Reduce to 75%
- 100%
 - No scaling (pixel for pixel)
- 125%
 - Enlarge to 125%
- 150%
 - Enlarge to 150%
- 200%
 - Enlarge to 200%
- 400%
 - Enlarge to 400%
- 800%
 - Enlarge to 800%

4.5. Time Codes

Each of the four time codes displayed on the Clip Viewer can be independently switched to a number of frames instead. When selected, these time codes can be edited.

- Current Time
 - Shows the time code of the clip's current frame
 - It is possible to jump to a particular frame by entering its time code
- In Point Time
 - Shows the time code of the clip's In point
 - The In point can be set by entering a time code
- Out Point Time
 - Shows the time code of the clip's Out point
 - The Out point can be set by entering a time code
- Duration Time
 - Shows the duration time code
 - The duration may be set by entering a time code

4.6. Position Bar

The playhead indicates the position of current frame relative to the clip's start and end. During playback, it shows the play position and you can scrub to change the position. The clip's In point and Out point are displayed at the top of the Position Bar.

4.7. Navigator

The navigator automatically appears if the image is scaled such that it is too large to fit in the Viewer (i.e. larger than would result from a zoom setting of 'Fit Both').

- The Navigator button allows the navigator to be switched on/off manually
- It is possible to move the position to anywhere on the Viewer
- The area shown can be changed by dragging the red frame in the Navigator
- The area shown can also be changed by dragging the image in the Viewer directly

4.8. Control Buttons

These buttons control playback.



Go to Start

- Jump to the start of the clip



Step Backward (Short-cut key "←")

- Step backward one frame at a time
- If this control is clicked while the shift key is held down then the current position will step backward ten frames at a time



Play / Still (Short-cut key SPACE)

- Plays the clip if it is currently still or pauses the clip if it is playing



Step Forward (Short-cut key “→”)

- Step forward one frame at a time
- If this control is clicked while the shift key is held down then the current position will step forward ten frames at a time



Go to End

- Jump to the end of the clip



Go to Mark In

- Jump to the In point



Go to Mark Out

- Jump to the Out point



Mark In (Short-cut key “i”)

- Set the In point to the current position



Mark Out (Short-cut key “o”)

- Set the out point to the current position.

5. Color Workflow and Settings

5.1. F65RAW MXF and Workflows

F65RAW MXF files store the output from the camera sensor, with its wide latitude and color gamut, in RAW format.

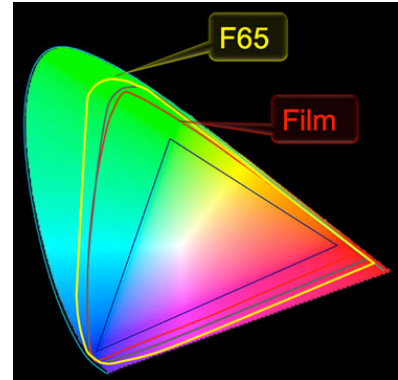
F65RAW format digital representation

16bit scene linear (Approx. 1300% Latitude)

S-Gamut RGB Reference Primaries

	CIE x	CIE y
Red	0.730	0.280
Green	0.140	0.855
Blue	0.100	-0.050

Reference White CIE-D65 (0.3127, 0.329)



F65RAW Viewer supports the following three typical workflows for the development and conversion of F65RAW media without loss of its richness and integration with the DI process. The different view modes provided by F65RAW Viewer mean that it can be used not only simply for viewing clips, but also for checking the original look of a clip or the expected color grading result with a particular Look Control or a Monitor LUT applied at each stage in the pipeline.

S-Gamut/Linear

Suitable for a 16-bit Linear DPX workflow, for easy color management while retaining the expressive capacity of the media.

