SONY FS7 SETUP GUIDE

ODYSSEY 7Q+
ODYSSEY 7Q

4K RAW up to 60p
4K RAW to 4K Apple ProRes up to 30p
4K RAW to UHD Apple ProRes up to 30p
2K RAW up to 240p
4K RAW to 2K Apple ProRes up to 60p
4K RAW to HD Apple ProRes up to 60p
4K/UHD Apple ProRes up to 30p (HDMI)
1080p video to Apple ProRes up to 60p

convergent design

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

ProRes
ProRes 422 (HQ)
ProRes 422
ProRes 422 (LT)

4K

Updated August 5, 2015 | Firmware Release 2015.8

Notes about using the odyssey with the FS7

Odyssey7Q+ is capable of recording 4K ProRes over HDMI. For recording via HDMI we recommend using a 4K rated cable with a maximum of one adapter between the camera and the Odyssey.

The Odyssey7/7Q do not support 1080p59.94 or 4K over HDMI due to a hardware constraint. (Odyssey7Q+ will accept 4K or 1080p59.94). For RAW recording from the FS7 the Sony XDCA-FS7 is required. XDCA-FS7 is capable of RAW output via SDI.

RAW RECORDING

Odyssey7Q and Odyssey7Q+ are capable of recording the RAW signal ouput from the FS7 if the Sony FS Recording Option Upgrade license has been purchased through our website and the license key has been entered in the unit.

The Odyssey Sony FS7/FS700 Recording Option Upgrade (available on our website as part of the Odyssey RAW Bundle) is required for recording 4K, 2K, RAW and HFR. The Sony XDCA-FS7 Extension Unit for the FS7 is required for RAW recording.

The following are approximate maximum record time in minutes, based on recording two 512G SSDs (1TB). Record times may vary slightly.

		FRAMES PER SECOND								
		24	**25**	**30**	**50**	**60**	**100**	**120**	**200**	**240**
	4K RAW	50	48	40	24*	20*				
	2K RAW	200	192	160	96	80	48	40	24*	20*

** Two SSDs are required to capture*

NOTE: When recording RAW, S-LOG3 Picture Profile must be used.

RAW FORMAT DETAILS

4K RAW	4096x2160, 12-bit linear data, recorded as Uncompressed .DNG
2K RAW	2048x1080, 12-bit linear data, recorded as Uncompressed .DNG

Typical Download Time in Minutes

Media	USB3.0	Thunderbolt
256G SSD	20	10
512G SSD	40	20
1TB SSD	80	40

Actual transfer rates are dependent on computer system and capture media.
USB 3.0 or Thunderbolt connections are recommended by Convergent Design for efficient data rates.

Apple ProRes Recording

Odyssey now supports recording Apple ProRes 422 (HQ), Apple ProRes 422 and Apple ProRes 422 (LT). Files are saved in .MOV format.

The Sony FS7 Recording Option Upgrade is not required for recording 4K to Apple ProRes over HDMI. The Sony FS7 outputs 4K as a RAW signal, which is processed and coverted by Odyssey.

		24	25	30	50	60	100	120	200	240
ProRes 422 (HQ)	4K to 4K ProRes	157	151	126	76	63				
	4K to UHD ProRes	168	161	134	81	67				
	4K to 2K ProRes	629	603	503	301	251		`		
	4K (Burst) to 2K ProRes						148	124		
	2K RAW HS to HD ProRes						161	134	81	67
	4K to HD ProRes	670	643	536	322	268				
	4K (Burst) to HD ProRes						156	132		
	HD ProRes	670	643	536	322	268				
ProRes 422	4K to 4K ProRes	220	221	176	106	88				
	4K to UHD ProRes	264	252	212	126	106				
	4K to 2K ProRes	964	924	772	460	384				
	4K (Burst) to 2K ProRes						228	192		
	2K RAW HS to HD ProRes						254	212	127	106
	4K to HD ProRes	1060	1016	848	508	424				
	4K (Burst) to HD ProRes						254	212		
	HD ProRes	1060	1016	848	508	424				
ProRes 422 (LT)	4K to 4K ProRes	328	316	264	158	132				
	4K to UHD ProRes	408	392	324	196	162				
	4K to 2K ProRes	1324	1272	1060	636	528				
	4K (Burst) to 2K ProRes						316	264		
	2K RAW HS to HD ProRes						364	303	182	151
	4K to HD ProRes	1516	1456	1212	728	604				
	4K (Burst) to HD ProRes						364	300		
	HD ProRes	1516	1456	1212	728	604				

