



# Europe | Technical Specifications

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All files uploaded to Peach are immediately run through an Auto QC process. To ensure files are not rejected please adhere to the guidelines below.

	HD (1080/50i)
Container	<b>MXF (OP1a)</b>
<b>Video</b>	
Codec	<b>XDCAM HD422</b>
Format Profile	<b>422P@HighLevel</b>
Frame size	<b>1920 x 1080</b>
Display Aspect Ratio	<b>16:9</b>
Frame rate	<b>25 fps</b>
Interlacing	<b>Upper Field First</b>
Bitrate	<b>50 Mbps</b>
Chroma Subsampling	<b>4:2:2</b>
GOP Length	<b>12 (M=3, N=12)</b>
<b>Audio</b>	
Format	<b>PCM (Little Endian)</b>
Channels	<b>2 (1 channel per stream)</b>
Sample Rate	<b>48 kHz</b>
Bit Depth	<b>16 bits / 24 bits</b>



## File Layout

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Files must be exact duration; TVC content only. No pre or post roll such as clock/slate, bars, black, hold, freeze or audio tone is required.

## Video Levels

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Levels must be in accordance *ITU BT.709*, and *EBU R103-2000* recommendations:

Luma = Level 16-235 (not RGB 0-255 level), equivalent to 0% - 100% or 0mV - 700mV. Chroma = Level 16-240, equivalent to maximum 100% RGB.

All content should be upper and first field dominant throughout and must be free of encoding artefacts, dropout, glitches, blocking, interlace issues or excessive aliasing and considered broadcast quality throughout.

## Audio Levels

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Unless stated otherwise, the Audio True Peak level must not exceed -1dBTP for both Loudness (-23LUFS/-24LKFS) and Peak (-10dBFS) mixes.

It should also be free of any distortion, glitches or excessive sibilance and must be in phase and in sync with the video throughout.

## Safe Area

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Please ensure all On Screen Text is free from spelling and grammatical errors, and within the relevant Safe Area in accordance with *EBU R95-2017* recommendations.

HD Safe Areas 1920x1080 Interlaced

Text Safe Area	Height (Top & Bottom)	Width (Left & Right)
<b>16:9 Action Safe</b>	<b>3.5% (38 Pixels)</b>	<b>3.5% (67 Pixels)</b>
<b>16:9 Title Safe</b>	<b>5% (54 Pixels)</b>	<b>5% (96 Pixels)</b>
<b>14:9 Action Safe</b>	<b>3.5% (38 Pixels)</b>	<b>10% (192 Pixels)</b>
<b>14:9 Title Safe</b>	<b>5% (54 Pixels)</b>	<b>15% (284 Pixels)</b>
<b>4:3 Action Safe</b>	<b>3.5% (38 Pixels)</b>	<b>15.1% (286 Pixels)</b>
<b>4:3 Title Safe</b>	<b>5% (54 Pixels)</b>	<b>16.25% (312 Pixels)</b>

Where specified please use SD Text Safe Area if sending to SD destinations.



Balkans (Albania, Montenegro, Serbia)	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Bosnia and Herzegovina	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: HD 16:9 Title Safe / SD 4:3 Action Safe</b>
Baltics (Estonia)	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Belarus	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: HD 16:9 Title Safe / SD 4:3 Title Safe</b>
Benelux (Belgium, Luxembourg, Netherlands)	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Bulgaria	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Title Safe</b>
Croatia	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Cyprus	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Czech Republic	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Short term Loud.: -20LUFS</b> <b>Text Safe Area: 16:9 Action Safe</b>
D/A/CH (Germany, Switzerland, Austria)	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Short term Loud.: -18LUFS</b> <b>max. True Peak: -3dBTP</b> <b>Text Safe Area: 16:9 Title Safe</b>
France	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS)</b> <b>max. True Peak: -3dBTP</b> <b>Text Safe Area: 16:9 Title Safe</b>
Greece	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Hungary	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>max. True Peak: -3dBTP</b> <b>Text Safe Area: 16:9 Title Safe</b>



Iceland	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Italy	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: AGCOM 219/09/CSP</b> <b>(-24LKFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Title Safe</b>
Latvia	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Lithuania	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Title Safe</b>
Malta	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Moldova	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: HD 16:9 Action Safe / SD 4:3 Action Safe</b>
Nordics (Denmark, Finland, Norway, Sweden)	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
North Macedonia	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Poland	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Title Safe</b>
Portugal	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Romania	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Short term Loud.: -20LUFS</b> <b>Text Safe Area: 16:9 Title Safe</b>
Russia	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 14:9 Title Safe</b>
Slovakia	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Slovenia	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: R128 (-23LUFS ± 0.5LU)</b> <b>Text Safe Area: 16:9 Action Safe</b>



Spain	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: 16:9 Action Safe</b>
Ukraine	<b>Video Format: HD (1080/50i)</b> <b>Audio Levels: -10 dBFS / 6 PPM (Type IIa)</b> <b>Text Safe Area: HD 16:9 Action Safe / SD 4:3 Action Safe</b>