

# SONY α7S SETUP GUIDE

ODYSSEY 7Q+  
ODYSSEY 7Q



## 4K Apple ProRes

23.98, 25, 29.97 (Odyssey7Q+)

## HD Apple ProRes

1080p 23.98, 24, 25, 29.97, 50\*, 60\*  
720p 50/60

convergent  
design

**HDMI**™  
HIGH-DEFINITION MULTIMEDIA INTERFACE

**ProRes**

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

**4K**

## Notes about using the Odyssey with the A7s

The Odyssey7/7Q do not support 1080p59.94 or 4K over HDMI due to a hardware constraint. If Auto HDMI output is used, the camera will output 1080i. (Odyssey7Q+ it will accept 4K or 1080p59.94)

### ProRes Record Times

		24	25	30	50	60
	4K to 4K ProRes	168	161	134		
	4K to HD ProRes	670	643	536	322	268
	HD ProRes	670	643	536	322	268
422	4K to 4K ProRes	220	221	176		
	4K to HD ProRes	1060	1016	848	508	424
	HD ProRes	1060	1016	848	508	424
422(LT)	4K to 4K ProRes	328	316	264		
	4K to HD ProRes	1516	1456	1212	728	604
	HD ProRes	1516	1456	1212	728	604

Note: 4K and 1080p50/60 over HDMI is only supported on the 7Q+, to record 1080p50/60 on an Odyssey7 or Odyssey7Q you must use a HDMI to SDI converter, as 7/7Q are limited to 1080p30 over HDMI due to a hardware constraint.

Note: Odyssey 7 only has 1 SSD slot

### FORMAT DETAILS

4K Apple ProRes	3840x2160 10-bit log video, originated from HD 8-bit camera signal, recorded as Apple ProRes compressed 4K video .MOV
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
HD Apple ProRes	1920x1080,1280x720 10-bit log video, originated from HD 8-bit camera signal, recorded as Apple ProRes compressed HD video .MOV

### Frame Rate Support

The Following A7s frame rates are supported on the Odyssey:

- 4K 23.98-30 (HDMI - Odyssey7Q+ Only)
- 1080p59.94/50 (HDMI - Odyssey7Q+ / HDMI to SDI Converter - Odyssey7Q)
- 1080i50/59.94
- 1080p25/29.97
- 1080p23.98 (24p output and 3:2 pulldown)

### 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 destination media.

USB 3.0 or Thunderbolt connections are recommended by Convergent Design for efficient data rates.



## Camera Settings

### 1. SWITCH CAMERA TO VIDEO MODE

ROTATE THE MODE DIAL TO THE  POSITION.



### 2. SET INTERNAL RECORDING



MENU »  » PAGE 2 »  RECORD SETTING » (59.94/50/29.97/25/24)  
XAVC-S for 30p / AVCHD for 60i

### 3. SET CLEAN HDMI OUTPUT

MENU »  » PAGE 3 » HDMI SETTINGS » HDMI INFO DISPLAY » OFF

### 4. SET HDMI OUTPUT

HD

MENU »  » PAGE 3 »  HDMI SETTINGS » (AUTO/1080P/1080I)

*NOTE: You may need to change 24p/60p output depending on your frame rate.*

*The A7s can output 23.98 over HDMI so this can be used or 1080i and 3:2 pulldown can be used to achieve 1080p23.98 recording to the Odyssey.*

4K (ODYSSEY7Q+)

Be sure that your Odyssey7Q+ is connected to your A7S via HDMI in order to enable HDMI 4K output from the camera.

MENU »  » PAGE 3 »  HDMI 4K OUTPUT » (24P/25P/30P)

A notification will appear: When outputting 4K movies, you cannot record movies to recording media. Click OK.

## 5. SET HDMI TIMECODE/CAMERA TRIGGER

MENU »  » PAGE 3 » HDMI SETTINGS »  TC OUTPUT » ON


*This will output timecode to the Odyssey, which will be recorded with your video signal.*

MENU »  » PAGE » HDMI SETTINGS »  REC CONTROL » ON

*This allows you to start/stop recording on the Odyssey with the record button on the A7S.*

HDMI Info Display must be set to OFF before you can select HDMI 4K Output.