Format Details

4K to 4K ProRes / 4K ProRes (HDMI)	4096x2160 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed 4K video
4K to UHD ProRes / UHD ProRes (HDMI)	3840x2160 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed UHD video. recorded as 3840x2160 center crop from the RAW.
4K to 2K ProRes	2048x1080 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed 2K video
4K to HD ProRes **	1920x1080, 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed HD video
2K HS to HD ProRes	1920 x1080 10 bit Log video, Originated from 2K Raw 12 bit camera signal, transferred and recorded as Apple ProRes compressed HD Video
HD DPX*	1920x1080, 12-bit log video, originated from HD 8-bit camera signal, recorded as Uncompressed .DPX. *HD DPX files at 60p are "packed" on SSDs due to high data rate. Use free CD Data Unpacker utility software to unpack files after transfer.*
HD ProRes	1920x1080, 10-bit log video, originated from HD 8-bit camera signal, recorded as Apple ProRes compressed HD video

*** NOTE: In 4K RAW to 4K Apple ProRes and 4K RAW to HD Apple ProRes, picture profiles SLOG-2, Rec709 and Rec709 800% are supported.*

Supported Frame Rates

	24	25	30	50	60	100	120	200	240
4K (4096x2160)	✓	✓	✓	✓	✓				
4K HDMI (4096x2160)	✓	✓	✓						
UHD (3840x2160)	✓	✓	✓	✓	✓				
UHD HDMI (3840x2160)	✓	✓	✓						
2K (2048x1080)	✓	✓	✓	✓	✓				
2K High-Speed RAW (2048x1080)						✓	✓	✓	✓
HD (1920x1080)	✓	✓	✓	✓	✓				

FS7 Configuration

The Odyssey Sony FS7/FS700 Recording Option Upgrade (available on our website as part of the Odyssey RAW Bundle) is required for recording 4K, 2K, RAW and HFR. The Sony XDCA-FS7 Extension Unit for the FS7 is required for RAW output from the FS7.

1. SET COUNTRY (NTSC/PAL)

MENU » USER » COUNTRY » NTSC/PAL AREA » (NTSC | PAL)

2. SELECT A CODEC

MENU » USER » CODEC » *(SELECT)*

RAW *
RAW + XAVC-I**
RAW + XAVC -L
RAW + MPEG HD422

** Required for 2K 100/120/200/240 (also note internal recording is disabled during high speed recording)*

*** Required for 4K HDMI output to be enabled*

3. SELECT RAW OUTPUT FORMAT

MENU » USER » REC FORMAT » RAW OUTPUT FORMAT » *(SELECT)*

NTSC	4096x2160 59.94P 4096x2160 29.97P 4096x2160 23.98P 2048x1080 59.94P 2048x1080 29.97P 2048x1080 23.98P
PAL	4096x2160/25p 4096x2160/50p 2048x1080/25p 2048x1080/50p

4. SET SHOOTING MODE

MENU » USER » BASE SETTING » SHOOTING MODE » CINE EI

5. SET COLOR SPACE

MENU » USER » BASE SETTING » COLOR SPACE » S-GAMUT3/SLOG3

Only Slog3 is supported in Raw and Raw to ProRes recording, Slog3cine, Slog2 and other Profiles / looks are not supported at this time.

