

# Academy of Motion Picture Arts and Sciences

## Online Streaming: Preferred Digital Source Specifications

<b>VIDEO CODEC</b>	AVC/H.264 (RECOMMENDED)	PRORES 422 HQ (ALTERNATE)
<b>Container</b>	MP4	MOV
<b>Profile</b>	High	HQ
<b>Video Resolutions (HD)</b>	1920 x 1080 (16:9 aspect ratio) 1280 x 720 (16:9 aspect ratio)	1920 x 1080 (16:9 aspect ratio) 1280 x 720 (16:9 aspect ratio)
<b>Video Resolutions (SD)</b>	640 x 360 (16:9 aspect ratio)	640 x 360 (16:9 aspect ratio)
<b>Recommended Bitrate (HD)</b>	CBR 50Mbps or Higher	220Mbps or Higher
<b>Minimum Bitrate (SD)</b>	30Mbps	110Mbps
<b>Scan Type</b>	Progressive (23.976fps, 24fps, 25fps)/Interlaced (25fps, 9.976fps)	Progressive (23.976fps, 24fps, 25fps)/Interlaced (25fps, 29.976fps)

<b>AUDIO CODEC</b>	AAC (for AVC/H.264)	PCM (for PRORES 422 HQ)
<b>Minimum Bitrate</b>	320K 16 bit 48kHz Embedded. Single 5.1 or 2.0 track	Lossless 16 or 24 bit 48kHz Embedded. Multiple mono tracks
<b>Expected Channels (required in this order)</b>	<p>5.1 (surround):</p> <ul style="list-style-type: none"> <li>• Ch 1 – Left</li> <li>• Ch 2 – Right</li> <li>• Ch 3 – Center</li> <li>• Ch 4 – LFE</li> <li>• Ch 5 – LS</li> <li>• Ch 6 – RS</li> </ul> <p style="text-align: center;">or</p> <p>2.0 (stereo):</p> <ul style="list-style-type: none"> <li>• Ch 1 – LT</li> <li>• Ch 2 – RT</li> </ul>	<p>5.1 (surround) + 2.0 (stereo):</p> <ul style="list-style-type: none"> <li>• Ch 1 – Left</li> <li>• Ch 2 – Right</li> <li>• Ch 3 – Center</li> <li>• Ch 4 – LFE</li> <li>• Ch 5 – LS</li> <li>• Ch 6 – RS</li> <li>• Ch 7 – LST</li> <li>• Ch 8 – RST</li> </ul> <p style="text-align: center;">or</p> <p>5.1 (surround):</p> <ul style="list-style-type: none"> <li>• Ch 1 – Left</li> <li>• Ch 2 – Right</li> <li>• Ch 3 – Center</li> <li>• Ch 4 – LFE</li> <li>• Ch 5 – LS</li> <li>• Ch 6 – RS</li> </ul> <p style="text-align: center;">or</p> <p>2.0 (stereo):</p> <ul style="list-style-type: none"> <li>• Ch 1 – LT</li> <li>• Ch 2 – RT</li> </ul>

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### 4K Delivery

<b>VIDEO CODEC</b>	H.264 (RECOMMENDED)	PRORES 422 HQ (ALTERNATE)
<b>Container</b>	MP4	MOV
<b>Profile</b>	High	HQ
<b>Preferred Bitrate</b>	CBR 30 Mbps	600 Mbps or Higher
<b>Minimum Bitrate</b>	30 Mbps	120 Mbps
<b>Scan Type</b>	Progressive	Progressive
<b>Video Resolution</b>	3840x2160 (matted if necessary)	3840x2160 (matted if necessary)

<b>AUDIO CODEC</b>	AAC (FOR VC/H.264)	PCM (FOR PRORES 422 HQ)
<b>Minimum Bitrate</b>	320K 16 bit 48 kHz	Lossless 16 or 24 bit 48kHz
<b>Expected channel and embedded track configuration (required in this order)</b>	2.0 (stereo) = Single Track <ul style="list-style-type: none"> <li>• Ch 1 – LT</li> <li>• Ch 2 – RT</li> </ul>	5.1 (surround): <ul style="list-style-type: none"> <li>• Ch 1 – Left</li> <li>• Ch 2 – Right</li> <li>• Ch 3 – Center</li> <li>• Ch 4 – LFE</li> <li>• Ch 5 – LS</li> <li>• Ch 6 – RS</li> </ul> 2.0 (stereo) = Single Track <ul style="list-style-type: none"> <li>• Ch 1 – LT</li> <li>• Ch 2 – RT</li> </ul>

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### GENERAL VIDEO NOTES:

- ITU-R BT.709 color space, file tagged correctly as 709
- 1920x1080 square pixel aspect ratio material (NO UPCONVERTS)
- Native frame rate of original source- 23.976/24/25/29.976
- Telecine material or 29.97 progressive content is very difficult to convert to other frame rates and is NOT preferred, will incur additional processing cost
- One second of black at head and tail of program is required. Video must not contain more than 3 seconds of black at head and tail and must not include head build (i.e. countdown, slates, bars and tone, etc.)
- If your video is interlaced, deinterlace it before uploading to avoid jagged lines during playback. If the video was recorded as progressive, upload it as is.
- Original Song clips must be no longer than 3 minutes, including any non-song material preceding or following the song.
- Original Song clips should not have any watermarks ("Property of" messages, film title, song title, songwriter names, etc.) superimposed on the clip.

### FORENSIC WATERMARKING NOTES:

- Films purchasing forensic watermarking must submit source files with the following frame rates: 23.976 or 29.97

### 4K VIDEO NOTES:

- File container must have embedded audio. We will not accept separate audio sources.
- Video will only be accepted at 3840x2160 resolution. Larger or smaller videos will be rejected.
- Video can be delivered in native framerate
- Visual watermarks are not allowed

### SUBTITLES:

If the film is in a language other than English, English subtitles need to be burned into picture, typically in the lower third of the screen. Subtitles need to be properly aliased so they NEVER disappear into the video background through the entire length of the film.

### QUALITY CONTROL:

- Source files will undergo a QC process to ensure they meet the required specifications
- Source files will not be reviewed in their entirety and will be limited to a spot check
- Source files that fail QC must be redelivered in a timely manner
- Requests to replace "live" content must be submitted to the appropriate Academy Awards Associate Director
- Replacement of "live" content with a new source file will take up to 5 business days