



# TECHNICAL REQUIREMENTS TELEVISION

Last updated 01.01.2026

# ADVERT LENGTH

Adverts generally last 15 seconds or more. A short-ad surcharge in accordance with the standard rate is added for adverts which are 5–14 seconds in length (see section 12 of terms and conditions). ORF agreement must be obtained for adverts lasting less than 15 seconds, with the exception of adverts that are 5 or 10 seconds in length. Adverts less than 5 seconds in length cannot be accepted for technical reasons.

It is permitted to book a tandem advert without incurring its own surcharge. If, however, a tandem advert does contain one or more adverts which last less than 15 seconds, the respective short-ad surcharges are added in accordance with the standard rate (see section 12 of terms and conditions).

# BROADCASTING MATERIAL

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

- XDCAM\_HD\_422
- Container: MXF OP1A
- 1920 x 1080 50i/50 Mbit/s
- Audio: 8 AES audio tracks/with one audio channel each /24 Bit
- EBU norm R128
- Programme loudness: - 23 LUFS +/- 0.5 LU
- Maximum short term loudness: - 18 LUFS (= + 5 LU relative)
- Maximum true peak level: - 3 dBTP (= dBFS measured with oversampling true peak meter)
- Start Time Code 00:00:00:00

The advert begins with the first picture (upper field first). The duration in seconds must be adhered to exactly, adverts which are only marginally longer must be rounded up to the next second.

In parallel with the technical requirements, the following customer-specific requirements must be provided:

- Agent number (Publiplan number)
- Product number (Publiplan number)
- Customer advert name
- Advert length in seconds (rounded up to the nearest second)
- Information on the advert (keywords for identifying the advert)
- AKM data

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

|                            |   |
|----------------------------|---|
| Container <sup>2</sup>     | MXF OP1A  |
| Codec                      | 4:2:2P@HL Long GOP  |
| Resolution                 | 1920 x 1080   |
| 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:<br>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<br>clip duration = playout duration   |
| Content               | no bars, black frames and tones – picture starts<br>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)

In parallel with the technical requirements.