6. SET RECORD COMMAND FOR SDI/HDMI TRIGGERING

MENU » RECORDING » SDI/HDMI REC CONTROL » SETTING » ON

7. SET CAMERA FOR RAW HIGH SPEED

If you are not recording 2K RAW 100/120 please skip this step.

MENU » USER » S&Q MOTION » SETTING » ON

MENU » USER » S&Q MOTION » HIGH FRAME RATE » ON

MENU » USER » S&Q MOTION » FRAME RATE » (100 | 120 | 200 | 240)

Note: 200 & 240fps requires two SSD drives in RAID configuration. Odyssey will automatically use both drives for these frame rates based on the input detected.

Odyssey Configuration

Use this section to set up the Odyssey for RAW recording. For RAW to ProRes recording please refer to the next section of this guide.

The Odyssey Sony FS7/FS700 Recording Option Upgrade (available on our website as part of the Odyssey RAW Bundle) is required for recording 4K RAW to ProRes. The Sony XDCA-FS7 Extension Unit for the FS7 is required for RAW output from the FS7.

1. SET ODYSSEY TO FS7 MODE

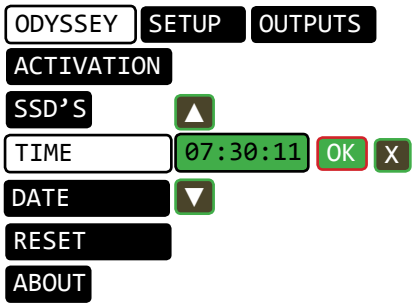
4K RAW

⚙ » SETUP » CAMERA » SONY FS7 » FS 4K/2K RAW-->RAW (.DNG)

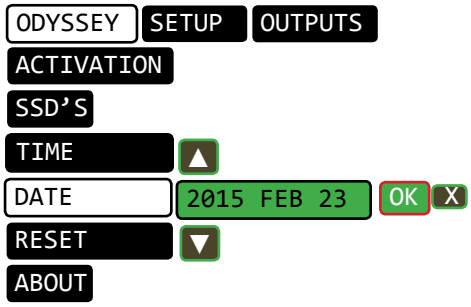
The unit will restart

2. SET DATE & TIME TO MATCH FS7

⚙ » ODYSSEY » SET » TIME



⚙ » ODYSSEY » SET » DATE



3. MAKE CAMERA THE RECORD TRIGGER

⚙ » SETUP » RECORD TRIGGER » CAMERA

4. SET TIMECODE SOURCE

⚙ » SETUP » TIMECODE SOURCE » SDI/HDMI

5. FORMAT SSDs

⚙ » ODYSSEY » SSD'S » FORMAT BOTH *(OR FORMAT SSD1 IF YOU DO NOT HAVE A SECOND SSD DRIVE INSTALLED.)*

6. CONNECT ODYSSEY TO XDCA-FS7 AND VERIFY INPUT

Connect XDCA-FS7 RAW OUT output to Odyssey SDIA input. The status on your Odyssey will display your camera's output.

Example: 

NOTE

The recorded file will be RAW (.DNG) 2K or 4K. 2K up to 120fps OR 4K up to 60fps (sustained).

Recording Across Two SSDs (SSD RAID)

SSD1	SSD2
1, 3, 5, 7…	0, 2, 4, 6…

4K 23.98p to 30p rates = Single Drive
2K 23.98p to 120p rates = Single Drive
2K 200p to 240p rates = RAID (two drives)
4K 50/59p = RAID (two drives)

RAID is set up automatically upon detecting the input signal - no setup is required.

NOTE

You can use any Convergent Design media; they need not be matching (ie, one 256GB card and one 512GB card).

Odyssey Configuration

Camera must be set to 4K RAW output to record to 4K RAW to Apple ProRes.

The Odyssey Sony FS7/FS700 Recording Option Upgrade (available on our website as part of the Odyssey RAw bundle) is required for recording 4K RAW to ProRes. The Sony XDCA-FS7 Extension Unit for the FS7 is required for RAW output from the FS7.

