

# SONY FS700 SETUP GUIDE

ODYSSEY 7Q+  
ODYSSEY 7Q



4K RAW up to 60p  
4K RAW burst up to 120p  
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  
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**

# Recording Capabilities

## Record Times & Formats

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

### RAW RECORDING

Odyssey7Q and Odyssey7Q+ are capable of recording the RAW signal output from the FS7 or FS700 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 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
RAW	4K RAW	50	48	40	24*	20*				
	4K RAW (Burst)						155 Takes*	155 Takes*		
	2K RAW	200	192	160	96	80	48	40	24*	20*

\* Two SSDs are required to capture

NOTE: When recording RAW, S-LOG2 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.

# Recording Capabilities

## Apple ProRes Recording

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

	24	25	30	50	60	100	120	200	240	
<b>ProRes 422 (HQ)</b>	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				
<b>ProRes 422</b>	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				
<b>ProRes 422 (LT)</b>	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				

# Recording Capabilities

## Format Details

<b>4K to 4K ProRes</b>	4096x2160 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed 4K video
<b>4K to UHD ProRes</b>	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.
<b>4K to 2K ProRes</b>	2048x1080 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed 2K video
<b>4K to HD ProRes **</b>	1920x1080, 10-bit log video, originated from 4K RAW 12-bit camera signal, transformed and recorded as Apple ProRes compressed HD video
<b>2K HS to HD ProRes</b>	1920 x1080 10 bit Log video, Originated from 2K Raw 12 bit camera signal, transferred and recorded as Apple ProRes compressed HD Video
<b>HD DPX*</b>	1920x1080, 12-bit log video, originated from HD 8-bit camera signal, recorded as Uncompressed .DPX. <i>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.</i>
<b>HD ProRes</b>	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
<b>4K (4096x2160)</b>	✓	✓	✓	✓	✓				
<b>4K HDMI (4096x2160)</b>	✓	✓	✓						
<b>UHD (3840x2160)</b>	✓	✓	✓	✓	✓				
<b>2K (2048x1080)</b>	✓	✓	✓	✓	✓				
<b>2K High-Speed RAW (2048x1080)</b>						✓	✓	✓	✓
<b>HD (1920x1080)</b>	✓	✓	✓	✓	✓				

## FS700 Configuration

### 1. SET UP THE FS700 FOR RAW RECORDING

MENU » REC/OUT SET » REC SET » RAW SET

Select any of the following frames rates that you wish to record on the Odyssey:

<b>NTSC</b>	4096x2160/24p 4096x2160/30p 4096x2160/60p 2048x1080/24p 2048x1080/30p 2048x1080/60p
<b>PAL</b>	4096x2160/25p 4096x2160/50p 2048x1080/25p 2048x1080/50p

Once the selection is made you will need to press EXEC on the camera, to return to live record.

### 2. SET GAMMA (REQUIRED FOR RAW RECORDING)

PICTURE PROFILE » PP7 » SETTING » GAMMA » S-Log2

PP7 is the default profile for S-Log2, Note that only S-Log2 is supported when recording RAW.

Once the camera is set to the desired frame rate, then connect to the Odyssey.

### 3. SET THE S&Q BUTTON FOR RAW HIGH SPEED

MENU » OTHERS » RAW S&Q BUTTON SET » 4K/2K SUPER SLOW

(BACK) » REC Command » ON

*NOTE: In 4K Super Slow the camera only outputs a maximum of 4K 60p, thus this mode will use internal buffering, and then will need to playback the footage to an Odyssey. In 4 Super Slow, the Odyssey Trigger must be set to Camera.*

MENU » RECORD » TRIGGER » CAMERA

*NOTE: For 2K up to 240fps sustained, or 4K up to 60p sustained, but 4K 100/120 3-4 second burst.*

## 4. SETUP FS700 HIGH FRAME RATE

MENU » CAMERA SET » SLOW AND QUICK » RAW 2K SUPER SLOW » EXECUTE

Select your desired frame rate\*:

NTSC	120 240
PAL	100 200

*TIME SAVER TIP:* A quicker way of doing this is once the S&Q is set to RAW HIGH SPEED, you can press and hold the S&Q button, then once the RAW Super Slow frame is highlighted, you can now switch from 120 to 240. (or 100 to 200 in record.)

