



Source Material Specs for DCP Authoring

Basic Summary:

Most films can be authored from a QuickTime file which has been rendered/exported to a high quality codec with embedded stereo audio (surround sound must be delivered separately as mono aif or wav files).

This movie file needs to have a “two-pop” as it’s first frame and a “tail-pop” as the last frame. If you’re unsure what a two-pop or a tail-pop is, please watch [this video](#). Failure to adhere to these requirements will result in the rejection of your source material and a request for re-delivery.

General Picture Requirements:

- First frame of the movie file is a two pop indicator at timecode 00:59:58:00 followed by two seconds of black, with the first frame of the film at timecode hour 01:00:00:00. The last frame of the file must be a tail pop indicator two seconds after the movie is generally considered to be finished.

Slates, bars and tone, countdowns, etc. are not necessary and should not be included. The two/tail-pop frames will become the start and end frames, and will not be visible in the final DCP.

- Final DCP will be authored at one of the standard DCP aspect ratios:
1.85:1 (Flat)* = 1998x1080
2.39:1 (Scope) = 2048x858

**If a 16x9 image is delivered (1920x1080 or 1280x720), a slight pillar-box will be added to conform to the “flat” aspect ratio.*

- Frame rate must be one of the following: 23.976, 24, 25, 29.97 or 30. *For projects finished at 23.976 using the InterOp standard, there is no need to convert to true 24fps. Cinematiq will handle the conversion (and audio pullup) during the authoring process.*

- Color can be encoded as **Rec-709**, **DCI-P3**, or **XYZ**.
If delivering in a colorspace other than Rec-709 (the default colorspace for HDTV), the file should be clearly labeled as such, and gamma levels noted.

Preferred Image File Formats:

- QuickTime Movie

General Audio Requirements:

- Every channel of audio (either embedded or separate) **MUST** contain a two-pop and tail-pop that aligns with the visual indicators. Two/tail-pop must be exactly 1 frame. Failure to include a pop on each channel at both the head and tail may result in lip-sync issues.

- Multi-channel audio such as 5.1 surround sound needs to be delivered as discrete mono files clearly labeled with a channel assignment (L,C,R,LFE,Ls, Rs)

- LFE channel audio should be low passed (e.g. ~24-48db roll-off above ~125-160Hz) applied to prevent unwanted frequency ranges from finding their way to exhibition locations that may not have low pass filters in-line.

Preferred Audio File Formats:

- WAV (24 Bit, 48kHz, matching picture frame-rate)
- AIFF (24 Bit, 48kHz, matching picture frame-rate)

Specific Guidelines for QuickTime Movie Files:

- Codec should either be one of the high-data rate **Apple ProRes** variants (422, HQ or 4444) or another standard professional codec such as **10-Bit Uncompressed, Avid DNxHD, Sony XDCAM or DVCPro HD** . *Use of another codec may result in delays or color-shifts. If you are planning on using a different codec, please contact us.*
- Stereo audio must be embedded in the QuickTime
- Multi-channel audio should be delivered as separate files matching the picture's frame-rate and include a two / tail pop (see audio delivery section for more info).