1. SET MODE TO 4K RAW TO APPLE PRORES

RAW TO HD RECORDING

☼ » SETUP » CAMERA » SONY FS7 » FS 4K RAW ->HD PRORES

RAW TO 2K RECORDING

☼ » SETUP » CAMERA » SONY FS7 » FS 4K RAW ->2K PRORES

RAW TO UHD RECORDING

☼ » SETUP » CAMERA » SONY FS7 » FS 4K RAW ->UHD PRORES

RAW TO 4K RECORDING

☼ » SETUP » CAMERA » SONY FS7 » FS 4K RAW ->4K PRORES

2. MAKE CAMERA THE RECORD TRIGGER

☼ » SETUP » RECORD TRIGGER » CAMERA

3. SET TIMECODE SOURCE

☼ » SETUP » TIMECODE SOURCE » SDI/HDMI

4. SET PRORES BITRATE

☼ » SETUP » VIDEO CODEC » *(SELECT)*

PRORES HQ	The Apple ProRes 422 (HQ) codec offers the utmost possible quality for 4:2:2 or 4:2:0 sources (without an alpha channel) and provides the following: • Target data rate of approximately 220 Mbps (1920 x 1080 at 60i) • Higher quality than Apple ProRes 422
PRORES 422	The Apple ProRes 422 codec provides the following: • Target data rate of approximately 145 Mbps (1920 x 1080 at 60i) • Higher quality than Apple ProRes 422 (LT)
PRORES LT	The Apple ProRes 422 (LT) codec provides the following: • Roughly 70 percent of the data rate of Apple ProRes 422 (smaller file sizes than ProRes 422) • Higher quality than Apple ProRes 422 (Proxy)

5. FORMAT SSDs

⚙ » ODYSSEY » SSD'S » FORMAT BOTH

(or FORMAT SSD1 if you do not have a second SSD drive installed.)

6. CONNECT TO CAMERA AND VERIFY STATUS INPUT

Connect FS7 3G-SDI output to Odyssey SDIA input

NOTE

Use only 3G-SDI rated cables from FS7 to Odyssey. Using a 1.5G SDI cable in not recommended and may cause issues.

The status on your Odyssey will display your camera's output.

Example:

Odyssey Configuration

Camera must be set to 4K RAW output to record to 4K RAW to Apple ProRes.

The Odyssey Sony FS7/FS700 Recording Option Upgrade (available on our website as part of the Odyssey RAw bundle) is required for recording 4K RAW to ProRes. The Sony XDCA-FS7 Extension Unit for the FS7 is required for RAW output from the FS7.

1. SET MODE TO 2K RAW HS TO APPLE PRORES

☼ » SETUP » CAMERA » SONY FS7 » FS 2K RAW ->HD PRORES

2. MAKE CAMERA THE RECORD TRIGGER

☼ » SETUP » RECORD TRIGGER » CAMERA

3. SET TIMECODE SOURCE

☼ » SETUP » TIMECODE SOURCE » INTERNAL » (SEED/TIME OF DAY/TIME OF DAY DF)

4. SET PRORES BITRATE

☼ » SETUP » VIDEO CODEC » *(SELECT)*

PRORES HQ	The Apple ProRes 422 (HQ) codec offers the utmost possible quality for 4:2:2 or 4:2:0 sources (without an alpha channel) and provides the following: • Target data rate of approximately 220 Mbps (1920 x 1080 at 60i) • Higher quality than Apple ProRes 422
PRORES 422	The Apple ProRes 422 codec provides the following: • Target data rate of approximately 145 Mbps (1920 x 1080 at 60i) • Higher quality than Apple ProRes 422 (LT)
PRORES LT	The Apple ProRes 422 (LT) codec provides the following: • Roughly 70 percent of the data rate of Apple ProRes 422 (smaller file sizes than ProRes 422) • Higher quality than Apple ProRes 422 (Proxy)

5. FORMAT SSDs

☼ » ODYSSEY » SSD'S » FORMAT BOTH

(or FORMAT SSD1 if you do not have a second SSD drive installed.)