### ACCESS HIGH FRAME RATES

Press the S&Q button » Select 120fps or 240fps

The Odyssey also has the ability of recording the buffered 4K 100/120 p from the FS700. If you wish to record this set the camera to 4K RAW, and enable S&Q. Then the Odyssey will record 4K100/120, for up to a 4 second burst.

4K 100/120 burst is now supported in 4K to 2K/HD ProRes.

## RAW 4K Super Slow 120fps and 100 fps

Start Trigger -> 440 Frames  
End Trigger -> 440 Frames  
End Half Trigger -> 220 Frames

Start Trigger Processes 440 frames from when RECord button is pressed.  
End Trigger Sends a buffer of the 440 frames prior to hitting the REC button.  
End Half Trigger sends a buffer of the 220 frames prior to hitting the REC button.

120fps is 3.7 seconds record time - (440 frames) - 60fps playback  
100fps is 4.4 seconds - (440 frames) - 50fps playback

## 5. PAL: 25P, 50P, 100P AND 200P

MENU » OTHERS » 60i/50i SEL » YES

## 6. SETUP RECORD TRIGGER (FS700 REC BUTTON)

MENU » REC/OUT SET » VIDEO OUT » SDI/HDMI CONTROL » ON

## 7. DUAL RECORD: FS700 INTERNAL + ODYSSEY

MENU » REC/OUT SET » RAW REC CONTROL » RAW+HD  
(BACK) » REC/OUT SET » HD SIMULTANEOUS REC » ON

*Note: The clip name from the FS700 is not sent over the SDI to the Odyssey, thus if you wish to use the internal media as an offline, you will need to rename the internal media to match the RAW files.*

## 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.**

### 1. SET ODYSSEY TO FS700 MODE

⚙️ » SETUP » CAMERA » SONY FS7/FS700 » FS RAW-->RAW (.DNG)

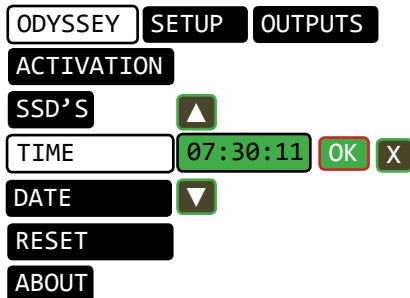
The unit will restart

#### NOTE

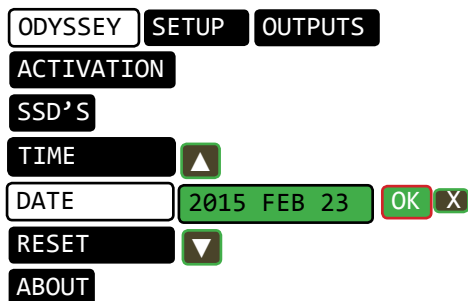
When selected for the first time (or after an update) it may take up to 3 minutes to load.

### 2. SET DATE & TIME TO MATCH FS700

⚙️ » ODYSSEY » SET » TIME



⚙️ » ODYSSEY » SET » DATE



### 3. MAKE FS700 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 TO CAMERA AND VERIFY STATUS INPUT

Connect FS700 3G-SDI output to Odyssey SDIA input

*Note: Use only 3G-SDI rated cables from FS700 to Odyssey. Using a 1.5G SDI cable is not recommended and may cause issues.*

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 240fps, 4K up to 60fps (sustained) and 4K 100/120 (3-4 second bursts).*

## 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  
4K 50/59p = RAID (two drives)  
2K 200/240p = 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).*



## FS700 Configuration

### 1. SET UP THE FS700 FOR 4K TO 4K/UHD/2K/HD RECORDING

MENU » REC/OUT SET » REC SET » RAW SET

Select any of the following frames rates that you wish to record on the Odyssey:

<b>NTSC</b>	4096x2096/24p 4096x2096/30p 4096x2096/60p*
<b>PAL</b>	4096x2160/25p 4096x2160/50p*

*\*4K to 2K/HD Only*

Once the selection is made you will need to press EXEC on the camera, to return to live / record.

