



tvnz
2020

**On-Air
Commercial
Specifications**





tvnz Delivery Specifications

MXF XDCAMHD 1080i/50

HD

Video Codec: XDCAM HD422
Container: MXF
Bitrate: 50Mb/s
Sampling: 4:2:2
Interlacing: 1080i Upper/Top Field First
GOP Structure: L=12 M=3
Frame Geometry: 1920x1080 @ 25 Frames per second
Operational Pattern: OP1a - Single Item/Package as per SMPTE 378M

Material will be assessed according to ITU-R BT709-5.
All Measurable signals are to conform to European Broadcast Union (EBU) and ITU standards.

MXF IMX-30i

SD

Video Codec: IMX-30i
Container: MXF
Bitrate: 30Mb/s
Sampling: 4:2:2
Interlacing: 576i Upper/Top Field First
GOP Structure: I-Frame Only
Frame Geometry: 720x576 @ 25 Frames per second
Operational Pattern: OP1a - Single Item/Package as per SMPTE 378M

Material will be assessed according to ITU-R BT601-5 Part A.
All measurable signals are to conform to European Broadcast Union (EBU) and ITU standards.

24Bit PCM 48KHz



Codec: Uncompressed PCM.
Bit Rate: 48KHz
Bit Depth: 24bit

Material assessed using ITU-R 1770-3 with equipment meeting ITU-R 1771.

Distributors:

Commercial material must be sent to TVNZ via one of the commercial distributors listed below:

Adstream

Phone: +64 09 281 3660

Website: adstream.com

Peach

Phone: +64 09 550 0810

Website: peachvideo.com

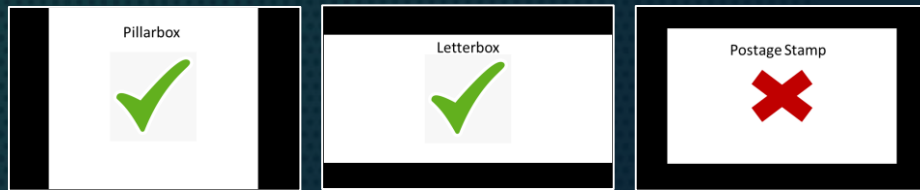


tvnz Video Specifications

Aspect ratio:

All commercials must be delivered in 16:9 widescreen. Where the original material is only available in 4:3, a 16:9 pillar boxed version is acceptable.

If the material is pillar boxed, it must fill the full height of the 16:9 frame i.e. Similarly, a letterbox commercial that fills the full width of the 16:9 frame is permitted. i.e. A film production aspect ratio of 21:9 or similar. A Postage stamped commercial is not permitted.



Video Levels and Gamut Tolerance:

As it is difficult to avoid generating signals slightly outside the strict specifications of either ITU R601 or ITU R709, it is reasonable to allow a small tolerance.

This has been defined as follows in EBU Rec103:

- *RGB components must be between -5 % and 105% (-35 and 735mV)*
- *Luminance (Y) must be between -1% and 103% (-7mV and 721mV)*

Slight transient overshoots and undershoots may be filtered out before measuring, and an error will only be registered where the out of gamut signals total at least 1% of picture area.

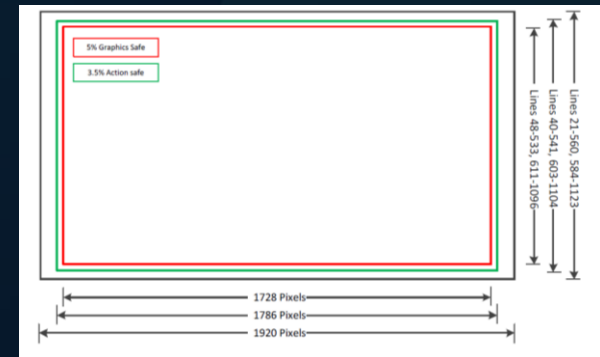
Safe action and graphics areas:

All commercials should be produced for a 16:9 action and 16:9 graphics presentation. This is an editorial decision that remains solely the responsibility of the Advertiser. TVNZ will not reject commercials where this recommendation is not adhered to, however TVNZ also accepts no liability for any damages, losses or costs around this specific occurrence.

SD



HD





tvnz Audio Specifications

Loudness:

All audio should conform to the following parameters.

Stereo Audio

Loudness -24 LUFS

True Peak -2 dBTP

Discrete 5.1 Sound

Loudness -24 LUFS (Dialnorm of -24)

True Peak -2 dBTP

All loudness and True Peak measurements should be measured using ITU-R 1770-3 with equipment meeting ITU-R 1771.

Phase:

All audio channels must be in phase with each other and maintain that relationship for the duration of the commercial

Sound and Vision Synchronisation:

The relative timing of sound to vision should not exhibit any perceptible error. Sound must not lead or lag vision in excess of 20ms (1 field at 25 frames per second). A sound delay of greater than 20ms can be acceptable where this occurs in context to give a perception of distance.

Audio Track Layouts:

All commercials MUST have a set of Stereo audio channels. TVNZ does not accept Dolby E or other encoded 5.1 Surround Formats. All channels must be delivered as discrete mono in one of the following layouts.

Option 1: Stereo Audio

Audio Channel 1 *Left (Lo or Lt)*

Audio Channel 2 *Right (Ro or Rt)*

Audio Channel 3-16 *Silent*

Option 2: Surround Audio

Audio Channel 1 *Stereo Left (Lo or Lt)*

Audio Channel 2 *Stereo Right (Ro or Rt)*

Audio Channel 3 *Front Left*

Audio Channel 4 *Front Right*

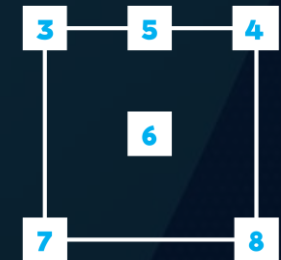
Audio Channel 5 *Centre*

Audio Channel 6 *LFE*

Audio Channel 7 *Surround Left*

Audio Channel 8 *Surround Right*

Audio Channel 9-16 *Silent*





tvnz Other Notes

Accurate Durations:

Automated file-based workflows made it necessary to have accurate durations for all commercials, therefore all supplied commercials must be frame accurate to the designated duration. No tolerance is permitted.



Legal Liabilities:

Advertisers remain solely responsible for the content of the commercial (i.e. the terms & conditions, disclaimers, etc.). TVNZ does not accept any liability for the commercial content including where a viewer action may result in restricted viewing or listening to a commercial and or its terms and conditions and any disclaimers. Any liability or legal issue arising from the commercial remains solely with the Advertiser. Each Advertiser indemnifies TVNZ for any damages, losses or costs incurred by that Broadcaster as a result of that Advertiser's alleged breach of this Agreement or any law or Advertising Code.



Disclaimer:

This document represents an abridged version of the full commercial standards. Please contact TVNZ if there are any additional queries around specifics that have not been outlined in this document.



Closed Captions:

If a commercial is being closed captioned the captioning data can be delivered as a separate data file that conforms to the EBU Tech. 3264-E 1991.

The file must have the same name as the MXF file delivered with the file extension of 'STL'.

Not all transmission platforms currently support captioning facilities so please check that a particular service can provide captioning facilities.

Production:

For creative and production enquiries, visit blacksand.co.nz for more information on TVNZ's internal production facilities

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blacksand.**