6. CONNECT TO CAMERA AND VERIFY STATUS INPUT

Connect FS7 3G-SDI output to Odyssey SDIA input

NOTE

Use only 3G-SDI rated cables from FS7 to Odyssey. Using a 1.5G SDI cable in not recommended and may cause issues.

The status on your Odyssey will display your camera's output.

Example:

FS7 Configuration

1. SET COUNTRY (NTSC/PAL)

MENU » USER » COUNTRY » NTSC/PAL AREA » (NTSC | PAL)

2. SELECT A CODEC

MENU » USER » CODEC » *(SELECT)*

RAW + XAVC-I
RAW + XAVC -L
RAW + MPEG HD422
XAVC-I
XAVC -L
MPEG HD422

**4K HDMI output requires camera to be set to XAVC-L or XAVC-I.*

3. SELECT OUTPUT FORMAT

MENU » USER » REC FORMAT » OUTPUT FORMAT » *(SELECT)*

NTSC	4096x2160 29.97P (HDMI Only)* 4096x2160 23.98P (HDMI Only)* 2048x1080 59.94P 2048x1080 29.97P 2048x1080 23.98P 1920x1080 59.94P 1920x1080 29.97P 1920x1080 23.98P
PAL	4096x2160 25P (HDMI Only)* 2048x1080/25P 2048x1080/50P 1920x1080/25P 1920x1080/50P

**4K HDMI output requires camera to be set to XAVC-L or XAVC-I. Recording 4K over HDMI requires a 4K rated HDMI cable and a maximum of one HDMI adapter between the camera and the Odyssey.*

4. SET SHOOTING MODE

MENU » USER » BASE SETTING » SHOOTING MODE » CINE EI

5. SET COLOR SPACE

MENU » USER » BASE SETTING » COLOR SPACE » S-GAMUT3/SLOG3

Only Slog3 is supported in Raw and Raw to ProRes recording, Slog3cine, Slog2 and other Profiles / looks are not supported at this time.

6. SET RECORD COMMAND FOR SDI/HDMI TRIGGERING

MENU » RECORDING » SDI/HDMI REC CONTROL » SETTING » ON

Odyssey Configuration

1. SET MODE TO APPLE PRORES RECORDING

HD RECORDING

☼ » SETUP » CAMERA » SONY FS7 » HD ->HD PRORES

4K/UHD HDMI TO 4K/UHD PRORES (ODYSSEY7Q+ ONLY)

☼ » SETUP » CAMERA » SONY » 4K/UHD PRORES(.MOV)

UHD HDMI TO HD PRORES (ODYSSEY7Q+ ONLY)

☼ » SETUP » CAMERA » SONY » UHD HDMI -> HD PRORES(.MOV)

4K HDMI TO 2K PRORES (ODYSSEY7Q+ ONLY)

☼ » SETUP » CAMERA » SONY » 4K HDMI -> 2K PRORES(.MOV)

2. MAKE CAMERA THE RECORD TRIGGER

☼ » SETUP » RECORD TRIGGER » CAMERA

3. SET TIMECODE SOURCE

☼ » SETUP » TIMECODE SOURCE » SDI/HDMI

4. SET PRORES BITRATE

☼ » SETUP » VIDEO CODEC » *(SELECT)*

PRORES HQ	The Apple ProRes 422 (HQ) codec offers the utmost possible quality for 4:2:2 or 4:2:0 sources (without an alpha channel) and provides the following: • Target data rate of approximately 220 Mbps (1920 x 1080 at 60i) • Higher quality than Apple ProRes 422
PRORES 422	The Apple ProRes 422 codec provides the following: • Target data rate of approximately 145 Mbps (1920 x 1080 at 60i) • Higher quality than Apple ProRes 422 (LT)
PRORES LT	The Apple ProRes 422 (LT) codec provides the following: • Roughly 70 percent of the data rate of Apple ProRes 422 (smaller file sizes than ProRes 422) • Higher quality than Apple ProRes 422 (Proxy)

5. FORMAT SSDs

☼ » ODYSSEY » SSD'S » FORMAT BOTH

(or FORMAT SSD1 if you do not have a second SSD drive installed.)

