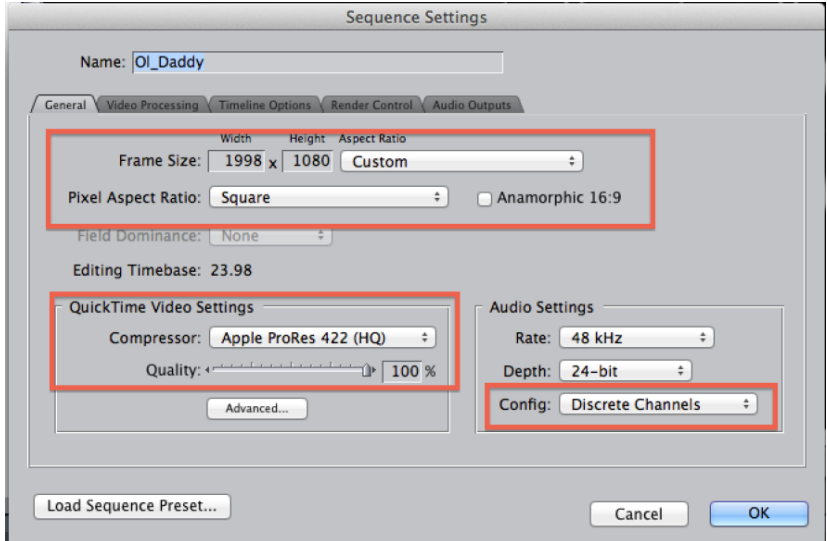
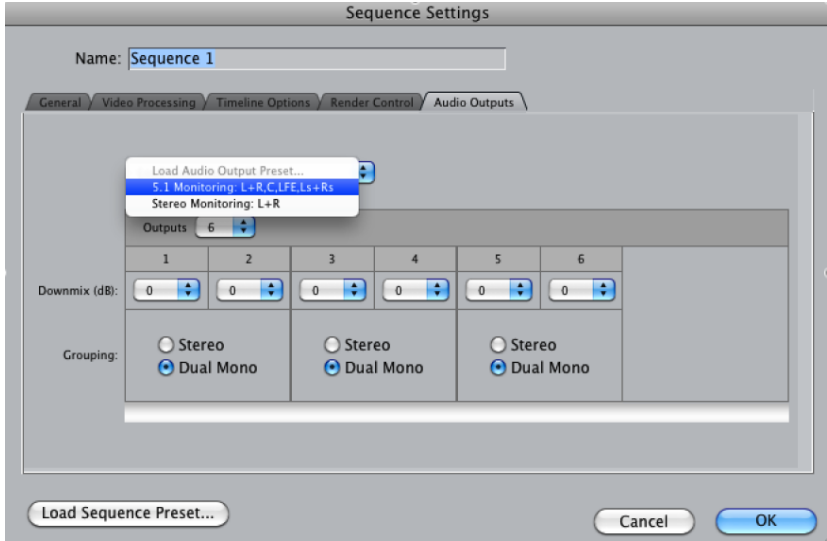
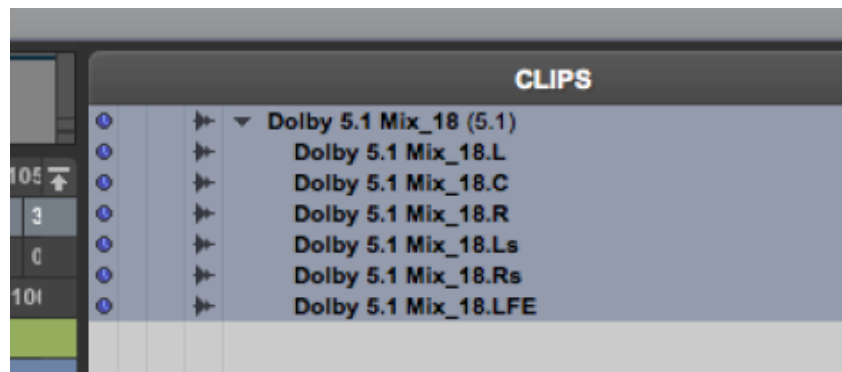


EASY DCP and FCP7 - How to Make a 2K DCP or Digital Cinema Package

EXPORT a self contained 23.98 quicktime of your current timeline	You will need a 1920 x 1080 or larger file exported from your Digital Non Linear Editor of your choice. Don't use an editing timeline use a self contained quicktime!!
Make a new sequence at 2048 x 858(scope) Prores 422 or HQ Or 1998 x 1080 (flat) Discrete Channels	
Next Change the audio output settings for the sequence. Go to >Sequence>Settings Click on 5.1 Monitoring: L+R,C, LFE, Ls+Rs Then change the Downmix to 0 and switch the Grouping to Dual Mono Then Click OK	
Ignore Warning Error	

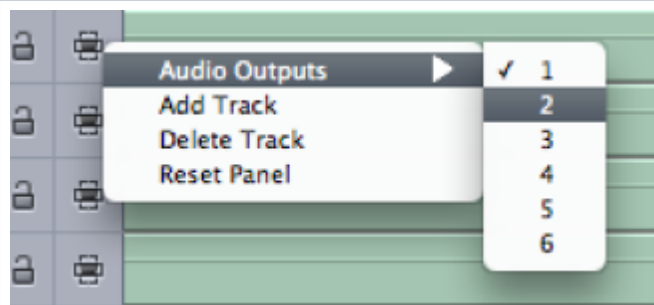
If you get an encapsulated .wav then the tracks are like this Open ProTools to double check this if you want. These files will come into FCP appropriately tracks 1-6 when dragged down to the audio tracks in timeline.



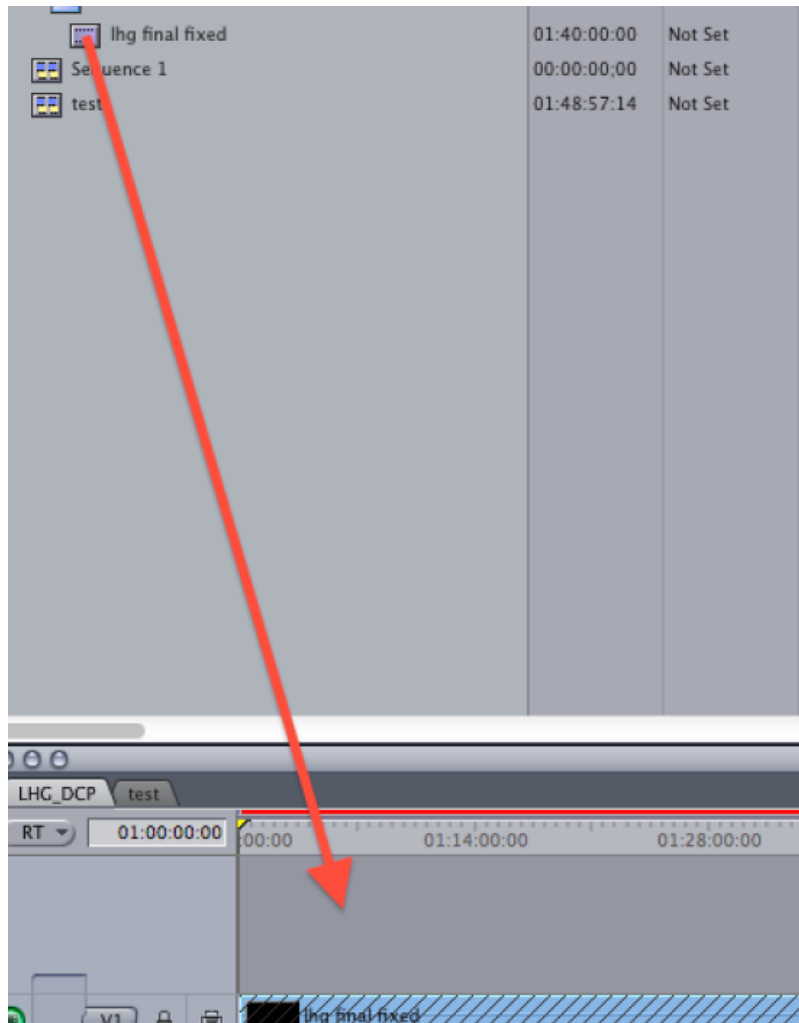
Add two audio tracks to your timeline so you have 6 tracks of audio

If you don't have an encapsulated .wave then will need to add two more tracks to your timeline.

Then on right click each Final Cut Pro Timeline track change the Audio Outputs to match the track
1=1 4=4
2=2 5=5
3=3 6=6

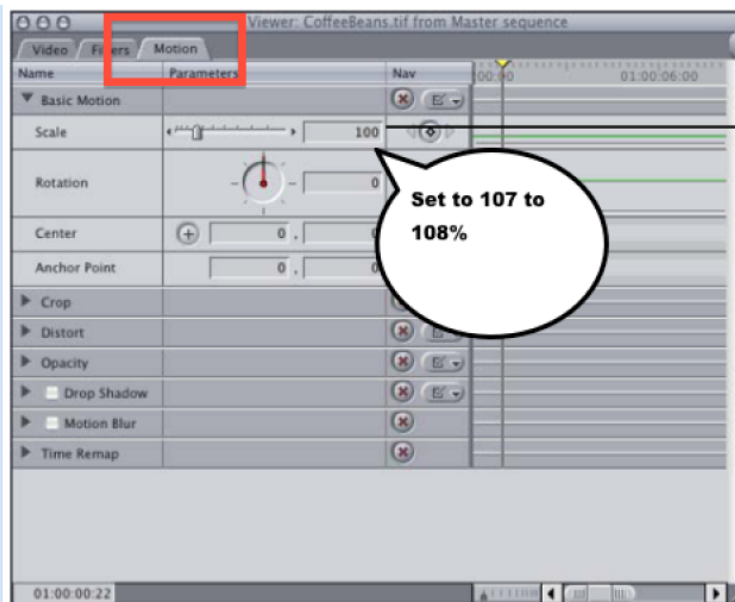


Add in the 1920 x 1080 movie into the 2K Scope timeline
Choose to ignore source settings

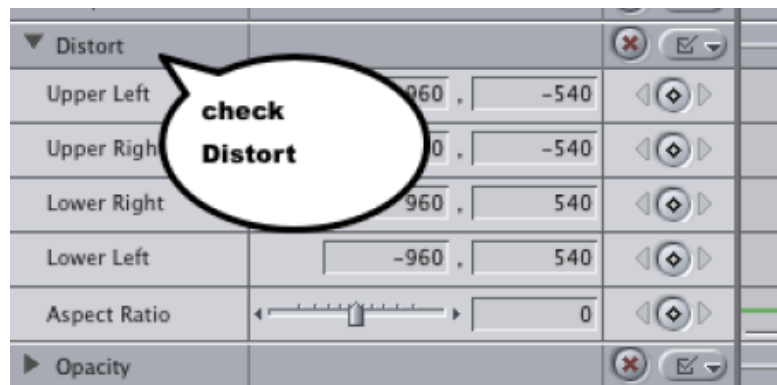


In Motion Tab change scale to 107 % then look at the left and right edge to make sure that you see no black on the sides usually 107% to 108% scale will work.

You will loose @2% on the top and bottom. Double check distort just to be sure it didn't distort anything.

