

TECHNICAL REQUIREMENTS FOR MATERIALS (COMMERCIALS/SPONSOR RECOMMENDATIONS) saved in file format

Technical Requirements for Advertising/Sponsorship Materials to be aired in Programmes supported by TVN Media shall be in accordance with the valid international standards.

The basic format is HD, in the absence thereof - SD 16:9 FHA

Material can be delivered only via Transfer TVN Media platform.

<https://transfer.tvnmedia.pl>

TECHNICAL REQUIREMENTS AS REGARDS THE MATERIALS DELIVERED IN A FILE FORMAT:

The accepted format of HD file is
QuickTime ".mov" with audio
codec: XDCAM HD (50Mbit/s) 4:2:2 (HD 1080i)
25 frames/s (fps)
Image resolution: 1920(H) x 1080(V) pixels
Interlace, upper half field
volume -23LUFS (in line with the recommendation EBU R128/ITU BS.1770-2)
Audio saved in two first sound channels (stereo)
Audio sampling rate: 48 kHz
Audio sampling resolution: 16 bits

The accepted format of SD file is
QuickTime ".mov" with audio
codec: Apple DV-PAL 25 4:2:0 (PAL 601)
25 frames/s (fps)
Image resolution in pixels: 720 x 576 FHA(anamorphic)
aspect ratio 16:9FHA (Full-Height Anamorphic)
Interlace, lower half-field
volume -23LUFS (in line with the recommendation EBU R128/ITU BS.1770-2)
Audio saved in two first sound channels (stereo)
Audio sampling rate: 48 kHz
Audio sampling resolution: 16 bits

DELIVERY:

Please visit <https://transfer.tvnmedia.pl> and create your account following the instructions. In case of any questions don't hesitate to contact bok@transfer.tvnmedia.pl

VIDEO:

The video signal shall be recorded in HD 1080i or PAL SD 576i in accordance with international recommendations

All important graphic elements must be placed in the "Safe Area" for PAL system. Failure to do so may result in the graphic elements be cut at the edges of the TV screen <https://tech.ebu.ch/docs/r/r095.pdf>

The level of Composite Video Baseband Signal (after playing the file and converting it into a signal useful for the TV) must not in any case exceed the level of 107% b/w, that is, 750 mV, and the value of 25% b/w, i.e., 175 mV over and below the blanking pulse. It is assumed that 700 mV is equal to 100% b/w of video signal.

It is not allowed to save the Material as file without interlacing.

AUDIO:

The sound level should meet the standards EBU R128 and ITU BS.1770-2

For digital PCM stereo audio signal, the volume should be -23LUFS (0LU respectively) for the measurement window of 30 seconds.

Measurement units:

LUFS - loudness full scale; interchangeably **LKFS** - loudness K-weighting full scale

LU - loudness unit, units relative to the reference level compliant with recommendation - EBU R128 and ITU BS.1770-2

Reference sound of a frequency of 1 kHz must be saved according to the instructions of the manufacturer of the audio monitoring unit (e.g. TSL AMU1-BD) while maintaining the level -4dB (0.775 V) of VU indicator as a reference (effective volume level of the program). Audio reference level (1kHz) measured with the peak meter (PPM), should be **-18dBFs**.

Values of the broadcast modulation signal measured by the VU indicator should not exceed the recommended reference level by more than +3 dB.

As for the peak meter (PPM) modulation peaks should not exceed the recommended reference levels by more than +9 dB, i.e. up to -9dBFs on the scale.

NOTICE!!!

Materials containing both music and speech must account for a balanced, physiological sound perception, i.e. the subjective feeling of a listener while listening to the Material should be balanced (volume level at a similar level).

Therefore, TVN Media reserves itself the right to air the Material characterised by a sound level corresponding to the program level of other materials (aired directly prior to and after the advertising Material). In line with the recommendation - EBU R128 and ITU BS.1770-2

The delay of vision and sound has to be adjusted; according to the CCIR's recommendations, the maximum value is 20ms.