6. CONNECT TO CAMERA AND VERIFY STATUS INPUT

Connect FS7 3G-SDI output to Odyssey SDIA input

SDI CABLES

Use only 3G-SDI rated cables from FS7 to Odyssey. Using a 1.5G SDI cable in not recommended and may cause issues.

The status on your Odyssey will display your camera's output.

Example:

FS7 Configuration

1. SET COUNTRY (NTSC/PAL)

MENU » USER » COUNTRY » NTSC/PAL AREA » (NTSC | PAL)

2. SELECT A CODEC

MENU » USER » CODEC » *(SELECT)*

RAW + XAVC-I
RAW + XAVC -L
RAW + MPEG HD422
XAVC-I
XAVC -L
MPEG HD422

**4K HDMI output requires camera to be set to XAVC-L or XAVC-I.*

3. SELECT OUTPUT FORMAT

MENU » USER » REC FORMAT » OUTPUT FORMAT » *(SELECT)*

NTSC	2048x1080 59.94P 2048x1080 29.97P 2048x1080 23.98P 1920x1080 59.94P 1920x1080 29.97P 1920x1080 23.98P
PAL	2048x1080/25P 2048x1080/50P 1920x1080/25P 1920x1080/50P

**4K HDMI to uncompressed DPX recording is not currently supported.*

4. SET SHOOTING MODE

MENU » USER » BASE SETTING » SHOOTING MODE » *(CUSTOM | CINE EI)*

5. SET COLOR SPACE

MENU » USER » BASE SETTING » COLOR SPACE » *(SELECT)*

6. SET RECORD COMMAND FOR SDI/HDMI TRIGGERING

MENU » RECORDING » SDI/HDMI REC CONTROL » SETTING » ON

Odyssey Configuration

7. SET ODYSSEY TO FS7 TO UNCOMPRESSED DPX MODE

☼ » SETUP » CAMERA --> SONY FS7 » HD->4:4:4 (.DPX)

Click OK - The unit will restart.

8. MAKE FS7 THE RECORD TRIGGER

☼ » SETUP » RECORD TRIGGER » CAMERA

9. SET TIMECODE SOURCE

☼ » SETUP » TIMECODE SOURCE » SDI/HDMI

10. FORMAT SSDs

☼ » ODYSSEY » SSD'S » FORMAT BOTH

(or FORMAT SSD1 if you do not have a second SSD drive installed.)

11. CONNECT TO CAMERA AND VERIFY STATUS INPUT

Connect FS7 3G-SDI output to Odyssey SDIA input

SDI CABLES

Use only 3G-SDI rated cables from FS7 to Odyssey. Using a 1.5G SDI cable in not recommended and may cause issues.

The status on your Odyssey will display your camera's output.

Example:

Copying files to your computer

1. CONNECT SSD DRIVE TO ADAPTER

Connect the Convergent Design 2.5” Premium SSD Media to any off-the-shelf 2.5” SATA adaptor (example: Seagate GoFlex Thunderbolt Adaptor or USB 3.0 Adaptor)

2. CONNECT ADAPTER TO COMPUTER

The SSD will mount within 10-20 Seconds. (You will see this mount on the desktop or within finder on MAC, or within My Computer on Windows machines).

3. COPY FILES FOR PLAYBACK/EDITING

All Clips or Takes are located within the “Clips” directory, navigate to this and copy all of your files to a local or external drive or RAID for playback and/or editing.

Software Utilities (Free Download from Website)

CD Clip Merger (RAW/DPX)

Use the Clip Merger for any Raided Record (ie if your recorded clip required more than one SSD).