### 2. SETUP RECORD TRIGGER (FS700 REC BUTTON)

MENU » REC/OUT SET » VIDEO OUT » SDI/HDMI COMMAND » ON

### 3. SET GAMMA (REQUIRED FOR 4K/UHD/2K/HD RECORDING)

PICTURE PROFILE » PP7 » SETTING » GAMMA » S-LOG2

#### NOTES:

- *Picture Profiles S-Log2, Rec709, Rec709 800% are all supported in this mode.\**
- *Custom Profiles or adjustments to the factory S-LOG2, Rec709, Rec709 800% are not supported at this time.*
- *Be sure to set the white balance correctly before shooting. Also note that if you wish to trigger the Odyssey via the camera's record trigger please set the following on the FS700*
- *With 4K to 4K/HD what you see on the monitor is what will be recorded.*
- *Adjusting settings within each picture profile will not be reflected in the recording since the Odyssey can only detect which profile is set, not the individual attributes.*

### 4. CONNECT FS700 TO THE ODYSSEY

Connect FS700 3G-SDI output to the Odyssey SDIA input

#### NOTE:

*Use only 3G-SDI rated cables from FS700 to Odyssey. Using a 1.5G SDI cable is not recommended and may cause issues.*

# 4K RAW to Apple ProRes Recording

## 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.**

### 1. SET MODE TO 4K RAW TO APPLE PRORES

#### HD RECORDING

⚙️ » SETUP » CAMERA » SONY FS7/FS700 » 4K RAW ->HD PRORES

#### 2K RECORDING

⚙️ » SETUP » CAMERA » SONY FS7/FS700 » 4K RAW ->2K PRORES

#### UHD RECORDING

⚙️ » SETUP » CAMERA » SONY FS7/FS700 » 4K RAW ->UHD PRORES

#### 4K RECORDING

⚙️ » SETUP » CAMERA » SONY FS7/FS700 » 4K RAW ->4K PRORES

### 2. MAKE FS700 THE RECORD TRIGGER

⚙️ » SETUP » RECORD TRIGGER » CAMERA

### 3. SET TIMECODE SOURCE

⚙️ » SETUP » TIMECODE SOURCE » SDI/HDMI

### 4. SET PRORES BITRATE

⚙️ » SETUP » VIDEO CODEC » *(SELECT)*

<b>PRORES HQ</b>	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: <ul style="list-style-type: none"><li>• Target data rate of approximately 220 Mbps (1920 x 1080 at 60i)</li><li>• Higher quality than Apple ProRes 422</li></ul>
<b>PRORES 422</b>	The Apple ProRes 422 codec provides the following: <ul style="list-style-type: none"><li>• Target data rate of approximately 145 Mbps (1920 x 1080 at 60i)</li><li>• Higher quality than Apple ProRes 422 (LT)</li></ul>
<b>PRORES LT</b>	The Apple ProRes 422 (LT) codec provides the following: <ul style="list-style-type: none"><li>• Roughly 70 percent of the data rate of Apple ProRes 422 (smaller file sizes than ProRes 422)</li><li>• Higher quality than Apple ProRes 422 (Proxy)</li></ul>

## 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 FS700 3G-SDI output to Odyssey SDIA input

### NOTE

*Use only 3G-SDI rated cables from FS700 to Odyssey. Using a 1.5G SDI cable is not recommended and may cause issues.*

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

*Example:*

4K 29.97

FS700  
4K->UHD

or

FS700  
4K->HD

# 2K RAW HS to HD Apple ProRes Recording

## Odyssey Configuration

Camera must be set to 2K RAW HS output to record to 2K RAW HS 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.**

