Each live stream program, cutdown(s), and/or accompanying clip pulls must deliver the following for archive:

- (1) YouTube Master aka 'YTM' aka Texted Master aka Broadcast Version
- (2) Textless Master aka 'TLM' aka Clean Version no bugs, no overlays, no lower thirds, etc
  - If clip VODs are direct lifts, then Textless versions of clips are not required
- (3) H.264 Downcoverts of 'YTM'
- (4) Audio Elements
  - Full Mix Print Masters
  - DME stems
- (5) Closed Captions
  - Captions created live must be cleaned up and redelivered with your VOD master(s) post live stream.

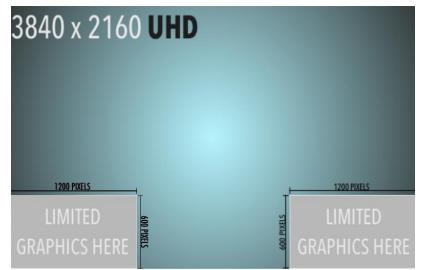
# Video Specifications

- Frame Size: 3840 X 2160 or 1920 x 1080 (if pre-approved)
- Aspect Ratio: 1.78 or 2.1 (letterboxed)
- Letterbox: 2:1 accepted
  - If delivering with a letterbox, see note below for additional requirements.
- Frame Rate: Native to broadcast, do not cross-convert to another frame rate.
- Container: Quicktime .MOV
- Codec: ProRes422HQ
- Color Space: Rec709
- Content Layout:
  - Begin video file at 00:58:30:00
    - 75% or 100% Bars and 1 Khz Tone at -20 dbM from 00:58:30:00 to 00:59:29:29 (60 seconds)
    - Black from 00:59:30:00 to 00:59:39:29 (10 seconds)
    - Slate from 00:59:40:00 to 00:59:49:29 (10 seconds)
      - Show Title
      - YT Host Channel
      - Episode #
      - Episode Title (if applicable)
      - Master ID
      - Audio Configuration
      - Resolution
      - Aspect Ratio
      - Frame Rate
      - TRT
      - Output Date
    - Black from 00:59:50:00 to 00:59:59:29 (10 seconds)
    - Program Start at 01:00:00:00

- Include One (1) second of Black after end of Program
- Commercial blacks, if and as requested by Google

### Video Quality Requirements

- Utilize highest-quality video. Do not subject video to any more post-production transformation than is absolutely needed.
- Video will be color corrected such that care is taken to correct white balance errors, match cameras, and optimize skin tones, such as to:
  - Prevent the viewer from being jarred from the content by technical errors.
  - Support the creative "look" of the content.
- Video luminance will be limited to 100 IRE equivalent on a waveform monitor, and video chrominance will be limited to 100 IRE equivalent on a vectorscope.
- Placement of on-screen text:
  - On-screen text will be displayed within the 16x9 Title Safe area.
  - Where feasible, avoid placing text or graphics in the lower left and lower right hand corners of the frame, as shown in the diagram below. Limit instances to no more than 5 seconds.



### • Letterbox Masters

- Any letterbox or aspect ratios other than 1.78 or 2.1 must be approved by YTO before production commences.
- o If delivering a Letterbox YouTube Master, an additional master must be delivered that is full frame 16x9 (1.78) with the letterbox/masking removed.

### Audio Specifications

 Audio must be embedded on all Master video files in uncompressed 24 bit 48 kHz formats.

- Embedded audio must be delivered in discrete channels (one track per channel). Channel configuration: Channel 1-6 (5.1 full mix), Channels 7-8: (Stereo Full Mix)
  - Ch 1: Left
  - Ch 2: Right
  - Ch 3: Center
  - Ch 4: LFE
  - Ch 5: Left Surround
  - Ch 6: Right Surround
  - Ch 7: Stereo Left
  - Ch 8: Stereo Right
- If delivering stereo audio only, then Channels 1-2 would be Stereo Full Mix.

# Audio Quality Requirements for YouTube Master

- Audio will be mixed such that max peaks never go over -1 dbFS.
- The audio mix will be free of clipping and other distortions that would cause a listener to become aware of the audio mix, rather than be engrossed in the content.
- Audio will be synchronized to video, no more than 15 milliseconds of variance will be tolerated.

# QC

The main live stream program and any additional clips must run through a technical QC and meet YTO standards before it can be accepted by YTO.

## H.264 HD Downconvert

If your live stream is required to deliver clip pulls or an edited cutdown of the main live stream event, then an H.264 HD downconvert must be delivered for each YouTube Master at the following specs:

Video Specifications

- Frame Size: 1920x1080
- Aspect Ratio: 16:9
- Frame Rate: Native to broadcast
- Burned-in English subtitles (for Non-English programs only)
- Container: .MP4
- Codec: H.264
- Data Rate: between 10 20 mb/s
- Remove bars & tone, slate, and black from header

Audio Specifications

• Stereo AAC audio at no less than 128 kbps

## **Audio Elements**

All audio files are to be delivered as 8 discrete audio channels (5.1 + Stereo) in .wav format. This includes both the final mix and the separated dialogue/music/effect stems (DME). Stereo-only audio accepted if pre-approved by YTO.

Two sets of audio packages must be delivered:

### (1) 5.1 + Stereo Print Master Full Mix

- (a) Print Master LEFT
- (b) Print Master RIGHT
- (c) Print Master CENTER
- (d) Print Master LFE
- (e) Print Master LEFT SURROUND
- (f) Print Master RIGHT SURROUND
- (g) Print Master STEREO LEFT
- (h) Print Master STEREO RIGHT
- (2) DME Stems
  - (a) 5.0 + Stereo Dialogue Stem, including all ADR
  - (b) 5.1 + Stereo Music Stem
  - (c) 5.1 + Stereo Effects Stem, including all Foley

Please label and organize all audio files with Master ID and track name.

- ShowSeries\_episode#\_framerate\_content\_channel\_masterID.wav
- ex: CobraKai\_102\_2398\_PM51\_Ls\_CK102YTM01US.wav

Timecode of all audio elements must match the YouTube Master.

### **Closed Captions**

In most cases captions will be created live during the initial broadcast. Post live stream, a cleaned-up edited version of the captions must be delivered alongside each YouTube Master to address any spelling, grammatical, timing, or any other typographical errors.

The revised captions must be delivered in .SCC format as a sidecar file and not embedded into the video file.

If the program is pre-taped, closed captions should be created pre-broadcast whenever possible.

## **Graphic Slates**

The following graphic slates must be delivered as standalone assets whichever way they were featured in the final program, either as static or as motion formats. All motion assets must deliver at the exact duration used in the broadcast.

Starting Soon Countdown Clock Thanks for Watching Please Standby (if applicable) End Screens for VODs

Specifications:

- Static assets
  - Layered and unmarried files in their native application format (i.e. .PSD, .AI, or .TIFF (layered not flat)
- Motion assets
  - Resolution: 3840x2160 or 1920x1080
  - Codec: ProResHQ, ProRes4444, or Apple Animation
  - Container: .MOV
  - Frame Rate: Native to broadcast

## QC

The main live stream program and any additional clips must run through a technical QC and meet YTO standards before it can be accepted by YTO.

### **Paper Deliverables**

In addition to the above A/V deliverables, all live stream productions must deliver all contractual production, legal, and post paperwork. Please speak with your assigned YTO Production Manager and Post Manager if you have any questions.

## Delivery

All deliverables must be uploaded to your designated QC vendor. Please speak with your YTO Post Manager for more information.