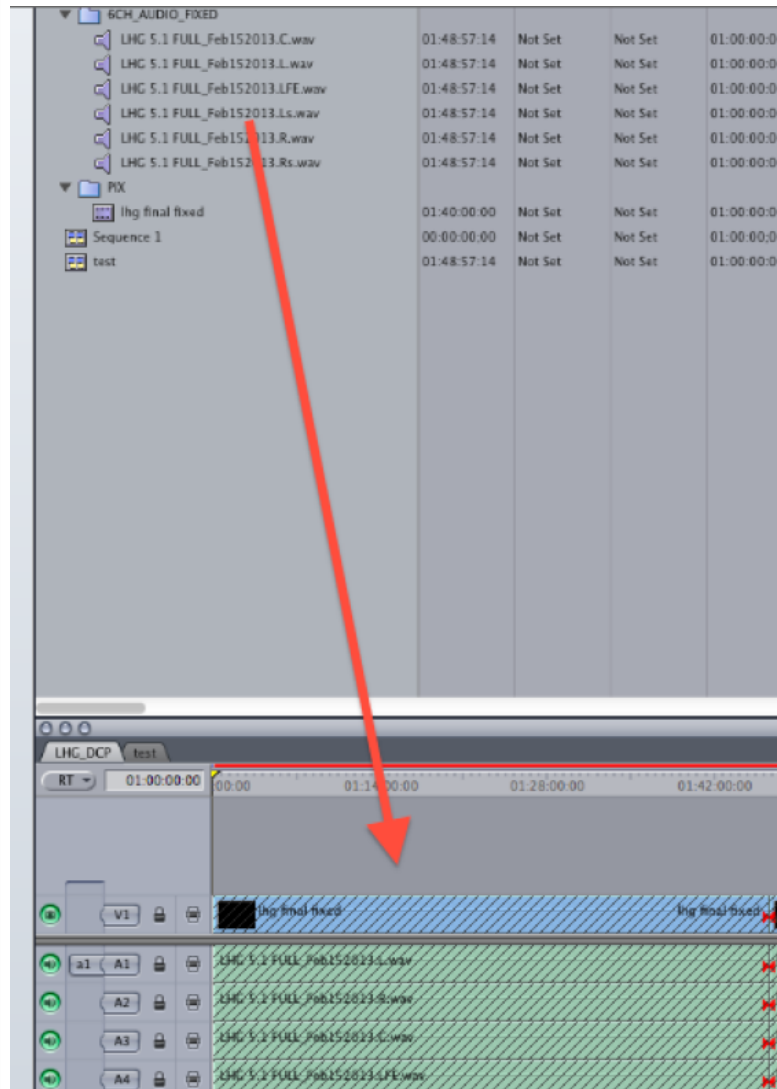


Check Distort setting too just to be sure that it stayed at zero

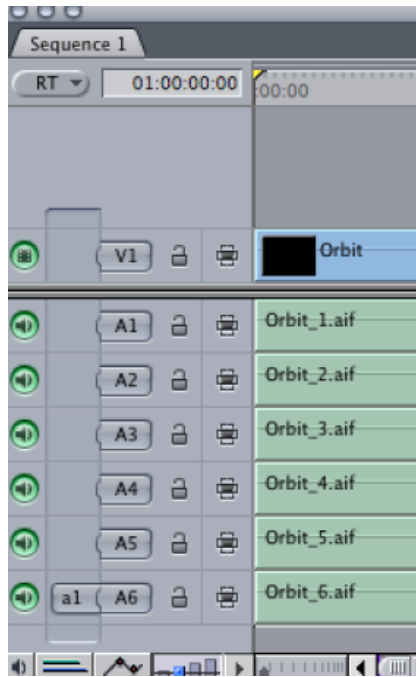


Trash Audio off Quicktime if it has any.

Then add in the 6 channel surround audio



In Final Cut Pro line up the following:
 Master Self
 Contained
 Quicktime Video
 All 6 tracks of
 surround
 printmasters. Put
 them in this track
 order
 A1 = Left Channel
 A2 = Right Channel
 A3 = Center
 Channel
 A4 = Low
 Frequency (LFE)
 A5 = Left Surround
 A6 = Right Surround

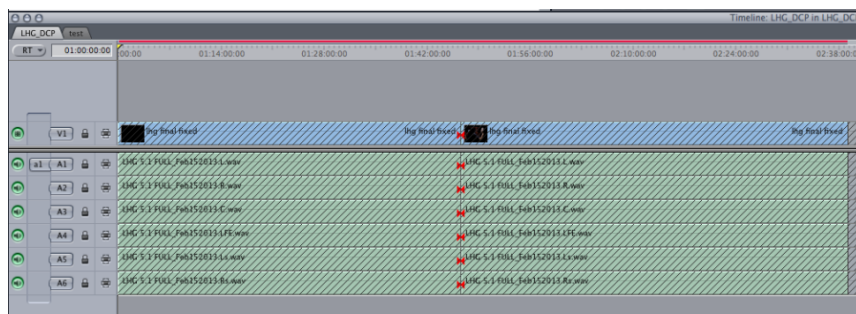


Make sure the end
 of each clip lines up
 exactly the same
 length. Check that
 the audio and video
 are in sync on all
 tracks



*If your timeline is
 longer than 90ish
 minutes you will
 have to break into
 segments or (reels.)*

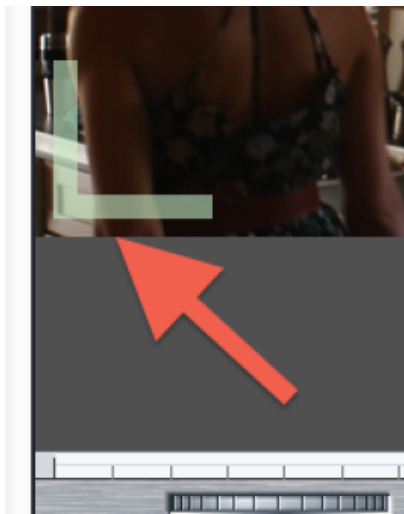
Find a break point
 to divide up the
 timeline
 Alt Option will apply
 cut to all tracks



Notice that clicking the "X" will mark clip.
Also on the second half when exporting notice that your mark in looks like this. Inclusive edit not the frame before it.

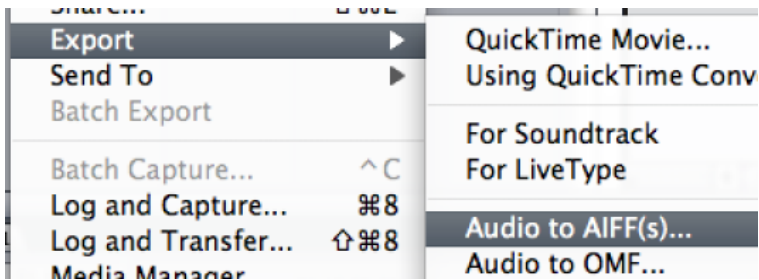
The position of the playhead, the frame that the playhead is on is included in your edit

RENDER THE TIMELINE if it is one reel or two render the whole thing



Next step is to export Audio to AIFF

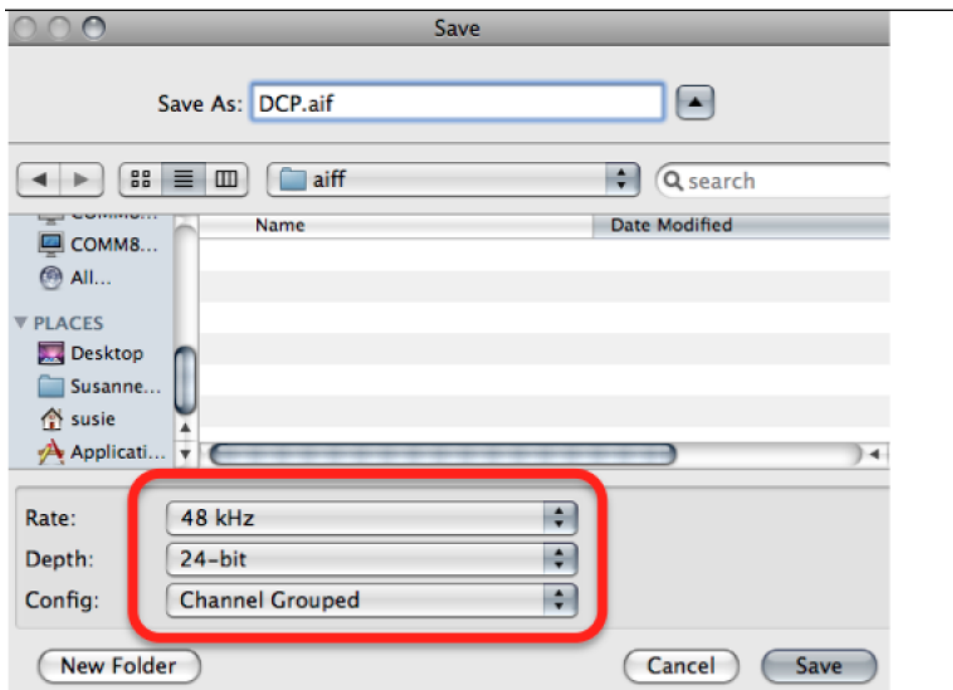
Pick a destination to save the files and do this for each section use mark in and out points on timeline. Click "X" to mark clip on the timeline.



Choose 48KHz and 24bit audio

Channel Grouped

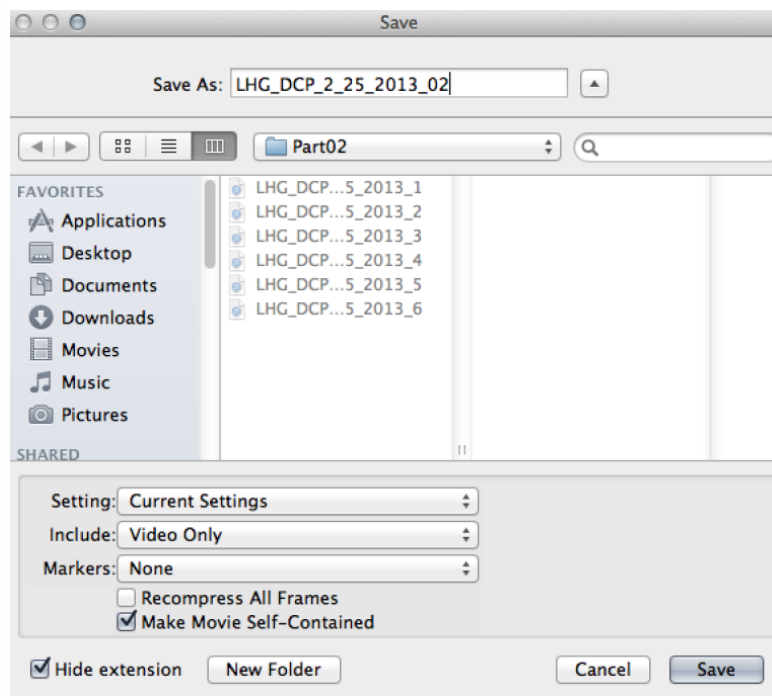
Will export all the files in the sequence