CD Apple ProRess Transfer Tool (Free Download from Website)

Use to combine clips into a single file
Use to copy all files to a single directory without folder structure.
Required in order to transfer markers to your NLE.

CD Data Unpacker (DPX)

Use CD Data Unpacker to convert “packed” files to “unpacked” data.

ALL UTILITIES CAN BE DOWNLOADED FROM THE FIRMWARE/DOWNLOADS AREA OF OUR WEBSITE: Convergent-Design.com/support/firmware-downloads.html

ATTENTION MAC OSX USERS

Before installing Convergent Design Software on Mac OSX You must first change the following settings.

1) Navigate to **Applications** » **Utilities** » **System Preferences**
2) Select **Security and privacy**
3) Under **General** » *Allow applications downloaded from:* Select **Anywhere**.

You will now be able to run the installer for installing any Convergent Design Applications.

Apple ProRes

The Odyssey can record in Apple ProRes 422 (HQ), Apple ProRes 422 and Apple ProRes 422 (LT) compressed codecs. This allows for high quality recording while avoiding high data rates of working with uncompressed video.

NATIVE APPLE PRORES SUPPORT

Adobe CC 2014
Apple FCP X, Aperture
Cineform Studio
Final Cut Pro 7
Black Magic DaVinci Resolve
The Foundry Nuke
Autodesk Smoke
Sony Vegas

FS700 RAW Support *(DNG Sequences)*

All FS700 RAW recording on the Odyssey is recorded as a 12-bit linear CinemaDNG file. With DNG files, timecode and clip metadata is stored in every frame, as well as in the XML file within each clip. All audio is recorded 48Hz 16 bit Uncompressed WAV audio.

It is important to correctly set the white balance of the camera, as this is baked into the RAW file.

NATIVE CINEMA DNG SUPPORT

Adobe CC 2014*
Apple FCP X, Aperture
Assimilate Scratch Lab (future update)
Black Magic DaVinci Resolve

**Pending next Adobe CC update.*

FS700 RAW: Dealing with RAW Files

Note that FS700 RAW files are Linear, thus the files need a Gamma 2.2 correction in order to look correct. You may notice when you first import your files that they appear very dark before correction.

FS700 Davinci Resolve Import Settings

1. Right click on the file and select “Edit CinemaDNG Codec Settings”
2. Then under the CAMERA RAW select be sure CinemaDNG is selected from the drop down menu.
3. Set the Decode using method to CinemaDNG Default* (Also be sure your project is setup correctly)
4. Set the White Balance to As Shot
5. Set the Color Space to Rec709
6. Set the Gamma to Rec709
7. Leave Highlight Recovery off
8. Click Apply

The Media Pool Camera RAW settings are the same as the ones in the color page and these are designed for individual clip adjustment so its better to first set the ‘Project Settings’, ‘Camera RAW’ as you need for the whole project.

Select ‘Project Settings’, ‘Camera RAW’, ‘CinemaDNG’ and make sure the ‘Decode using’ is set to either ‘CinemaDNG Default’ or “Camera Metadata’

The “Camera Metadata’ is the default and the best place to start if you need to change an individual clip with camera RAW.

The Media Pool settings are helpful if you have a mix of different clip types, you can sort by codec, select a group and adjust.

Example 3D LUTs

For your convenience, Convergent Design has generated several example LUTs that can be applied to your RAW footage. Keep in mind these LUTs are an approximation, and may need adjustment depending on your application.

These LUTs are available in the Firmware/Downloads section of the Convergent Design website.

**Also note that using camera metadata or CinemaDNG default is also supported.*

To Load 3D LUTs into Davinci Resolve

1. Select the Project Settings wheel, and navigate to Look Up Tables
2. Select Open LUT Folder, and copy the included example LUTs into this folder.
3. Now Select Update Lists
4. Now in the Media Browser you can right click on your RAW file and select 3D LUT and select the LUT you wish to apply from the list.

