

DCP

DIGITAL CINEMA PACKAGE

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NORDISK FILM
SHORTCUT
EGMONT



1. Delivery Media

1.1 Files:

NTFS (Windows) formatted hard drive with USB, FireWire 400 or FireWire 800.

HPFS (Mac Os) formatted hard drive with USB, FireWire 400 or FireWire 800.

1.2 Video:

HDCAM SR tape

Other delivery media can be accepted but need additional handling.

Please contact us for information.

2. Picture Delivery Format

2.1 Files:

10 bit DPX image sequence (uncompressed) @ 24fps

8 or 16 bit TIFF image sequence (uncompressed) @ 24fps

Files should be named with following structure ←name→.←number→.←extension→

name = title of feature

number = a 6 digit number

extension = dpx or tif

example: Mymovie.000334.dpx or Another_Movie.098544.tif

2.2 Video (picture):

HDCAM SR 422 1920x1080pSF@24fps

HDCAM SR 444 1920x1080pSF@24fps

HDCAM SR 422 1920x1080pSF@25fps (no audio pitch adjustment made)

HDCAM SR 444 1920x1080pSF@25fps (no audio pitch adjustment made)

Note that DCP's are always running at 24fps.

Other delivery formats and frame rates can be accepted but need additional handling.

Please contact us for information.

3. Resolution

3.1 Files:

Flat 1998x1080 (1:1.85)

Scope 2048x858 (1:2.35)

3.2 Video:

Resolution is always 1920x1080 but picture has to be masked off to desired aspect ratio 1:1.85 or 1:2.35.

NB: As for traditional film remember there should be a 10% title safe.

4. Colour

The image data has to be linearly coded.

Final viewing and approval before delivery has to be done at a display device showing standard broadcast rec709 colourspace (ITU-R-BT.709)

Rec709 summary

Whitepoint $x=0,3127$ $y=0,3290$ or Whitepoint temperature = 6500K

For further info: http://en.wikipedia.org/wiki/Rec._709

Delivery of log material need additional handling.

Please contact us for information.

5. Sound

5.1 Files

For stereo sound track deliver 1 stereo file or 2 mono files.

For 5.1 sound track deliver 6 named mono files:

Front_Left

Front_Right

Center

LFE

Left_Surround

Right_Surround

Format of files have to be .wav files, 24bit, 48kHz @24fps

6. Duration and Synchronisation

6.1 Files:

When delivering an image sequence, the sequence has to start with a sync picture 48 frames before picture start. Audio files also have to contain a sync-beep 48 frames before picture start to ensure proper synchronisation.

If sync marks and proper synchronisation can not be delivered other combinations can be accepted but need additional handling. Please contact us for information.

6.2 Video:

A sync picture is not needed but preferred.

7. Single Programs vs Multireels

7.1 Files

For optimal handling image sequences should be split in reels of max. 20 min. duration. That means no more than 30.000 files should be contained in one reel folder.

Sync marks and proper synchronization has to be made for each reel as described in p.6.1

7.2 Video

There are no restrictions for delivering videotape. They can be delivered as one long feature or split up in reels.

8. Subtitles

To create a DCP with subtitles you have to deliver a **.stl ebu standard** subtitle file or a **.pac subtitle file**.

Timecodes in subtitle files indicating where subtitles go on and off has to match timecode of HDCAMSR tape or files delivered.

If images is delivered as individual reels, subtitle files has to be delivered as reels accordingly.

9. Stereoscopic (3D) Content

DCPs for stereoscopic presentation shall interleave the left and right eye frames alternating at 48 frames per second rate. The left and right eye material shall be captured for 24 frames per second presentation. The first frame of each reel shall be left eye and last frame right eye.

Files has to be delivered as two separate folders.

One folder for left eye files and one for right eye files.

Left and right eye files must have same number of files and matching numbers.

10. Delivery of DCP to Cinemas

10.1 Hard drives

Most cinemas accept delivery of DCPs on a transportable hard drive.

Remember to specify what type of hard drive the cinema accepts and how hard drives should be formatted.

10.2 Security keys

For encrypted DCPs we also need the server certificate for the cinema players where the DCPs are going to be presented, as well as a start and end time specifying the period the DCP shall be presented.

With this information we will deliver a KDM (key delivery message). This is the key that secures that the DCP can only be presented at the specific cinema player in the specified time period.

For further information please contact



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