Export the Reels using in and outpoints to export the separate reels

Choose self contained QuickTime

"VIDEO" ONLY!!
DON'T EXPORT AUDIO WITH THE QUICKTIME

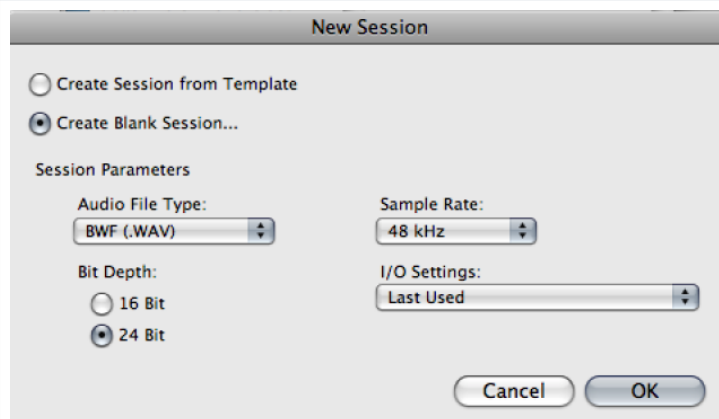


The next step will be to convert the exported aiff audio files in protools

Open a new ProTools session

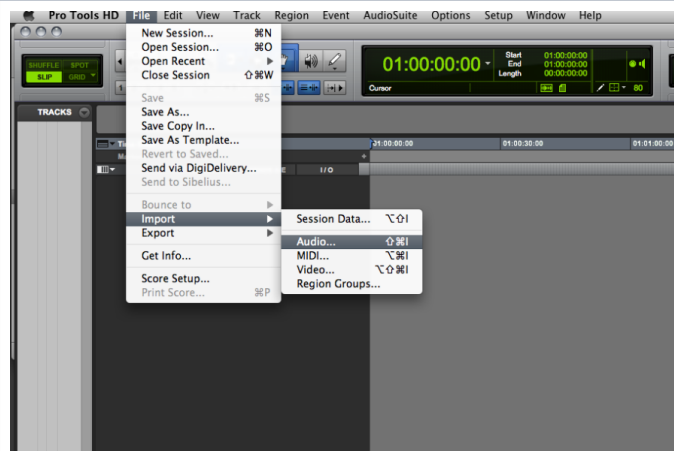
Choose .wav and 24 bit
Sample Rate 48khz

Click OK



Save the session to a hard drive

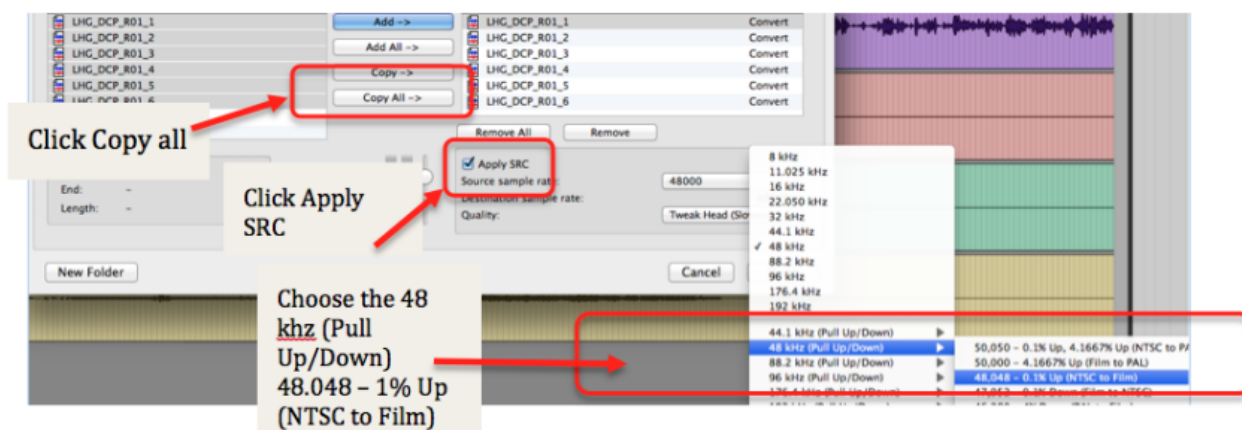
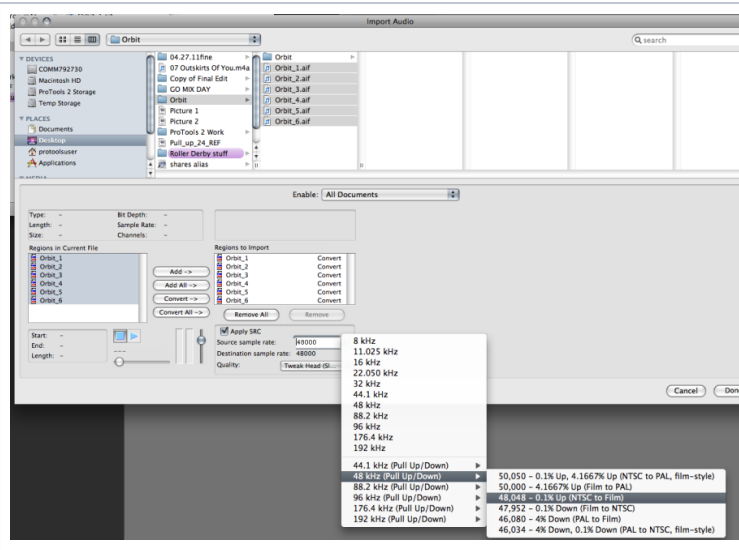
When the session opens go to >Import>Audio



Navigate to the AIFF files to import.

Note the Channels export as shown below.

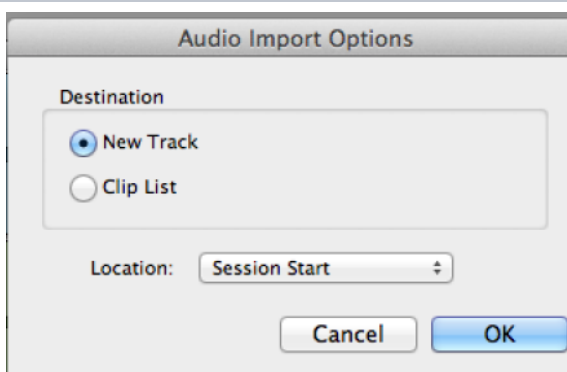
- A1 = Left Channel
- A2 = Right Channel
- A3 = Center Channel
- A4 = Low Frequency (LFE)
- A5 = Left Surround
- A6 = Right Surround



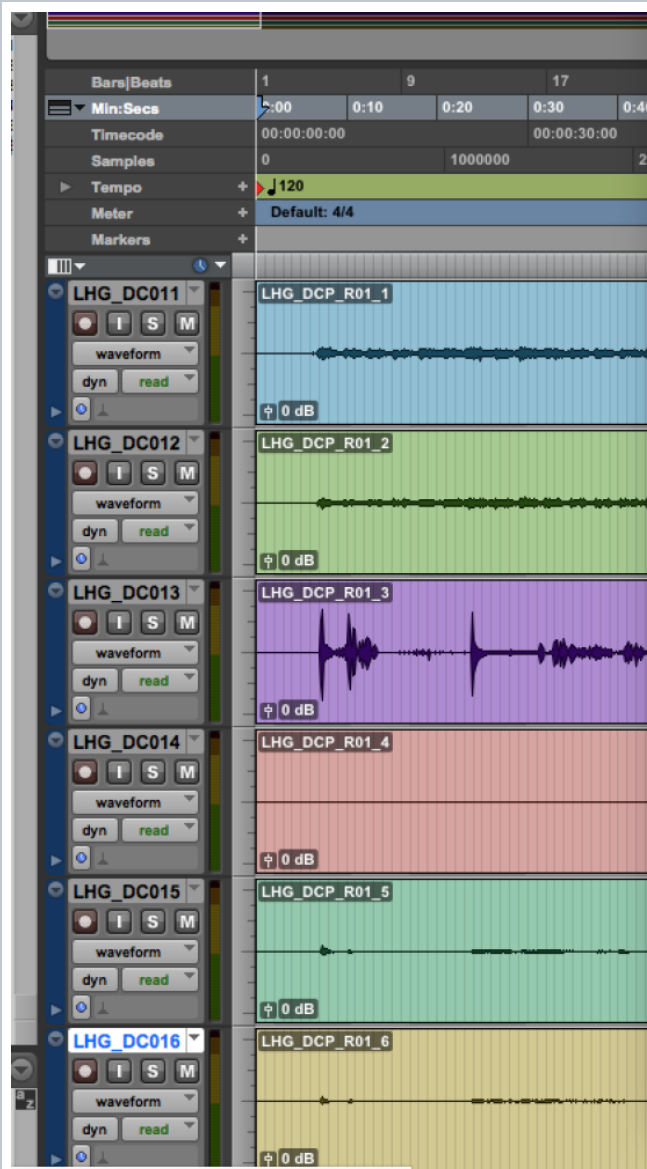
Choose a folder to save the converted files and click "Done"

The files will begin converting (adding pulldown to the audio tracks) and will be saved to the destination folder

Choose to add to New Track when prompted.



Make sure there is audio in all the tracks



Now move all the Quicktimes and the pulled down audio to the DCP computer in the Grad Suite H CMB 4.112H.
Below is an example of the files needed to make the DCP

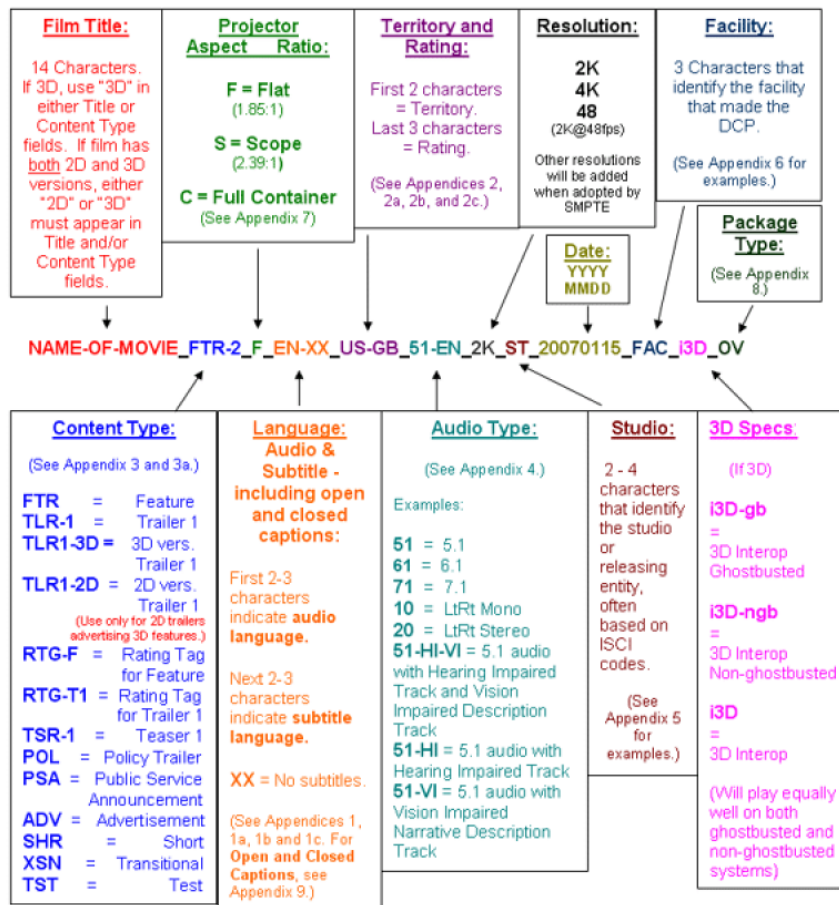
LHG_R01		
Name	Date Modified	Size
LHG_DCP_R01_1_L.wav	Today 4:21 PM	418.3 MB
LHG_DCP_R01_2_R.wav	Today 4:21 PM	418.3 MB
LHG_DCP_R01_3_C.wav	Today 4:20 PM	418.3 MB
LHG_DCP_R01_4_Lfe.wav	Today 4:23 PM	418.3 MB
LHG_DCP_R01_5_Ls.wav	Today 4:22 PM	418.3 MB
LHG_DCP_R01_6_Rs.wav	Today 4:23 PM	418.3 MB
LHG_DCP_R01.mov	Today 4:04 PM	62.66 GB

Move to the Color Correction Suite Grad Suite H CMB 4.112H – This is the only suite that has the Easy DCP software.