S-Gamut/CineLog

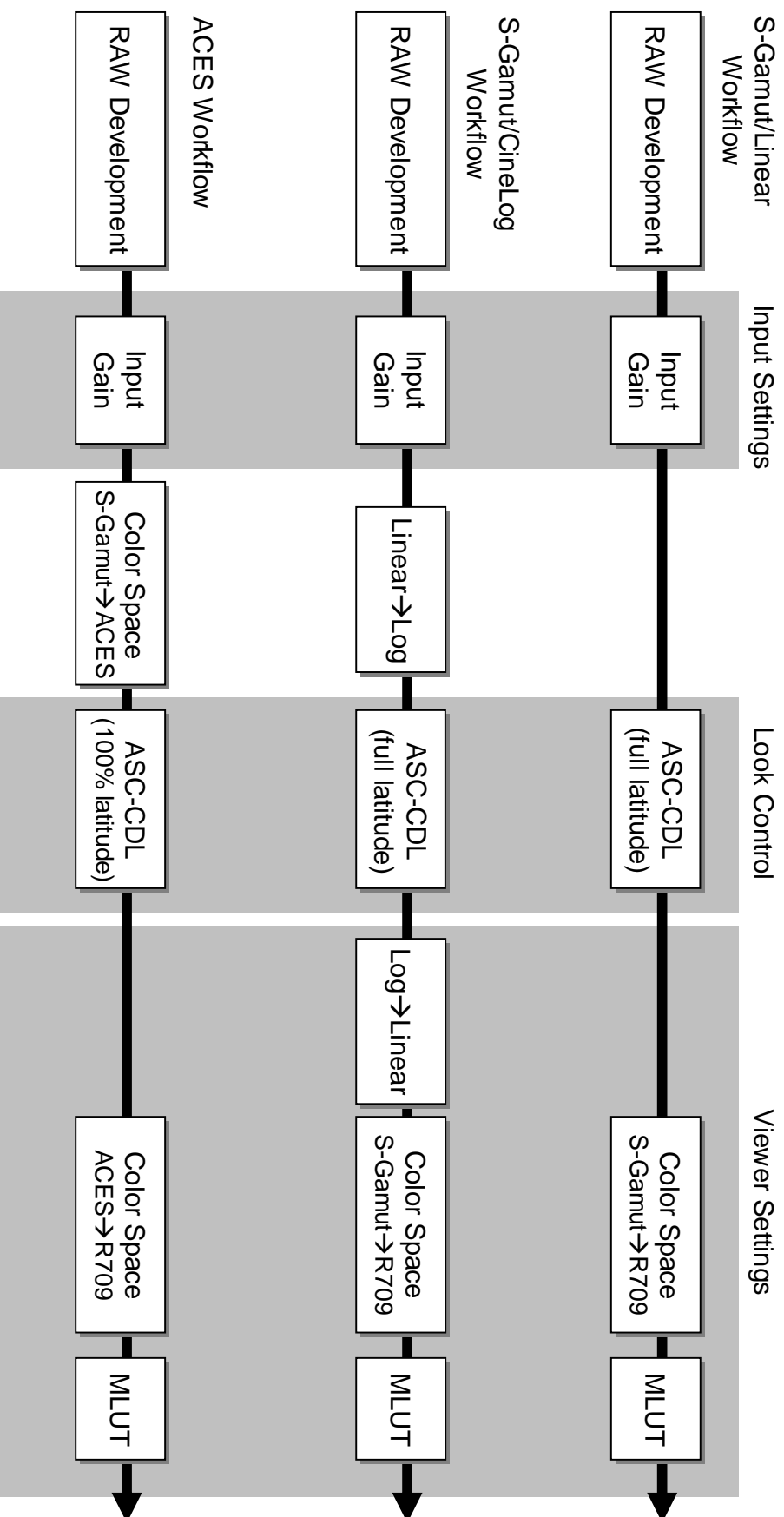
Suitable for a workflow using 10-bit Logarithmic DPX, and well suited to popular film-based workflows.

F65RAW and CineLog code values

Chart Reflection	Raw code value (16bit)	CineLog code value (10bit)
0%	512	95
90%	5472	685

ACES

Suitable for the new AMPAS-IIF ACES workflow.



*ASC-CDL : ASC Technology committee Color Decision List Version 1.2
 *ACES : Academy Color Encoding Specification by AMPAS-IIF
 (The Image Interchange Framework / Academy of Motion Picture Arts & Sciences)

5.2. Input Settings

Firstly, the Workspace Color Space (color gamut and gamma curve) for the ASC-CDL to be applied should be selected under Input Settings.

The Exposure Index (EI) indicates the camera setting when the content was shot. If an EI different from the standard value of 800 was used, then the ISO Sensitivity slider moves to match the EI value and a push (or pull) process is applied. However, the slider may be returned to a setting of 800 so that the push (or pull) process is not applied, allowing the content to be viewed with its original luminance.

5.3. Look Control

When a clip is selected, the ASC-CDL parameters are automatically set to the values given in its xml metadata file, and these parameters are applied when the clip is viewed.

All the parameters set in the Look Control, including the ASC-CDL parameters obtained from the xml metadata file, are ASC-CDL encoded and are applied during processing and viewing.