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

⚙️ » SETUP » CAMERA » SONY FS700 » 2K RAW HS ->HD PRORES

### 2. MAKE FS700 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*)

<b>PRORES HQ</b>	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: <ul style="list-style-type: none"><li>• Target data rate of approximately 220 Mbps (1920 x 1080 at 60i)</li><li>• Higher quality than Apple ProRes 422</li></ul>
<b>PRORES 422</b>	The Apple ProRes 422 codec provides the following: <ul style="list-style-type: none"><li>• Target data rate of approximately 145 Mbps (1920 x 1080 at 60i)</li><li>• Higher quality than Apple ProRes 422 (LT)</li></ul>
<b>PRORES LT</b>	The Apple ProRes 422 (LT) codec provides the following: <ul style="list-style-type: none"><li>• Roughly 70 percent of the data rate of Apple ProRes 422 (smaller file sizes than ProRes 422)</li><li>• Higher quality than Apple ProRes 422 (Proxy)</li></ul>

### 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 FS700 3G-SDI output to Odyssey SDIA input

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

*Example:*

4K 29.97

FS700  
4K->UHD

or

FS700  
4K->HD

### NOTES

*Use only 3G-SDI rated cables from FS700 to Odyssey. Using a 1.5G SDI cable is not recommended and may cause issues.*

*Only one SSD can be inserted into the unit when recording 2K RAW HS to HD Apple ProRes*

*Internal recording on the camera is disabled when the camera is set to 2K RAW 100/120/200/240*

## FS700 Configuration

### 1. SET UP THE FS700 FOR RECORDING

MENU » REC/OUT SET » REC SET » HD

Select any of the following frames rates that you wish to record on the Odyssey:

NTSC	1080/24p 1080/30p 1080/60p
PAL	1080/25p 1080/50p

#### NOTE

1080/100p, 1080/120p are not supported.

### 2. SET UP RECORD TRIGGER (FS700 REC BUTTON)

MENU » REC/OUT SET » VIDEO OUT » SDI/HDMI COMMAND » ON

### 3. SET UP FS700 OUTPUT RESOLUTION

MENU » REC/OUT SET » VIDEO OUT » SDI/HDMI/COMPONENT » 1080P/480P

### 4. SET UP FS700 OUTPUT FRAME RATE

MENU » REC/OUT SET » VIDEO OUT » 24/30P OUTPUT » 24P/30P

## Odyssey Configuration

### 1. SET ODYSSEY TO HD->HD APPLE PRORES 422 MODE

⚙️ » SETUP » CAMERA » SONY FS7/FS700 » HD->HD PRORES(.MOV)

### 2. MAKE FS700 THE RECORD TRIGGER

⚙️ » SETUP » RECORD TRIGGER » CAMERA

### 3. SET TIMECODE SOURCE

⚙️ » SETUP » TIMECODE SOURCE » SDI/HDMI

### 4. SET PRORES BITRATE

⚙️ » SETUP » VIDEO CODEC » *(SELECT)*

<b>PRORES HQ</b>	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: <ul style="list-style-type: none"><li>• Target data rate of approximately 220 Mbps (1920 x 1080 at 60i)</li><li>• Higher quality than Apple ProRes 422</li></ul>
<b>PRORES 422</b>	The Apple ProRes 422 codec provides the following: <ul style="list-style-type: none"><li>• Target data rate of approximately 145 Mbps (1920 x 1080 at 60i)</li><li>• Higher quality than Apple ProRes 422 (LT)</li></ul>
<b>PRORES LT</b>	The Apple ProRes 422 (LT) codec provides the following: <ul style="list-style-type: none"><li>• Roughly 70 percent of the data rate of Apple ProRes 422 (smaller file sizes than ProRes 422)</li><li>• Higher quality than Apple ProRes 422 (Proxy)</li></ul>

