



*Technische  
TV-Anforderungen*  
STAND: 21.04.2022

## Sendematerial

Anlieferung über die Homepage der ORF-Enterprise ([enterprise.ORF.at](http://enterprise.ORF.at)), Bild- und Tonträger im HD-Format INTERLACED (nicht progressiv).

Die Sekundenlänge ist genau einzuhalten, auch geringfügig längere Spots müssen auf die nächste volle Sekunde aufgerundet werden

## Spezifikationen

### XDCAM\_HD\_422<sup>1</sup>

Container <sup>2</sup>	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 <sup>3</sup>	16
WhiteRefLevel <sup>3</sup>	235
Color Range <sup>3</sup>	225
Transfer Characteristic	ITU-R BT. 709
Peak Luminance	100 Nits
Audio <sup>4</sup>	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
Content	clip duration = playout duration no bars, black frames and tones - picture starts on first frame and ends on last frame
Loudness <sup>5</sup>	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

<sup>1</sup> XDCAM HD 422 (MPEG HD422) according SMPTE RDD09:2013

<sup>2</sup> Header Partition Status "Closed and Complete"

No Pre-Charge/Roll-Out allowed

<sup>3</sup> According EBU R 103 "Video Signal Tolerance In Digital Television Systems"

<sup>4</sup> 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

<sup>5</sup> 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)

Parallel zu den technischen Erfordernissen.