



**Technical Specifications For Commercial  
Material** October 2017

**File Delivery Specifications:**

- Fox Networks broadcasts exclusively in 1280 x 720/59.94. All files shall be delivered per SMPTE 296M-2001 with 5.1 digital sound per ATSC RP A/85.
- Videotape and SD delivery require prior authorization.
- Stereo, 2-channel and monophonic deliveries require prior authorization.
- Fox Networks only accepts MXF file delivery standardized in SMPTE 377M-2011.
- Files shall be wrapped in MXF per SMPTE 378-2004, OP1a.
- MXF files shall have one MPEG-2 video stream per ISO/IEC 13818-2-2011.
- MPEG-2 video essence shall be 1280 x 720/59.94, 4:2:2 profile @ high level, and 50Mbps.
- Safe Action Area and Safe Title Area parameters per SMPTE RP 218:2009
- 5.1 digital surround sound shall be in phase.
- Dolby E is not accepted.
- MXF files shall have 8 audio PCM 16 (16 bits @ 48 kHz PCM) or 8 audio PCM 24 (24 bits @ 48 kHz PCM) channels per SMPTE 382M-2007.

Channel		Channel	
1:	Left	2:	Right
3:	Center	4:	LFE-Low Frequency Enhancement
5:	Left surround	6:	Right surround
7:	DVS, SAP or mono	8:	Mono
9-12:	(n/a or not used)		

- Programming shall be created such that any down mix from 5.1 to stereo or mono represents the original mix.
- The dynamic range of the material shall be suitable for television broadcast.
- The loudness shall be measured across all channels, except LFE (*Low-Frequency Enhancement*) in units of LKFS per ATSC RP/A85.
- Each commercial segment shall have an average loudness of -24LKFS.
- Instantaneous audio peaks shall not exceed -6dBFS.
- Average peak audio levels shall not exceed -10dBFS.
- If the material's loudness measures higher or lower than our loudness specification, the material will be subject to rejection.
- SAP and DVS are subject to the above loudness and dynamic range requirements.
- Monophonic audio shall be recorded on channels 1 and 2 and are subject to the above loudness and dynamic range requirements.
- 2-channel audio material shall be clearly labeled as such and be recorded on channels 1 and 2, where the left channel is recorded on channel 1 and the right channel is recorded on channel 2.
- Material shall include a consistent AFD code of 1010 (letterbox) or 1111 (centercut) metadata per SMPTE 2016-1 & 2-2007.
- HD material that has no AFD code shall be broadcast as 1010.
- AFD and bar data information per SMPTE 2016-1, carried in ANC per SMPTE 2016-3-2007.
- All files shall have drop frame timecode per SMPTE 12M-1 & -2-2008.
- Metadata for Start of Material (SOM) and End of Material (EOM) per segment per SMPTE 377-1-2009.
- The file name shall match the on air traffic I.D.

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