This is th

Digital Cinema Naming Convention V.3.9

Fields are always separated by underscores.
Hyphens are sometimes used within fields. No blank spaces.



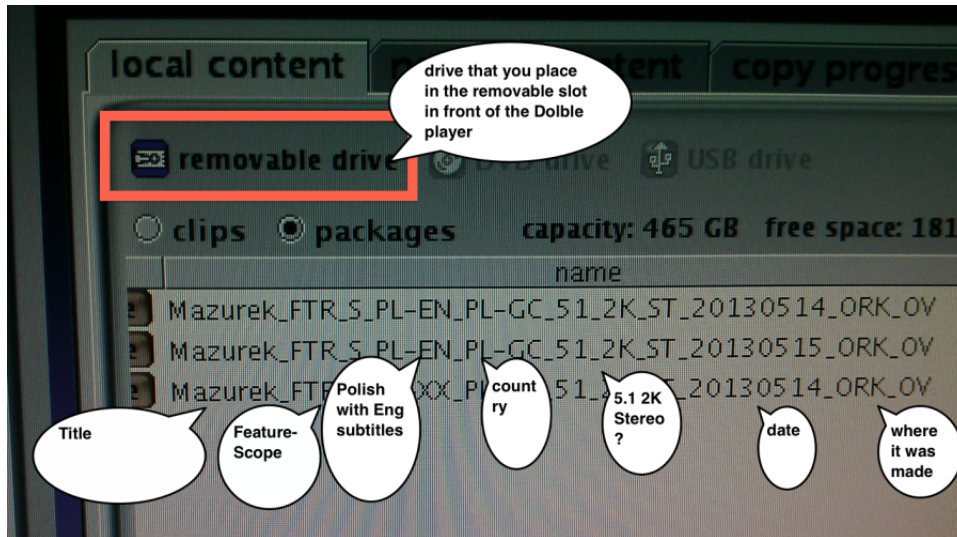
c
p
i
n
f
o
r
m
a
t
i
o
n
d
o
n'
t
n
e
e
d
a
n
d
F
AC
=f
a
c
i
l
i
t
y
d
o
n'
t
n
e
e
d
a
n
d
ST
=
s
t
u
d
i
o
d
o
n'
t
n
e
e
d

E
x
a
m
p
l
e

Q

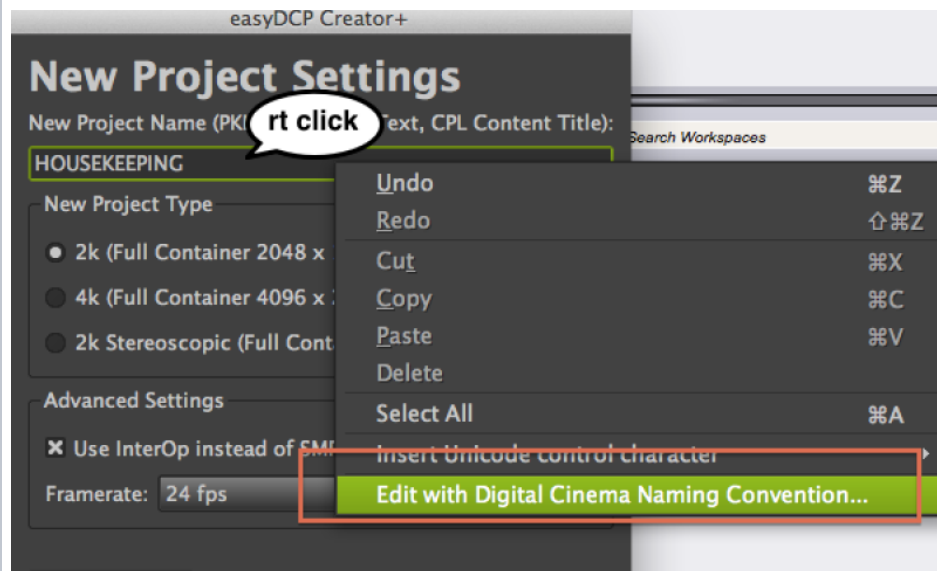
LOVES-HER-GUN_FTR_S_EN-XX_US-NR_51-EN_2K_20130219

Example of DCP naming

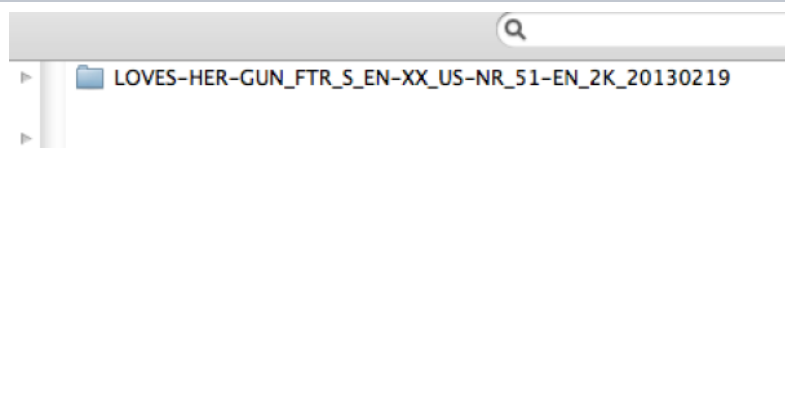


One Note: - Please talk to tech staff as we have to authenticate you to use the Software. It will not let you open it untill the License is in the proper location. FYI.

Open "EasyDCP" Right click on the Title window and choose Edit with Digital Cinema Naming Convention



Example of correct DCP name



Choose the naming convention to use (change all the settings to the

Digital Cinema Naming Convention V.9.0

SUSIE-TEST_SHR-TEMP_F_185_EN-XX_51_2K_20140402_IOP

Film Title: **SUSIE-TEST**

Content Type: **SHR (Short Subject)**

Content Type Version Number: **(No Content Type Version Number Information)**

Content Type Modifiers: **Temp (Temp Version (without final picture and sound))**

Projector Aspect Ratio: **F (Flat (1.85:1) 1998x1080@2k, 3996x2160@4K)**

Interior Aspect Ratio: **185 (Flat (1.85:1) 1998x1080@2k, 3996x2160@4K)** match these

Language Audio: **EN (ENGLISH)**

Language Subtitle: **XX (No subtitles)**

Open/Closed Caption: **(No Open/Closed Caption)**

Territory: **(No Territory Information)**

Rating: **(No Rating Information)**

Audio Type: **51 (5.1)**

Audio Type Impaired: **(No Hearing Impaired Track)**

Sound Format: **(No Sound Format)**

Resolution: **2K (2K)**

Studio: **(No Studio Information)**

Date: **20140402**

Facility: **(No Facility Information)**

Standard: **IOP (Interop)**

Package Type: **(No Package Type Information)**

For more information see <http://www.digitalcinemanamingconvention.com>

OK Cancel

m
)
b
ut
s
et
to
a
p
pl
y
to
y
o
ur
p
ar
ti
c
ul
ar
D
C
P

C
li
c
k
OK

Choose the 2K 24fps setting using our project is 4K or 2K Stereo or 2K Stereo. Then create

New Project Settings

Project Name (DCP Title, PKL Annotation Text):
LOVES-HER-GUN_FTR_S_EN-XX_US-NR_51-EN_2K_2013

Project Type

- ☒ 2k (Full Container 2048 x 1080 Pixel)
- ☐ 4k (Full Container 4096 x 2160 Pixel)
- ☐ 2k Stereoscopic (Full Container 2048 x 1080 Pixel)

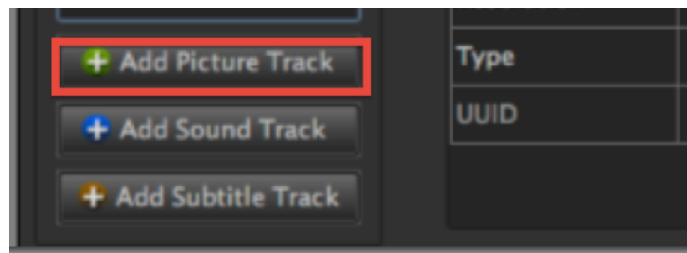
Advanced Settings

☒ Use InterOp instead of SMPTE Packing

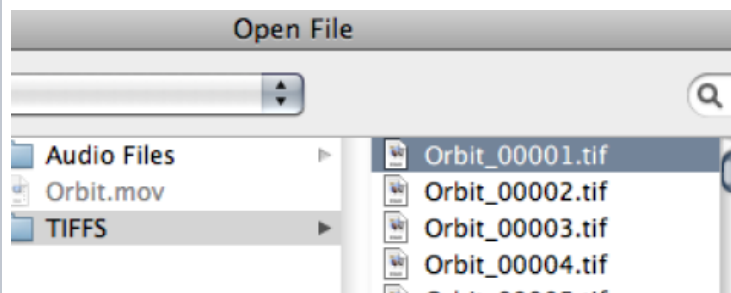
Framerate: 24 fps

Create Load Project... Cancel

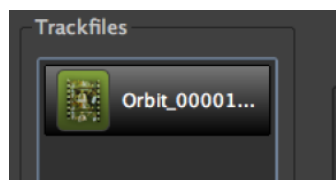
In the open project choose to Add Picture Track



Navigate to the Self Content area and QuickTime and choose the 1st file of these sequence or the only QT needed

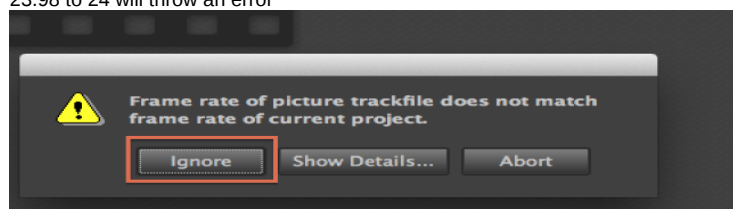


This is how the "Video" Track looks when loaded

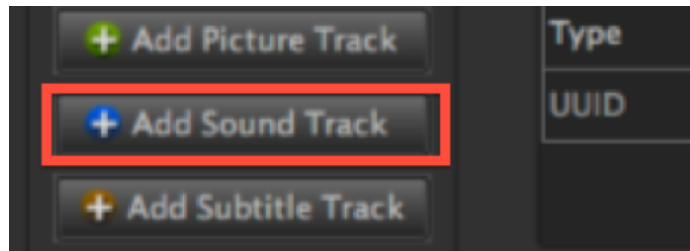


You will get an error for the frame rate conversion. Choose to ignore or it

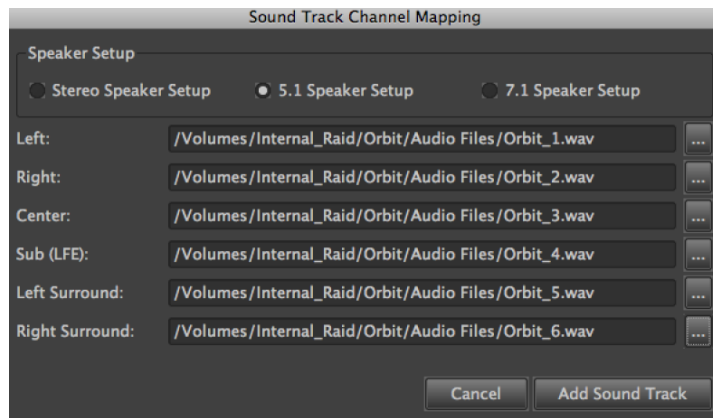
23.98 to 24 will throw an error



Next choose to Add Sound Track



Click on the speaker setup



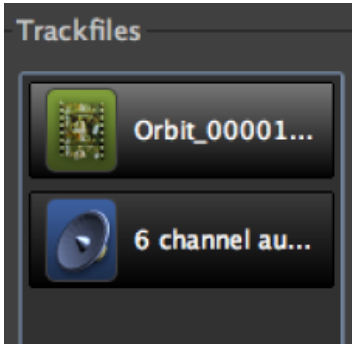
Click on the square icon next to the track to navigate to the

a
u
d
i
o
f
i
l
e
t
h
a
t
c
o
r
r
e
s
p
o
n
d
s
t
o
t
h
e
t
r
a
c
k
l
a
b
e
l
.

