

**MPT HD File-based Program Delivery
Technical Specifications (Stereo Audio)**

HD program w/ Captioning & Stereo mix

NOTE: MPT is unable to accept files in an Apple ProRes format. Please make sure you are able to deliver your project in the format specified below.

Summary:

MXF-OP1a 1920x1080i / 59.94 (29.970 fps) / 50 Mb/s video 4:2:2 / 8 embedded mono audio channels / EIA-608 / EIA-708 (HD) embedded Captions (SMTPE 436M) / Drop-Frame Timecode / Program start timecode 01;00;00;00

CONTAINER: MXF OP-1a (XDCAM HD422)	
Video Format	MPEG Video (XDCAM HD422)
Format profile	4:2:2@High
Format settings, GOP	M=3, N=15
Bit rate	50.0 Mb/s
Width x Height	1920 x 1080 pixels
Display aspect ratio	16:9
Frame rate	29.970
Standard	NTSC
Color space	YUV
Chroma subsampling	4:2:2
Bit depth	8 bits
Scan type	Interlaced
Scan order	Top Field First

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AUDIO	
Audio #1 (Stereo Mix Left) Audio #2 (Stereo Mix Right) Audio #3 (Silence) Audio #4 (Silence)	Audio #5 (Silence) Audio #6 (Silence) Audio #7 (Mono Mix, SAP mix or DVI mix) Audio #8 (Mono Mix, SAP mix or DVI mix)
Format	PCM
Bit rate mode	Constant
Bit rate	1 152 kb/s
Channels 1-8	1 mono track per channel
Sampling rate	48.0 kHz

Audio Level

True peak level cannot exceed -2 dBFS.

Loudness integrated over duration of entire program must be within -24 LKFS ±2.

A 5.1-channel program down-mixed to stereo must also be within -24 LKFS ±2.

Lip Sync & Phase

Lip Sync shall not lead or lag more than one-half frame.

All channels, including DVI and Second Language must be in phase. PCM, 48 kHz, 16 or 24 bit

CAPTIONING & TIMECODE

NOTE: If you do not have an embedded caption file as per the specs below, MPT can accept a Word transcript to create the caption file locally. Please make sure that the transcript is clean of timecodes and that speaker names are specified.

Text #1 (EIA-608 Captioning) SD		Text #2 (EIA-708 Captioning) HD	
Format	EIA-608	Format	EIA-708
Muxing mode	Ancillary data / CDP	Muxing mode	Ancillary data / CDP
CaptionServiceName	CC1		
Other #1 (MXF TC)			
Type	Time code		
Format	MXF TC (Drop-frame)		

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Slate Sample

COMPLETE TITLE: With any subtitle

Episode # 000

TRT: 26:46

(indicate if Closed Captioned)

Ch.1 Stereo Left

Ch.2 Stereo Right

Ch. 7/8 Mono mix

Output date: _____

Producer: Company or Name

Editor: Name

Short Pre-Program Elements/Timecodes

00;25;00 - 59;39;29 HD Bars / Tone (15 seconds)

00;59;40;00 - 59;44;29 Black

00;59;45;00 - 59;57;29 Program Slate

00;59;58;00 - 59;59;29 Black

01;00;00;00 Program START

Post-Program Elements

Silent Black (15 seconds)