Note the following about each CD example LUT, and you should adjust the LUT based on your application.

FS700_1.11.100_SLOG.cube

(Same LUT is recommended with firmware v2.10.141/3.10.100)

This LUT can be applied to view a simulated S-Log2 look based on the RAW recording with the S-Log2 picture profile, also note the image should closely match the internal media.

FS700 FCP X Import Settings

Once you have created a new project be sure to check the following Settings:

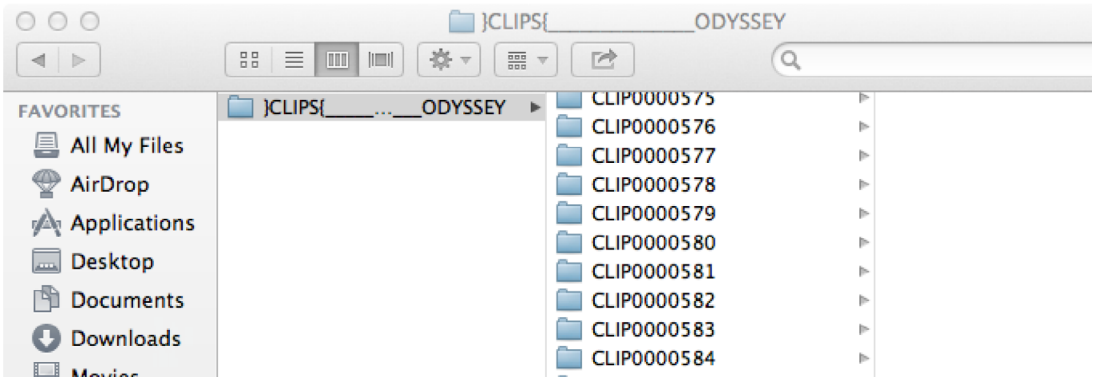
1. Under Final Cut Pro select Preferences
2. Be sure the Still Images editing duration is set to 0.0.1 Seconds
3. Select navigate to File and select Import Media
4. Navigate to the Clips directory, and select the Clip Folder contain your FS700 RAW files.
5. At this point you can start correcting the files to a 2.2 Gamma using the Color Board.

** Note if you are recording the internal media you can import the matching S-Log2 file, and select Match Color for a close approximation of S-Log2, but will most likely need additional tweaking.*

Working with Recorded Files

There are numerous post systems and NLEs that can read natively the various file formats recorded by the Odyssey. Some NLEs may require plug-ins in order to read certain file formats. Blackmagic Design Resolve software is available for free and can read all formats recorded by the Odyssey.

File Structure



Uncompressed Support (DPX sequence)

All Uncompressed recording on the Odyssey is recorded as 10 bit RGB 4:4:4 DPX, this is for all sources regardless if the source is 8 bit, 10 bit, 4:2:2, 4:4:4. With 12 bit camera's the files are recorded as a 16 bit DPX, for more universal compatibility. Also note that with DPX files timecode, and Clip Metadata is stored in every frame, as well as in the XML file within each clip. All audio is recorded 48Hz 16 bit Uncompressed WAV audio.

Also Note 1080p59.94/60p, 1080p119/120 and 12 bit files are recorded as Packed, so our CD unpacker utility will need to be used before the files can be used in any editor.

NATIVE 10-BIT / 16-BIT DPX SUPPORT

Adobe CS6 / Adobe CSCC/2014
Apple Color
AutoDesk Smoke
Assimilate Scratch Lab
Avid DS
Black Magic DaVinci Resolve
Cineform Studio
ColorFront OnSet Dailies
DJViewer
Eyeon Fusion
Grass Valley Eduis (Does not support 16-Bit)
The Foundry Nuke
Xnview(Does not support 16-Bit)

PLUGINS FOR DPX SUPPORT

Glue Tools
Apple FCP Pro
Apple FCP Pro X
Meta Fuse
Avid Media Composer

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CDSupport@convergent-design.com
Convergent-Design.com