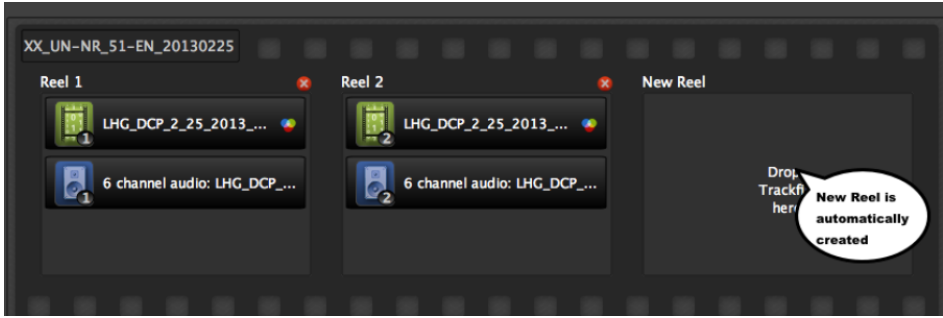
T
h
e
n
c
l
i
c
k
"
A
d
d
S
o
u
n
d
T
r
a
c
k

P
r
o
j
e
c
t
w
i
t
h
T
r
a
c
k
F
i
l
e
s
a
d
d
e
d

D
r
a
g
I
m
a
g
e
a
n
d



Sound reel
So, over to the DCP Content "New Reel"
window to create the reels (in this example create 2 reels)
Note that once you create at



e
o
n
e
re
el
w
it
h
i
m
a
g
e
a
n
d
s
o
u
n
d
a
"
N
e
w
R
e
el
"
is
a
ut
o
m
at
ic
al
ly
cr
e
at
ed

Notice that there are two reels here. Both have one image file and a 6 channel audio file.



Metadata Inspector		
Annotation Text	:	LHG_DCP_2_25_2013_02...
Aspect Ratio	:	2.39
Duration	:	81877
Edit Rate	:	24 / 1
Frame Rate	:	24 / 1
Intrinsic Duration	:	81877 ←
Offset	:	0
Resolution	:	2048 x 858
Type	:	Picture Track

Example of the audio track in intrinsic duration at 81877. In all cases the Audio and Video should match or it won't work with these of t

Annotation Text	:	6 channel audio: LHG_DCP_...
Channel Count	:	6
Edit Rate	:	24 / 1
Intrinsic Duration	:	81877
Type	:	Sound Track
UUID	:	---Will be created during p...

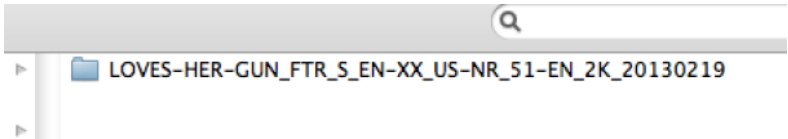
w
are

M
a
k
e
s
u
r
e
t
h
e
r
e
i
s
n
o
t
a
"
W
a
r
n
i
n
g"
t
r
i
a
n
g
l
e

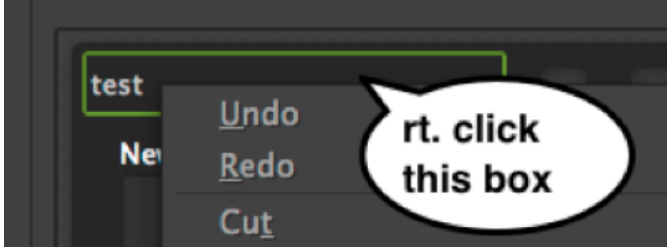
T
h
e
Q
u
e
s
t
i
o
n
M
a
r
k
i
s
O
K



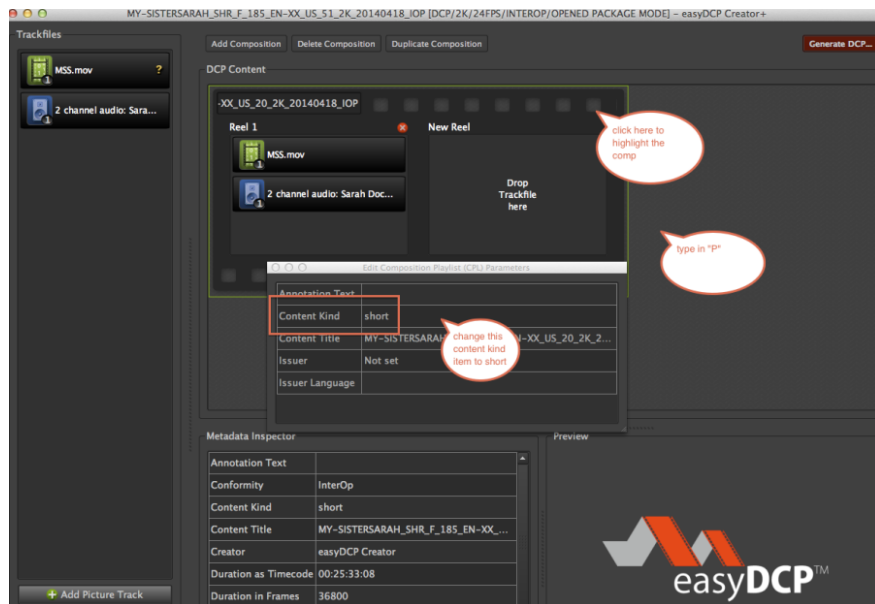
Make a folder on the external hard drive on DCP computer using the DCP naming convention of your DCP. Change the



You can right click and copy the title of the DCP in Easy DCP and paste it on to the name of the folder. That is the easiest way to do it.

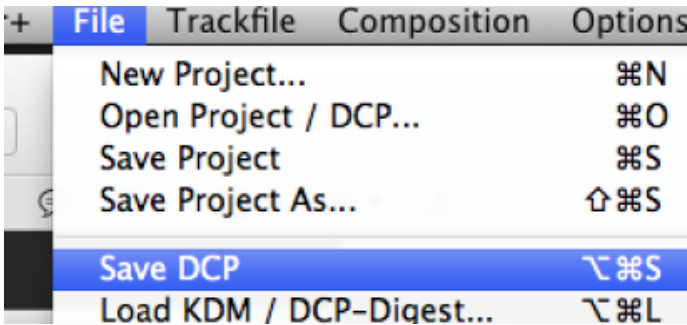


Content Kind to a short if you are making a DCP of a Short. Click on the DCP Content to highlight the area in green. Then click "P".



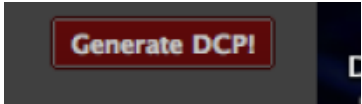
h
e
n
c
h
a
n
g
e
t
h
e
"
C
o
n
t
e
n
t
K
i
n
d"
t
o
s
h
o
r
t.

T
h
e
n
c
h
o
o
s
e
t
o
"
S
a
v
e
D
C
P
"
i
f
y
o
u
h
a
v
e
o
p
e
n
e
d
a
p
r
e
v
i
o
u
s
l
y
m
a
d
e
D
C
P
t
o
c
h
a
n

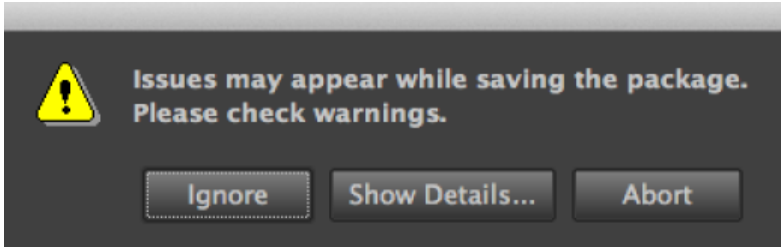


g
e
th
e
c
o
n
t
e
n
t
t
y
p
e.
I
f
n
o
t
j
u
s
t
s
a
v
e
th
e
P
r
o
j
e
c
t

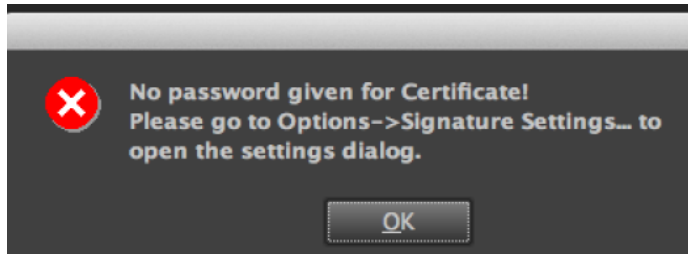
C
l
i
c
k
G
e
n
e
r
a
t
e
D
C
P
I



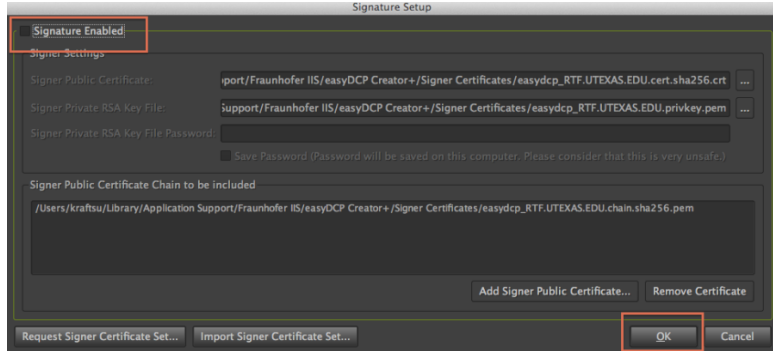
I
f
y
o
u
g
e
t
th
is
e
r
r
o
r
i
t
is
o
k
a
y
t
o
i
g
n
o
r
e
i
t



If you get a certificate error

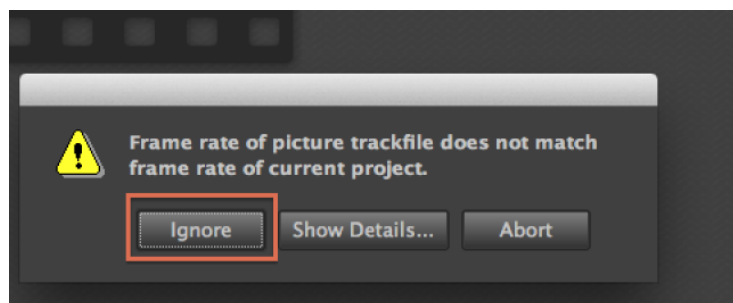


Go to Options > Signature Setup.

