

NOTE TO PRODUCERS

Your post-production team must follow these specifications set forth by Allegheny Image Factory (AIF). When purchasing a hard drive for commercial productions please adhere to the following specifications:

- 7200RPM disk speed or higher
- 500GB-1TB disk size
(Always consult your Director of Photography and Post-Production Supervisor, as disk space will vary by production)
- Must have at least Firewire 800 (x2) and USB 2 (3 preferable) - E-SATA Ports are acceptable.
- No Thunderbolt drives
- No Solid State drives

Please note that it is a non-exhaustive list. The guidelines set forth in this document cannot account for every distributor's specifications, however they are industry standard.

It is recommended to always consult the distributor of the production for *their* production specifications.

See the "Company Deliverables" section of this document for additional deliverable requirements for producers.

UMBRELLA POLICIES**Tape Delivery**

- Bars – 58:30 - 59:30
- Black - 59:30 – 59:40
- Slate – 59:40 – 59:50
- Black – 59:50 – 1:00:00

Slate should read as follows

Client Name

Spot Title

ISCI Code (see producer for code)

Spot Length

Producer

Post-Production Supervisor

Company Name, Copyright Notice, and Company Website

No leader is necessary.

Digital Delivery

No slate, color bars or leading or trailing black required. Spots must be Ready to Air. Audio must be dual (2) channel audio.

Additional Standards

- Video levels must not exceed 100 IRE, Chroma levels must not exceed 110 IRE or go below -20IRE, and Black levels must not go below 7.5 IRE at any time.
- First frame of program must start a 1:00:00:00
- Content shall be closed captioned as defined in EIA-708-B and EIA-608B.
- All supers must be Center Cut safe for SD broadcast

DIGITAL DELIVERY ENCODING SPECIFICATIONS**SD & HD Content Layout**

All submitted spots should be ready to air when submitted. A ready to air spot is exact length (e.g. a 30 second spot is exactly 30 seconds long, no slate, color bars, or leading or trailing black).

Suggested Video & Audio Standards

Black Level: Must not go below 7.5 IRE

Chroma Level: Must not exceed 110 IRE or go below -20 IRE

Videos levels must not exceed 100 IRE

SD Audio Levels

Please refer to the Audio Codex table below

SD File Specifications

		Quicktime		
	MPEG	Final Cut Pro*	Avid	Alternative H.264
Stream Type:	MPEG-2 Program Stream	Apple ProRes 422NTSC 48kHz	AVID DV50	H.264
Video Bit Rate	12 Mbps – Constant Bit Rate (CBR)	Default (CBR)	Default (CBR)	12 Mbps - (CBR)
Frame Rate	29.97	29.97	29.97	29.97
GOP	Closed Long GOP (IBBP)	Default	Default	Default
Aspect Ratio	4:3	NTSC – CCIR 601/DV	4:3	4:3
Width/Height	720x512	720x486	720x480	720x480
Chroma	4:2:2(HP@HL)	4:2:2	4:2:2	4:2:2
Interlacing	Upper/Top Field First	Bottom/Lower Field First	Bottom/Lower Field First	Bottom/Lower Field First

NOTES:

720x480 can be used for MPEG if closed captioning is not required. Closed Captioning is not maintained on ProRes and Avid files. If sending CC, masters must be in MPEG format

The first trigger for closed caption files MUST be married to the first frame of video

DO NOT SUBMIT anamorphic content. Widescreen programming must be letterboxed or Panned and Scanned to bring the Picture into the television safe area.

***It is strongly recommended that the file size should be limited to 300MB for a 30 second spot**

HD File Specifications {1080i HD format is preferred}

		Quicktime		
	MPEG	Final Cut Pro	Avid	Alternative H.264
Stream Type:	MPEG-2 Transport Stream	Apple ProRes 422 1920x1080 60i 48kHz Apple ProRes 422 1280x720 60p 48kHz	Avid DNxHD 145 (8-Bit)	H.264
Video Bit Rate	45 Mbps – (CBR)	Default - (CBR)	Default - (CBR)	45 Mbps - (CBR)
Frame Rate	1080i – 29.97 720P – 59.94	1080i – 29.97 720P – 59.94	1080i – 29.97 720P – 59.94	1080i – 29.97 720P – 59.94
GOP	Long GOP (IBBP)	Default	Default	Default
Aspect Ratio	16:9	HDTV – 1080i (16:9) or HDTV 720P (16:9)	16:9	16:9
Width/Height	1920x1080 (1080i) or 1280x720P (720p)	1920x1080 (1080i) or 1280x720P (720p)	1920x1080 (1080i) or 1280x720P (720p)	1920x1080 (1080i) or 1280x720P (720p)
Chroma	4:2:2(HP@HL)	4:2:2	4:2:2	4:2:2
Interlacing	1080i (Upper/Top Field First) 720P (progressive)	1080i (Upper/Top Field First) 720P (progressive)	1080i (Upper/Top Field First) 720P (progressive)	1080i (Upper/Top Field First) 720P (progressive)

SD & HD Audio Specifications

	MPEG	LPCM
Encoding	MPEG-1 Layer 2	SMPTE 302M
Channels	2 – Stereo	2 - Stereo
Peak Audio	May regularly peak to, but should not exceed -20dBFS	
	Stereo Only	Stereo Only
Channel 1	Stereo Left	Left Front
Channel 2	Stereo Right	Right Front
Channel 3, 4, 5, 6, 7,& 8	N/A	N/A

Note on File Size/Compression

Uncompressed video files tend to be very large and are prone to transmission and processing issues that lead to file corruption. On the other hand certain codecs compress files too much to maintain proper quality throughout processing. See table below for examples of approximate file sizes.

Format	Codec	Approx. File Size (30sec)
SD (720x480i)	Apple Pro Res 422	<300mb
	Mpeg2 Program Stream	<100mb
HD (1920x1080i)	Apple Pro Res 422	<800mb
	Mpeg2 Transport Stream	<300mb

TAPE DELIVERY ENCODING SPECIFICATIONS

Please refer to the document “*Technical Requirements for High Definition and Standard Definition Programming*” for an exhaustive list of specifications.

COMPANY DELIVERABLES

After a production is completed the following must be delivered to AIF.

These files are in addition to the files required by the client.

- An Uncompressed 8bit 4:2:2 version of the finished production
- An Uncompressed 8bit 4:2:2 textless version of the finished production
- Audio Mix For Uncompressed Versions
 - Full Mix on Channels 1 and 2
 - Dialog Mix on Channel 3
 - Music and Effects mix on Channel 4
- An OMF2 encapsulated file of finished production with 250 frame handles
 - If audio mix contains more than 8 channels:
 - Channels 1-8 should be exported as the first (1st) OMF
 - Channels 9-16 should be exported as a second (2nd) OMF and so on.

Video Encoding Specifications:

Format	Codec	Audio
HD (1920x1080p)	Apple Uncompressed 8bit 4:2:2	Uncompressed (48kHz, 24bit)

- Company Deliverables should be placed on the show hard drive in a folder called “AIF DELIVERABLES”
- Hard drive must be labeled with Show Name, Production Number, and Producer
 - This label must be typed. AIF will not accept a handwritten label.
- All talent releases should be scanned and included on the Show Hard drive as well as physical copies that accompany the hard drive.
- All Music Cue Sheets, music releases, licenses, or composer releases (if applicable) should be scanned and included on the Show Hard drive as well as physical copies that accompany the hard drive.
- All Deal Memos with key production personnel (if applicable) should be scanned and included on the Show Hard drive as well as physical copies that accompany the hard drive.

CONTACT INFORMATION

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