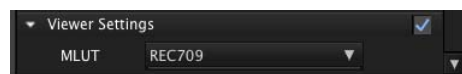
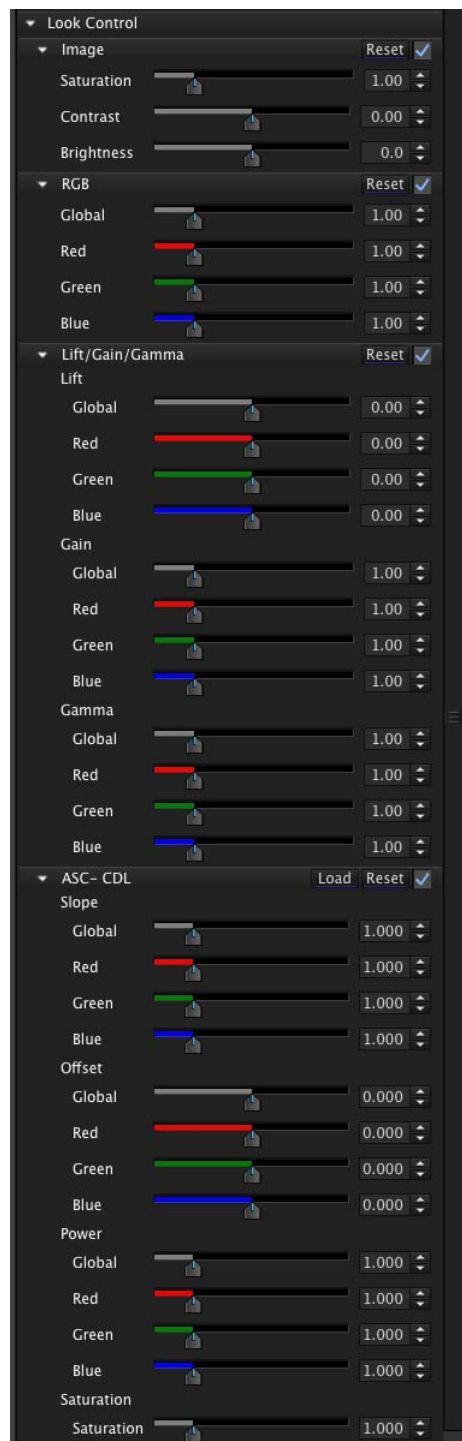
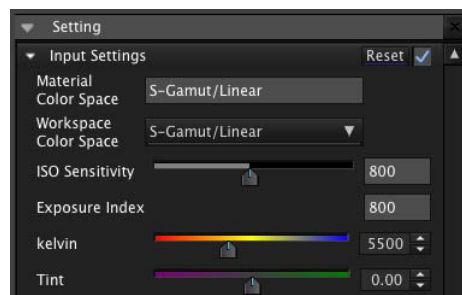
Please note that the Workspace Color Space selection in the Input Settings will affect the result of applying the ASC-CDL parameters.

5.4. Viewer Settings

The Monitoring LUT to be used during viewing can be selected here.

The default LUT (Rec. 709) has a standard Rec. 709 gamma curve with luminance levels in the range from 0% to 100%. If another built-in LUT is selected then clips can be viewed with luminance levels over 100% while preserving a normal video look.

Please note that the Rec.709 color gamut is used in the Clip



Viewer by default. However, if the check is removed from the Viewer Settings checkbox then this color gamut transform is disabled.

6. Exporting Media

6.1. Supported Formats

Format	Resolution	Bit Depth	Color space	Transfer
DPX	4096x2160	16-bit integer	S-Gamut	Linear Logarithmic
	3840x2160	10-bit integer		
	2048x1080			
	1920x1080			
Open EXR	4096x2160	32-bit float	S-Gamut ACES	Linear
	3840x2160	16-bit float		
	2048x1080			
	1920x1080			

*DPX Version 2 (Method A for 10-bit)

*Open EXR version2

Notes: 2048x1080 and 1920x1080 are generated by simplified low resolution decoder. These resolutions are assumed to be used for proxy or off-line purpose.

6.2. Export Settings

These settings determine the behavior and file format when a clip is exported. Once these settings have been made, clicking Submit will schedule the clip currently being viewed for export.

Export

Format: DPX

Resolution: 4096*2160

Bit depth: 16

Bake: ALL

Speed: ☒

Bin: /Users/sony/Desktop

Name: Tokyo_ID0009

of digits: 5

Start: 1

Duplication: Error

ASC-CDL: ☒

Notification: ☐ Setting

Submit

Bake Setting:

Selects which video processing parameters are applied during export.

None

The clip is exported with the original color gamut and gamma curve, and no video processing is performed (the parameters under Input Settings, Look Control, and Viewer Settings are ignored). In this mode, the wide latitude and large color space of the F65 can be exploited to the full.

Input

The clip is exported with the color gamut and gamma curve specified by Workspace Color Space. Only the parameters under Input Settings are applied. As the Input Settings are always processed in linear space, this mode can be used for push (or pull) processing in a CineLog DPX workflow.

All

The clip is output as it is displayed. It is exported with a Rec709 color gamut and using a gamma curve determined by the Monitor LUT setting. This achieves a look in the exported clip corresponding to that seen in the Viewer with the Look Control parameters applied but some of the F65RAW latitude and color space is lost.

Speed:

Selects the RAW-Developing algorithm used (high-speed or high-quality).

of digits:

Specifies the number of digits to be used in the sequence number appended to the filename of the exported sequence.

Start:

Specifies the initial sequence number.

ASC-CDL:

When this box is checked, the encoded CDL parameters are exported to an cdl file in color decision list format.