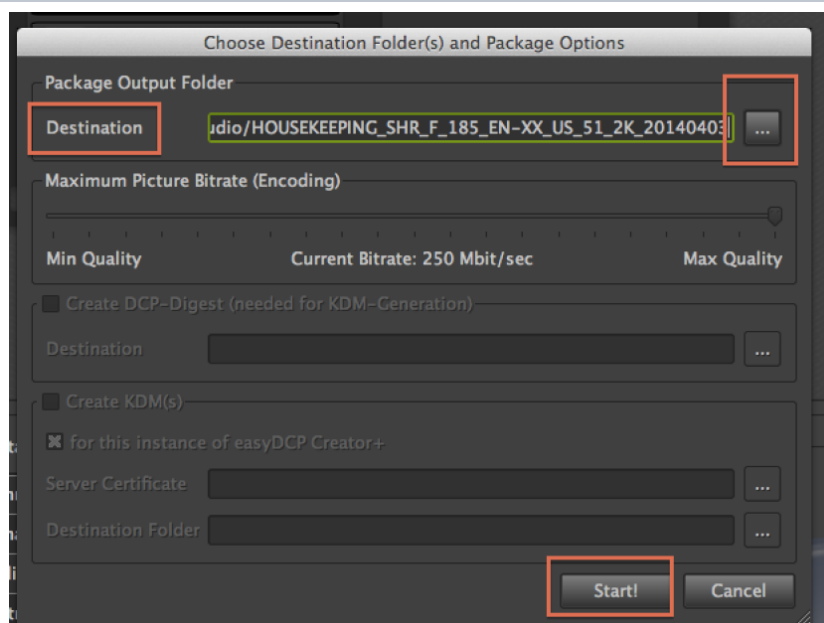


Make sure Signature is enabled

Click on this error message. It doesn't mean anything important.

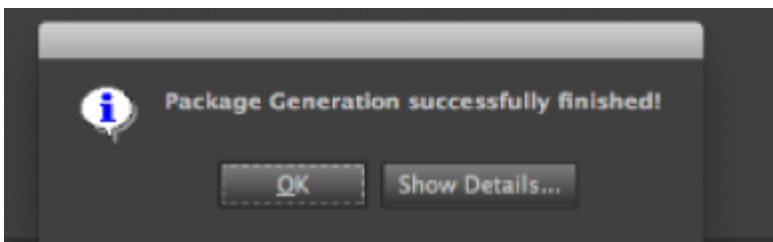


Choose where to save the file so that it is accessible.



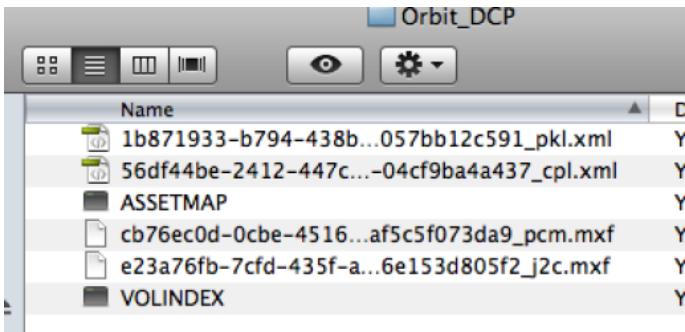
the folder you create at the end named the same way as the DCP Naming Convention Chart!

When finished the DCPs of the software will state that the process was successful



Save Project again

This is the completed DCP folder

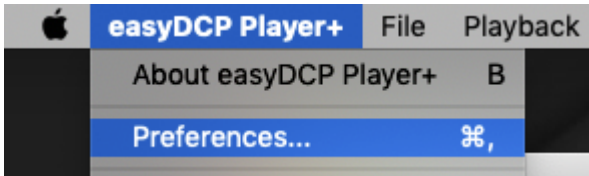
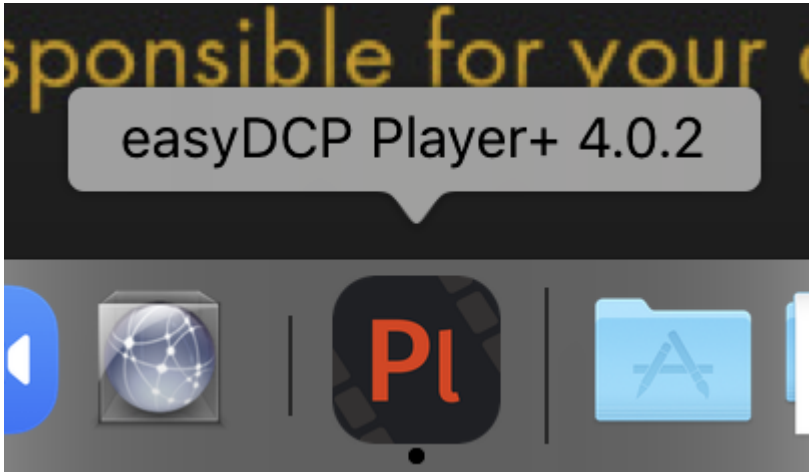


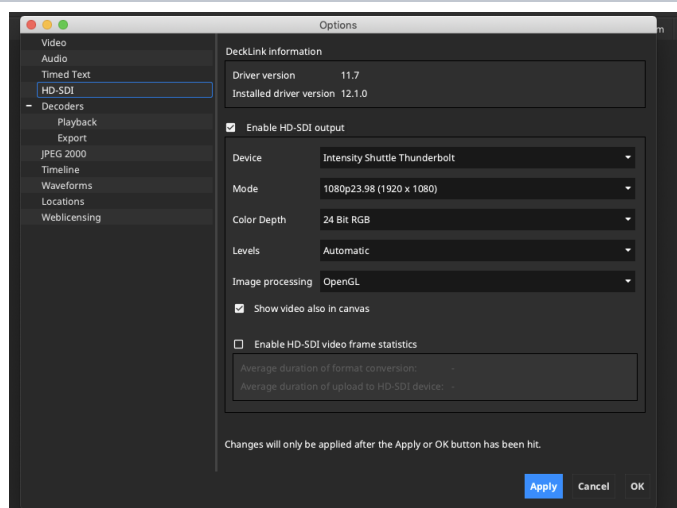
e
x
a
m
p
l
e.
A
l
l
t
h
e
s
e
f
i
l
e
s
s
h
o
u
l
d
b
e
p
r
e
s
e
n
t
.

T
o
t
e
s
t
w
e
c
a
n
p
l
a
y
u
s
i
n
g
t
h
e
B
i
g
B
a
r
c
o
D
C
P
p
l
a
y
e
r
i
n
4
C
.
F
i
n
d
K
e
e
f
e,
S
u
s
a
n
n
e
o
r

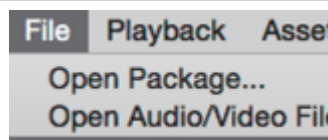
J
er
e
m
y
to
s
et
u
p
a
vi
e
w
in
g
or
y
o
u
c
a
n
te
st
u
si
n
g
th
e
lo
c
al
pl
a
y
er
o
n
th
e
c
o
m
p
u
t
er.

L
a
u
n
c
h
E
a
s
y
D
C
P
P
l
a
y
er





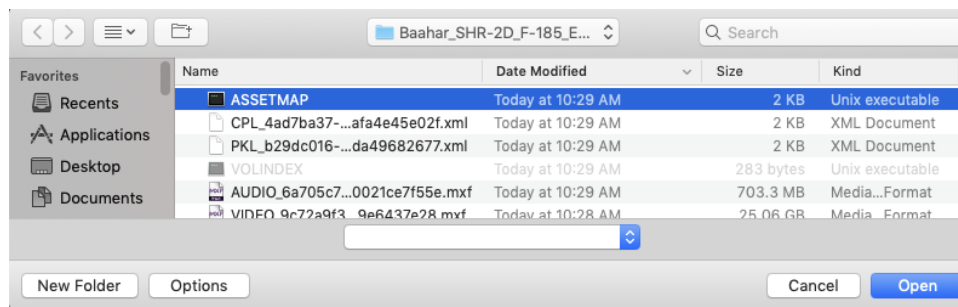
In
E
a
s
y
D
C
P
I
a
y
e
r
c
h
o
o
s
e
>
O
p
e
n
>
O
p
e
n
P
a
c
k
a
g
e



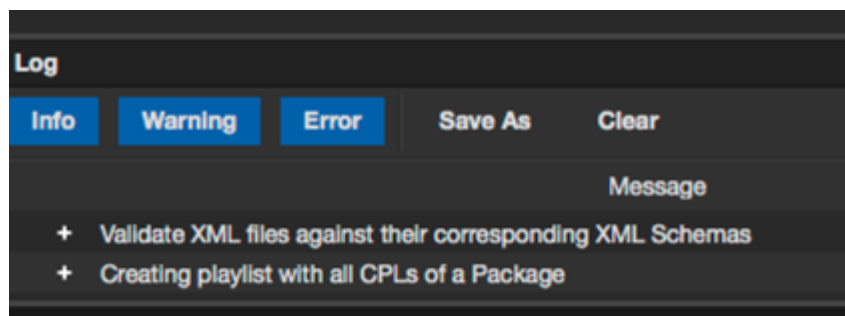
Navigation to the new location at Folder containing the DCP files

Choose ASSETMAP

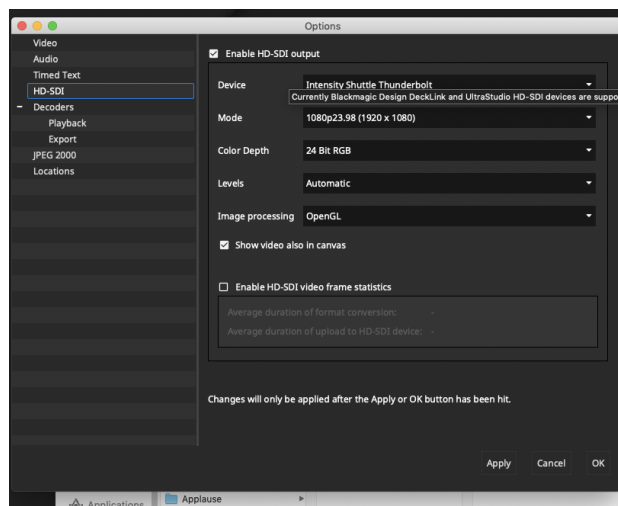
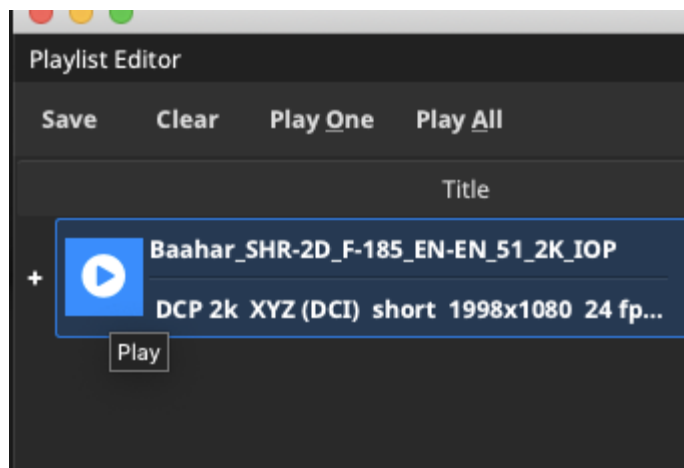
Choose open