## 6. SET PICTURE PROFILE (SLOG-2)

MENU »  » PAGE 5 » PICTURE PROFILE » PP7

*Note: You may use any of the picture profile settings, however, The PP7 setting (SLOG-2) gives you the full range of the sensor.*

*Note: If you use SLOG-2 you will need to configure the LUT control on the Odyssey by tapping LUT on the lower menu and selecting Sony F5/F55 (SLOG-2). This LUT setting matches the SLOG-2 on the A7S.*

## Odyssey Configuration

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

HD RECORDING

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

UHD TO HD RECORDING (ODYSSEY7Q+)

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

4K RECORDING (ODYSSEY7Q+)

⚙️ » SETUP » CAMERA » SONY » UHD HDMI TO HD PRORES(.MOV)

### 2. MAKE A7S THE RECORD TRIGGER

⚙️ » SETUP » RECORD TRIGGER » CAMERA

### 3. SET TIMECODE SOURCE

⚙️ » SETUP » TIMECODE SOURCE » SDI/HDMI

The HDMI input is automatically detected when connected to the Odyssey.

*\*\* Note the HDMI input is on the right side of the unit, on the Odyssey7Q+ but is at the bottom of the unit for Odyssey7 and 7Q.*

### 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

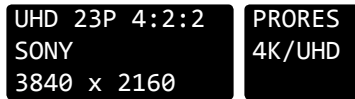
*(or FORMAT SSD1 if you do not have a second SSD drive installed.)*

## 6. CONNECT TO CAMERA AND VERIFY STATUS INPUT

CONNECT A7S HDMI OUTPUT TO ODYSSEY HDMI INPUT

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

*Example:*



## 7. SET HDMI CADENCE

Connect HDMI input, and verify the camera internal record rate matches the input indicator on the Odyssey. If it does not a Cadence may be needed to correctly reflect the format in which you wish to record.

⚙️ » SETUP » VIDEO CADENCE » PROGRESSIVE

### PROGRESSIVE

Use this setting for 720p50/60, 1080p24\*\*, 25\*,30\*

*\*Note typically the camera will need to be set to record 1080p25/30 internally, and the output is set to 1080i.*

*\*\*Note that when wishing to record 1080p24, HDMI output can be set to "Auto" or 1080i or 1080p (7Q+ only), therefore Progressive should be used when auto is selected.*

### INTERLACED

Use this setting for 1080i50, 1080i59.94 recording

### 3:2 PULLDOWN\*/\*\*

Use this setting for 1080p24 recording when the camera only has a output setting of 1080i, also note the camera must be set to record 1080p24 or 1080p23.98 internally,

*\*\*Note that when wishing to record 1080p24, HDMI output can be set to "Auto" or 1080i, therefore 3:2 pulldown should be used when 1080i is selected.*

## 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). See the At A Glance Chart, "No. of SSD's Req" column, on page 2.

### 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

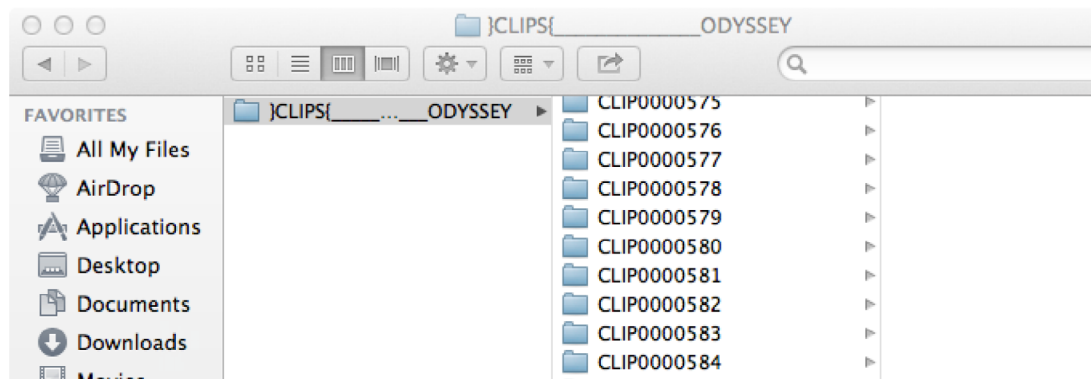
Final Cut Pro 7  
Black Magic DaVinci Resolve  
The Foundry Nuke

Autodesk Smoke  
Sony Vegas

## 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



**Note:** To combine files into a single directory use our ProRes Utility.