



## DELIVERY GUIDELINES & TECHNICAL SPECIFICATIONS

Version 1.9 - 23.04.2018

This document is your guide to uploading/delivering video assets for our video-on-demand (VOD) service. It means a great deal that you want to share your content on Pantaflix, and we hope this document is useful in your efforts to deliver the best possible source material.

Please make sure your files do not contain any textless material (e.g. neutral titles after the program) or color bars, but only the film itself, starting with the first frame of the program.

Please do not upscale your material prior to the upload.

Assets can be delivered to Pantaflix via a direct upload, or via hard disk drive or Aspera delivery to us. We offer different standards for these different delivery methods.

We also work with a post-production house who can handle the digitization of the following formats:

Betamax, U-Matic HB und LB (PAL/NTSC), MiniDV, DVCAM, Beta SP (PAL/NTSC), Digi-Beta (PAL/NTSC), D1, D2, D 5, 1" B + C Format, XDCAM, HDCAM SR, HDCAM, DVC Pro, DVC Pro 50, DVC HDs, film negatives and film prints.

Depending on the content/titles, we may be able to offer you an advance on these digitization costs.

If you have any questions, feel free to contact us: [servicing@pantaflix.com](mailto:servicing@pantaflix.com).

<b>Video Codecs</b>	<b>Preferred:</b> Apple ProRes 422 HQ and DNxHD 185 accepted for uploads with lower bandwidths: H.264 <b>Other supported formats:</b> Apple ProRes 422, XDCAM SD, XDCAM HD, XDCAM EX, XDCAM HD422
<b>Audio Codecs</b>	<b>Preferred:</b> PCM, AAC for Upload <b>Other supported formats:</b> AC-3, MPEG-2 Audio, MP3, PCM
<b>Muxed/Container Formats</b>	MP4, Mpeg, MOV, MPEG-2 Transport Stream, Material Exchange Format (MXF OP1A, H264/MPEG2 and PCM Audio)
<b>Audio general info</b>	<b>2.0/LtRt/Stereo mix is mandatory.</b> 5.1 mix is recommended additionally. Delivery either embedded in video file as discrete channels/separate streams per mix or as separate multichannel audio streams per mix (wav, mov, aif). Please provide information on audio mapping in an additional document. Audio of additional language versions may be delivered as separate file(s) as well.
<b>Frame Rate</b>	The same rate at which you shot the video. Accepted frame rates are 24, 23.98, 25, 29.97 or 30fps. Constant Frame Rate only.
<b>Bit Rate</b>	For 1080p, we recommend 50Mbps - upload minimum 15Mbps. For 720p, we recommend 30Mbps – upload minimum 10Mbps. For SD, we recommend 15Mbps – upload minimum 8Mbps.
<b>Interlacing</b>	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.
<b>Keyframes</b>	Set to automatic.
<b>Pixels</b>	Encode using isomorphic (square) pixels (1 x 1). Although, this is usually the default video software setting, adjusting to 16:9 might unknowingly change the encoding to (rectangular) anamorphic pixels.
<b>Video Resolution</b>	Upload at 1920x1080p (or lower, if resolution is lower).
<b>Audio Bitrate</b>	PCM – upload AAC 265Kbps
<b>Subtitles</b>	<b>Preferred:</b> separate subtitle files <b>Also supported:</b> embedded (burned-in) subtitles <b>Supported formats:</b> .SRT, .VTT, .TTML (.DFXP) Please deliver an individual file per subtitle version.
<b>Graphic Elements</b>	<b>Films:</b> 1 poster (.JPG, .PNG); minimum resolution 720x1080 – aspect ratio 2:3 1 - 5 stills (.JPG, .PNG); minimum resolution 1920 x 1080 – aspect ratio 16:9 <b>TV Shows:</b> 1 Season Poster/Cover image - minimum resolution 1000 x 750 –aspect ratio 4:3 1 Season Background image - min. resolution 1920 x 1080 – 16:9 1 Episode Poster/Cover image - min. resolution 896 x 504 – 16:9
<b>Meta Data</b>	IMDb url, original title, international title (if applicable), logline (max. 150 characters) and synopsis (max. 500 characters), production countries, genre(s), year of production, age rating(s), cast & crew (director, scriptwriter, DOP). iTunes or Amazon meta data are accepted as well.