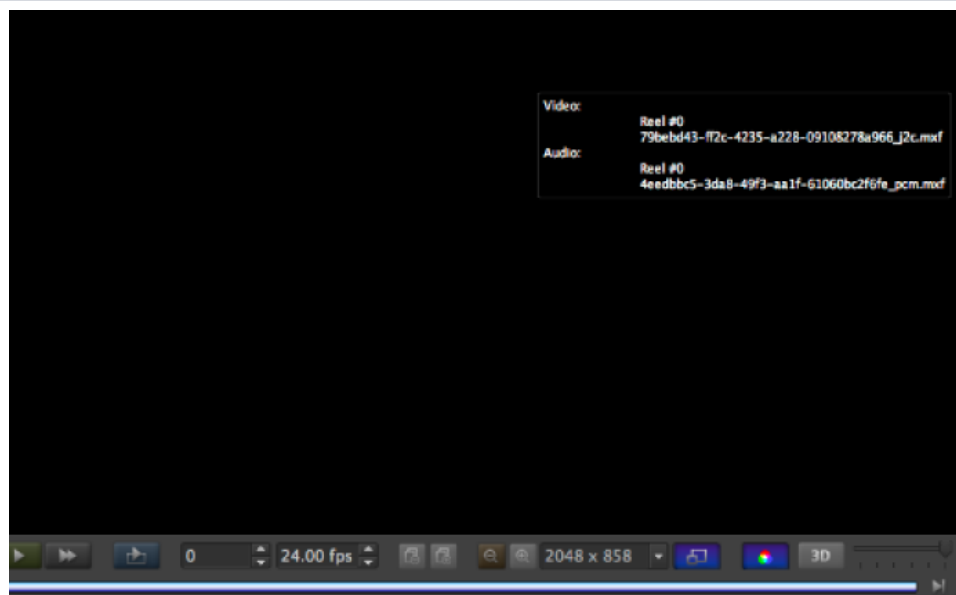
The DCPP will load. This might take a few minutes. You can get information in the lower left corner displaying the progress of the file loading.



Click Playlist icon on the file toolbar to load it into the player



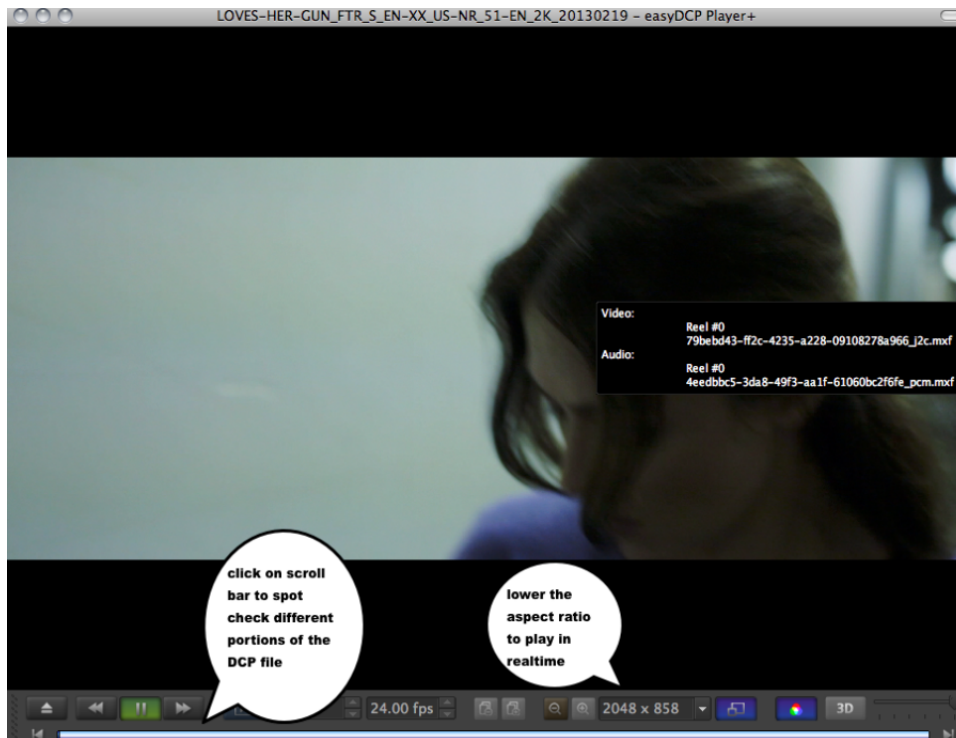
Then hit Play button on the player to play



D
C
P
p
l
a
y
e
r
w
i
n
d
o
w
p
l
a
y
i
n
g
t
h
e
D
C
P
f
i
l
e

L
o
w
e
r
t
h
e
A
s
p
e
c
t
r
a
t
i
o
t
o
p
l
a
y
t
h
e
f
i
l
e
i
n
r
e
a
l
t
i
m
e

S
c
r
o
l
l
a
l
o
n
g
t
h
e
p
o
s
i
t
i
o
n
i
n
d
i
c
a
t
o
r
t
o
s
p



ot
c
h
e
c
k
th
e
file

L
o
o
k
at
th
e
a
u
di
o
w
a
v
ef
or
m
s
to
d
o
u
bl
e
c
h
e
c
k
th
e
fil
e.

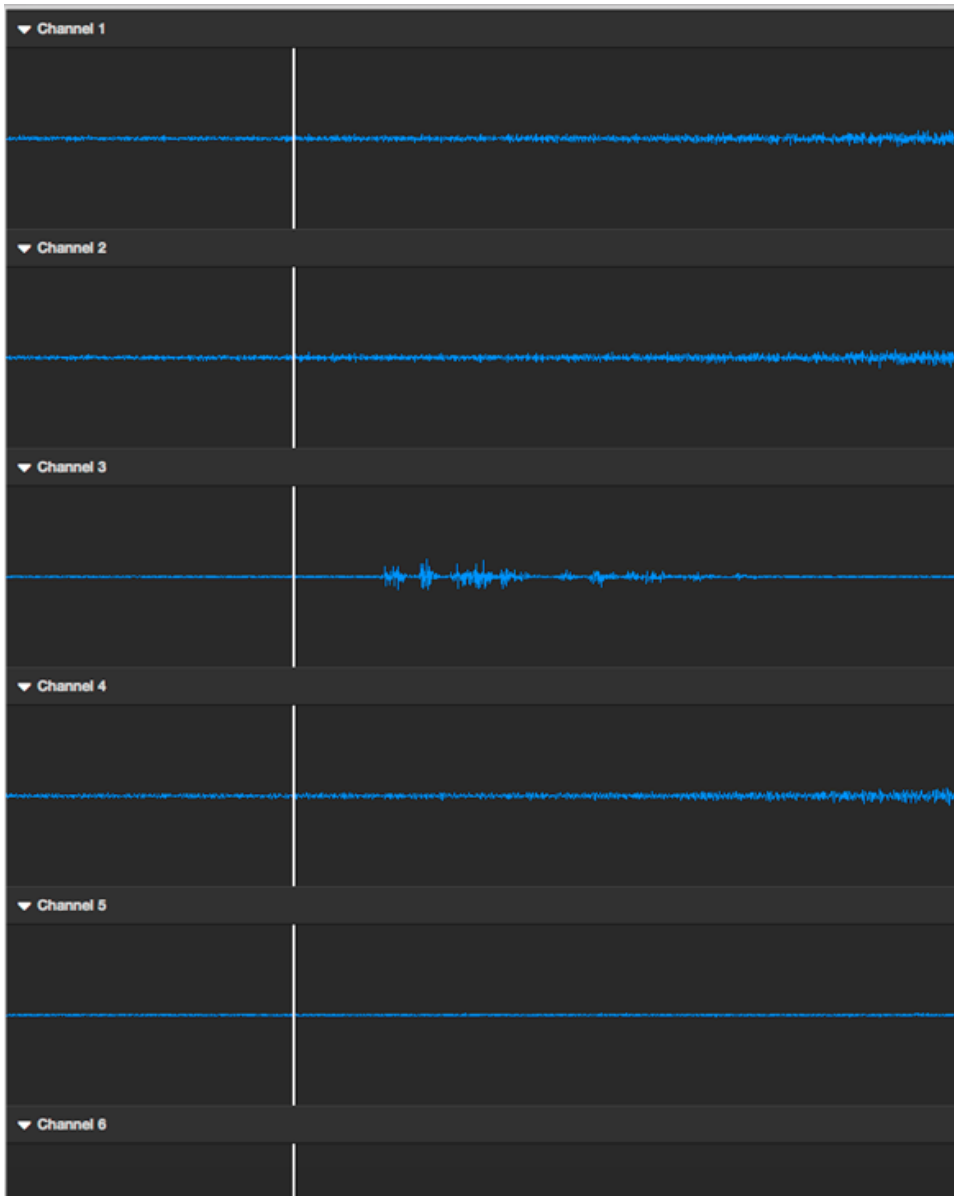
G
o
to
A
s
s
et
>
W
a
v
ef
or
m
Vi
s
u
al
iz
er

Asset	View	Help
 Edit with easyDCP Creator		⌘E
Hash Checker		H
Export...		E
Metadata Inspector		I
MXF Inspector		X
✓ Waveform Visualizer		A

Make sure that the waveform looks right.

Notice that Channel 3 has a small vertical line in the middle of the waveform.

Generally that is the case.



Y
o
u
c
a
n
w
at
ch
th
e
w
a
v
ef
or
m
s
fo
ll
ow
th
e
i
m
a
g
e
fil
e
w
h
e
n
y
o
u
pl
a
y
th
e
fil
e
in
E
a
s
y
D
C
P.

M
a
k
e
s
u
r
e
t
h
e
a
u
d
i
o
f
i
l
e
s
a
p
p
e
a
r
c
o
r
r
e
c
t
l
y.

