



Technical Requirements Television

21.04.2022

Broadcasting material

Send via the ORF-Enterprise website homepage (enterprise.ORF.at), audio and visual recordings in INTERLACED (not progressive) HD format.

The duration in seconds must be adhered to exactly, adverts which are only marginally longer must be rounded up to the next second.

Specifications

XDCAM_HD_422¹

Container ²	MXF OP1A
Codec	4:2:2P@HL Long GOP
Resolution	1920x1080
Frame Rate	50i
Field Dominance	Top Field
Video Bit Rate	50 Mbit/s
Chroma Subsampling	4:2:2
Bit Depth	8 Bit
BlackRefLevel ³	16
WhiteRefLevel ³	235
Color Range ³	225
Transfer Characteristic	ITU-R BT. 709
Peak Luminance	100 Nits
Audio ⁴	8 Tracks
Channel Count	1 Audiochannel = 1 Audiotrack
Bit Depth	24 Bit
Sampling Rate	48 KHz
Coding	PCM
Multichannel audio	Dolby E 16Bit: L/R, C/LFE, SL/SR: Dolby E 20Bit: L/R, C/LFE, SL/SR, Stereo

Advert

Start Timecode	00:00:00:00
System Item Timecode	continuous
Clip Duration	≥ 5 seconds clip duration = playout duration
Content	no bars, black frames and tones - picture starts on first frame and ends on last frame
Loudness ⁵	EBU R128

Audio track allocation:

Audiotrack 1	Stereo Left
Audiotrack 2	Stereo Right
Audiotrack 3	Reserved
Audiotrack 4	Reserved
Audiotrack 5	Reserved
Audiotrack 6	Reserved
Audiotrack 7	Reserved
Audiotrack 8	Reserved

¹ XDCAM HD 422 (MPEG HD422) according SMPTE RDD09:2013

² Header Partition Status "Closed and Complete"

No Pre-Charge/Roll-Out allowed

³ According EBU R 103 "Video Signal Tolerance In Digital Television Systems"

⁴ Unused tracks have to be filled with silence or muted In case of Dolby E "Fixed Channel Status Data" have to be set to "Non PCM" Use of reserved tracks require bilateral agreement

⁵ Loudness -23 LUFS +/- 0,5 LU

Maximum Short-Term Loudness: -18 LUFS (= +5 LU relativ)

Maximum True-Peak: -3dBTP (=dBFS gemessen mit Oversampling True Peak Meter)

In parallel with the technical requirements.