### 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

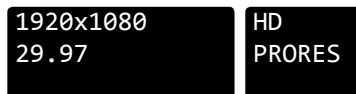
Connect FS700 3G-SDI output to Odyssey SDIA input

#### SDI CABLES

*Use only 3G-SDI rated cables from FS700 to Odyssey. Using a 1.5G SDI cable is not recommended and may cause issues.*

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

*Example:*



## FS700 Configuration

### 1. SET UP THE FS700 FOR RECORDING

MENU » REC/OUT SET » REC SET » HD

Select any of the following frames rates that you wish to record on the Odyssey:

NTSC	1080/24p 1080/30p 1080/60p
PAL	1080/25p 1080/50p

*Note: 1080/100p, 1080/120p are not supported.*

### 2. SET UP RECORD TRIGGER (FS700 REC BUTTON)

MENU » REC/OUT SET » VIDEO OUT » SDI/HDMI COMMAND » ON

### 3. SET UP FS700 OUTPUT RESOLUTION

MENU » REC/OUT SET » VIDEO OUT » SDI/HDMI/COMPONENT » 1080p/480p

### 4. SET UP FS700 OUTPUT FRAME RATE

MENU » REC/OUT SET » VIDEO OUT » 24/30p Output » 24p/30p



## Odyssey Configuration

### 1. SET ODYSSEY TO FS700 TO UNCOMPRESSED DPX MODE

⚙️ » SETUP » CAMERA --> SONY FS7/FS700 » HD->4:4:4 (.DPX)

*Click OK - The unit will restart.*

### 2. MAKE FS700 THE RECORD TRIGGER

⚙️ » SETUP » RECORD TRIGGER » CAMERA

### 3. SET TIMECODE SOURCE

⚙️ » SETUP » TIMECODE SOURCE » SDI/HDMI

### 4. FORMAT SSDs

⚙️ » ODYSSEY » SSD'S » FORMAT BOTH

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

### 5. CONNECT TO CAMERA AND VERIFY STATUS INPUT

Connect FS700 3G-SDI output to Odyssey SDIA input

#### SDI CABLES

*Use only 3G-SDI rated cables from FS700 to Odyssey. Using a 1.5G SDI cable is not recommended and may cause issues.*

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

*Example:*

1920x1080  
29.97

DPX  
4:4:4

## 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 ProRes 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](http://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 CINEMADNG 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 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:

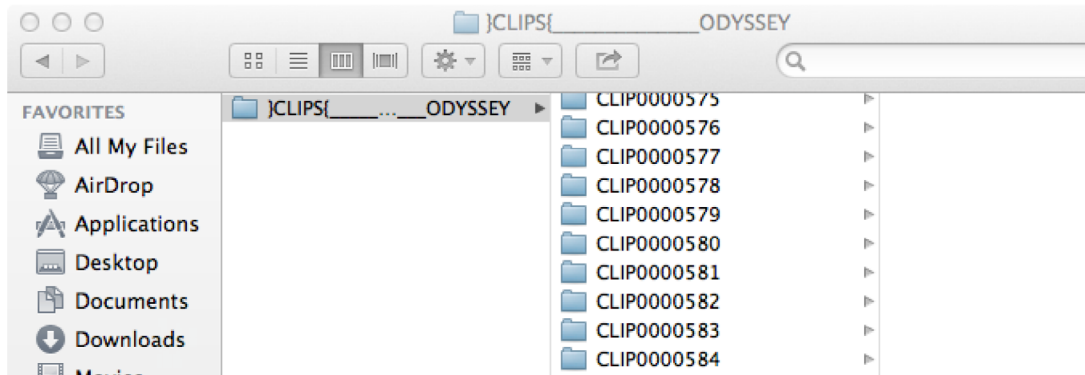
1. Under Final Cut Pro select Preferences
2. Be sure the Still Images editing duration is set to 0.0.1 Seconds
3. Select navigate to File and select Import Media
4. Navigate to the Clips directory, and select the Clip Folder contain your FS700 RAW files.
5. At this point you can start correcting the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