G
o
t
o
t
h
e
v
i
e
w
>
C
o
l
o
r
T
r
a
n
s
f
o
r
m
s
>
s
h
o
u
l
d
b
e
X'
Y'
Z'
>
R'
G'
'B'
,
(
R
e
c
B
T.
7
0
9)

P
l
a
y
t
h
e
e
n
t
i
r
e

View

Help

2D/3D

▶

2K_20160224_IOP - easyDCP Plat

Color Transforms

▶

None

↵ 0

Brighter for Shutter Glasses

↵ 1

✓ Log

⌘L

X'Y'Z' -> R'G'B' (P3)

↵ 2

Fullscreen

F

✓ X'Y'Z' -> R'G'B' (Rec BT.709)

↵ 3

✓ Show Canvas

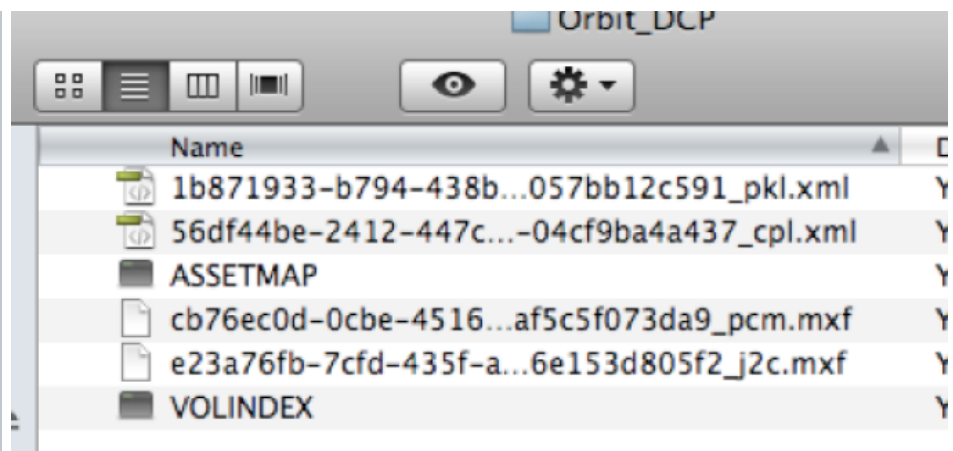
X'Y'Z' -> R'G'B' (Rec BT.709) (Brighter for Shutter Glasses)

↵ 4

D
C
P
to
c
h
e
c
k
th
e
q
u
a
l
i
t
y
o
f
th
e
i
m
a
g
e
a
n
d
s
o
u
n
d.
M
a
k
e
s
u
r
e
th
e
tr
a
c
k
s
ar
e
c
o
r
re
ct
a
n
d
lo
o
k
s
a
n
d
s
o
u
n
d
g
o
o
d.

--	--

IF THE FILES IS GOOD THEY WILL NEED TO BE COPIED TO ANTFSDRIVE TO COPY TO OUR DC SERVER.

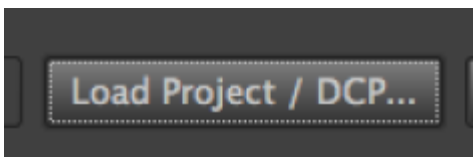


O
R
M
O
S
T
F
E
S
T
I
V
A
L
S
R
E
Q
U
I
R
E
A
L
I
N
U
X
E
X
T
3
D
R
I
V
E

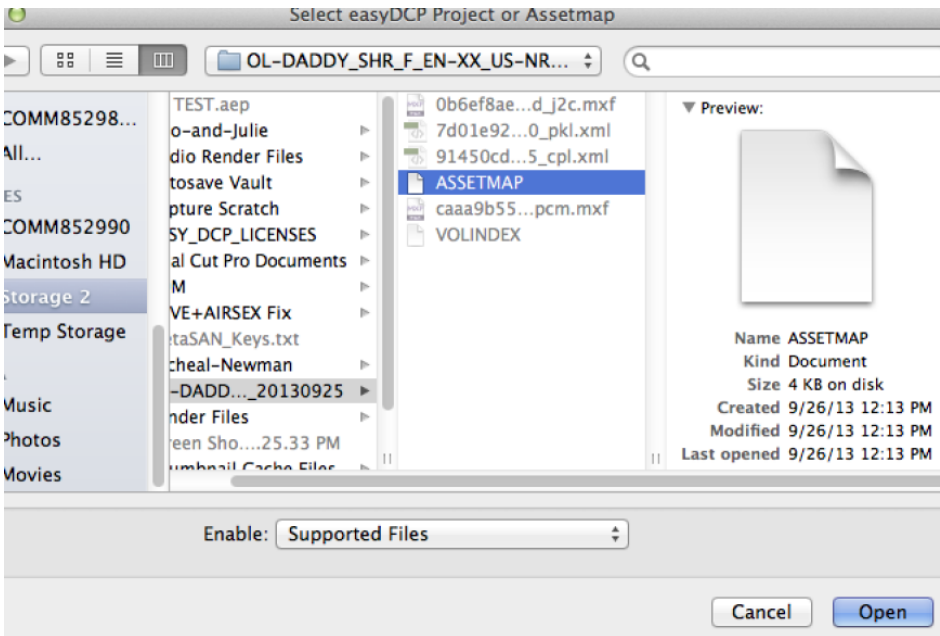
M
o
r
e
i
n
f
o
c
a
n
b
e
f
o
u
n
d
h
e
r
e.
[C
L
I
C
K
H
E
R
E](#)

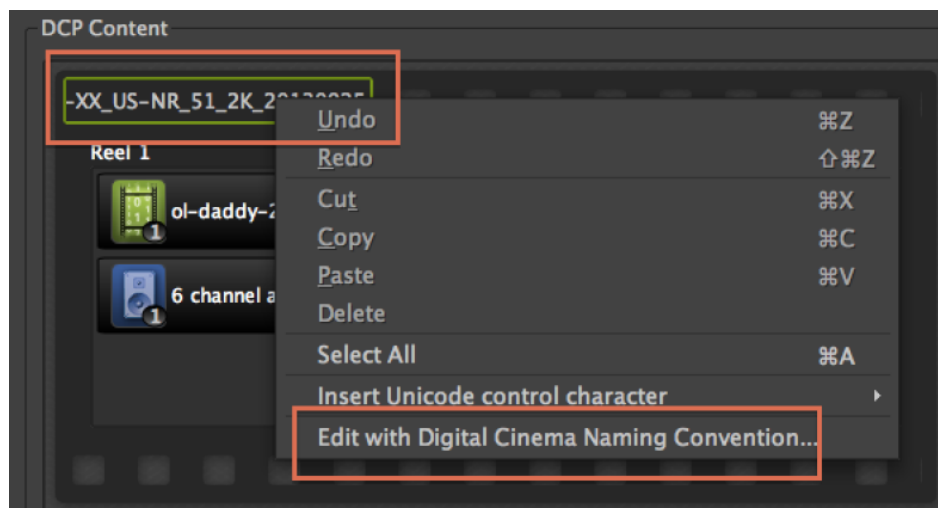
T
o
o
p
e
n
a
D
C
P
to
e
di
t
it
y
o
u
c
a
n
o
p
e
n
th
e
A
p
p
l
ic
at
io
n
E
a
s
y
D
C
P
a
n
d
g
o
to
"L
o
a
d
/
O
p
e
n
P
ro
je
ct
"
a
n
d
N
a
vi
g
at
e
to
A
s
s
et
m
ap

Something scan be changed in a DCP open EZ DCP and click Load Project



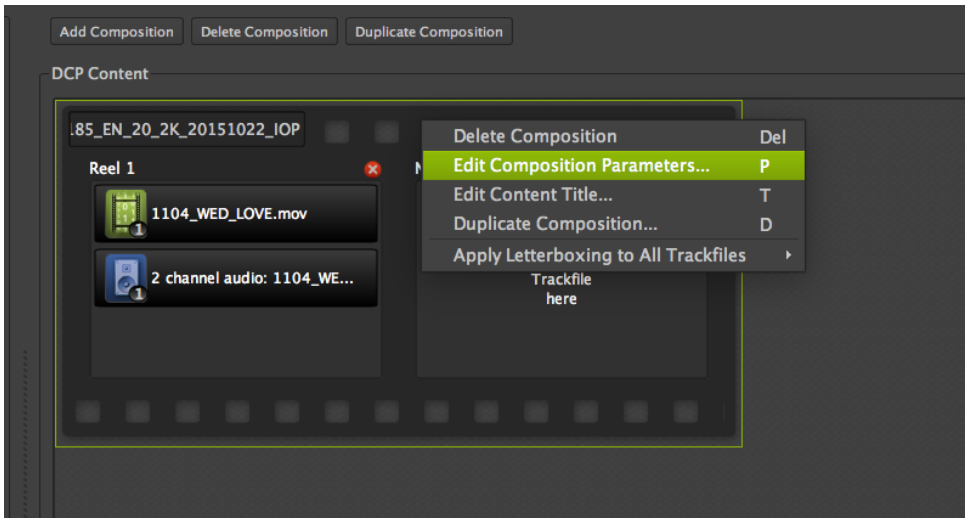
Navigation to the Assets Map





Y
o
u
c
a
n
a
l
s
o
c
h
a
n
g
e
t
h
e
t
y
p
e
o
f
t
r
a
c
k
i
f
y
o
u
d
i
d
n'
t
d
o
t
h
i
s
c
o
r
r
e
c
t
l
y.

C
h
a
n
g
e
t
h
e
C
o
n
t
e
n
t
K
i
n
d
t
o
a
s
h
o
r
t
i
f
y
o
u
a
r
e
m
a
k
i
n
g
a
D



C
P
of
a
S
h
or
t.

C
l
i
c
k
o
n
t
h
e
D
C
P
C
o
n
t
e
n
t
t
o
h
i
g
h
l
i
g
h
t
t
h
e
a
r
e
a
i
n
g
r
e
e
n.
T
h
e
n
c
l
i
c
k
"
P
."
T
h
e
n
c
h
a
n
g
e
t
h
e
"
C
o
n
t
e
n
t
K
i
n
d"
t
o
s
h
o
r
t.

changing the content to trailer or short or et c.

Edit Composition Playlist (CPL) Parameters

Annotation Text	
Content Kind	trailer
Content Title	1104-WED-LOVE_TLR_F-185_EN_20_2K_2015102...
Issuer	Not set
Issuer Language	

Metadata InspectorPreview

Choose File > Save DCP

File	Trackfile	Composition	Options
New Project...			⌘N
Open Project / DCP...			⌘O
Save Project			⌘S
Save Project As...			⇧⌘S
Save DCP			⌘S
Load KDM / DCP-Digest...			⌘L
Packing List (PKL) Parameters...			⌘P

Choose to ignore the error



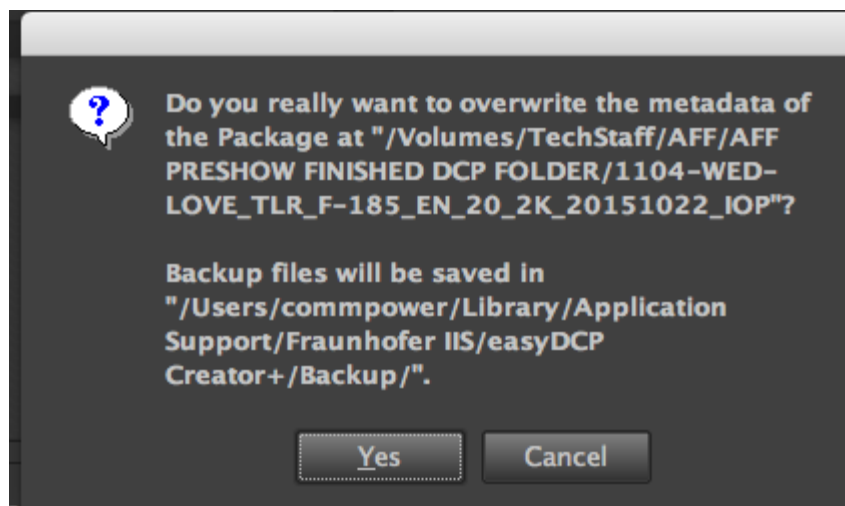
Issues may appear while saving the package.
Please check warnings.

Ignore

Show Details...

Abort

Ignore this warning and choose Yes



Saving fixes the change

