All shows are required to deliver the following elements:

- 1. 4K/UHD YouTube Master (YTM)
- 2. 4K/UHD Textless Master (TLM)
- 3. HD YouTube Master (YTM, H.264)
- 4. Full Mix Printmasters
- M&E Mixes
- 6. DME Stems
- 7. Closed Captions
- 8. English Subtitles (if applicable)

UHD Masters

Master delivery to YouTube includes two 4K/UHD masters:

- 1. YouTube Master aka "YTM"
- 2. Textless Master aka "TLM"

Each episode, livestream, special or feature must deliver each of these above listed versions.

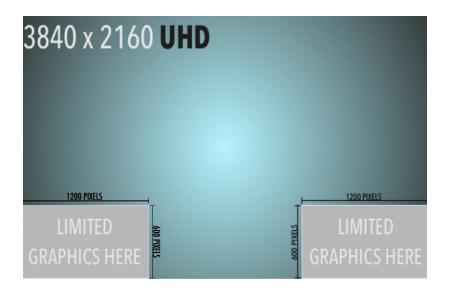
Video Specifications for YouTube Master

- Frame Size: 3840 X 2160
- Aspect Ratio: 1.78 or 2.1 (letterboxed, if pre-approved)
- Letterbox: 2:1 accepted
 - If delivering with a letterbox, see note below for additional requirements.
- Frame Rate: 23.98 fps or native non-interlaced frame rate
- Container: Quicktime .MOV
- Codec: ProRes422 HQ
- 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 00:59:29:23 (60 seconds)
 - Black from 00:59:30:00 to 00:59:39:23 (10 seconds)
 - Slate from 00:59:40:00 to 00:59:49:23 (10 seconds)
 - Show Title
 - YouTube Host Channel
 - Episode Number
 - Episode Title (if applicable)
 - Master ID
 - Audio Configuration
 - Resolution
 - Aspect Ratio
 - Frame Rate
 - TRT

- Output Date
- Black from 00:59:50:00 to 00:59:59:23 (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 along with a Timing Sheet. (see <u>Ad Breaks & Mid-Roll Timings</u>)

Video Quality Requirements for YouTube Master

- Utilize the highest-quality video. Do not subject video to any more conversions or transcoding 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 16x9 <u>Title Safe area</u>.
 - Where feasible, avoid placing text or graphics in the lower right hand corner of the frame, as shown in the diagram below. Limit instances to no more than 5 seconds.



Letterbox Masters

- o 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 for YTM

- 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).
- Interleaved files will be rejected.
- Channel configuration: Ch. 1-6 (5.1 full mix), Ch. 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 you have been approved to deliver Stereo only, configuration will be

Ch 1: Stereo LeftCh 2: Stereo Right

Audio Quality Requirements

- 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.

<u>Video and Audio Specifications for Textless Master</u>

- The Textless Master **must remove** all overlay graphics, lower thirds (including backplates), forced narratives and subtitles, date, location and time identifiers, etc.
- The timing must not be modified when removing the graphics for the Textless version. The YouTube Master and Textless Master must align exactly, frame for frame.

A "Semi Textless" Master may be requested for any international versioning which would require only forced narratives and subtitles to be removed, but lower thirds and any other non-story pertinent text to remain burned-in.

The Textless Master's file formatting matches the YouTube Master except two areas:

- **Letterbox:** If the YTM delivers with a letterbox, the Textless Master must receive both a 16x9 full frame master and letterbox master. See Textless Delivery Option section in the *Final Master Delivery* article.
- Audio on the Textless Master must include the fully-filled M&E Mix (scripted only), ENG/Original Language Mix Minus (documentary/reality), or Full Mix as follows*:
 - Ch 1: Left (Fully-Filled M&E, Mix Minus or Full Mix)
 - Ch 2: Right (Fully-Filled M&E, Mix Minus or Full Mix)
 - Ch 3: Center (Fully-Filled M&E, Mix Minus or Full Mix)
 - Ch 4: LFE (Fully-Filled M&E, Mix Minus or Full Mix)
 - Ch 5: Left Surround (Fully-Filled M&E, Mix Minus or Full Mix)
 - Ch 6: Right Surround (Fully-Filled M&E, Mix Minus or Full Mix)
 - Ch 7: Stereo Left
 - Ch 8: Stereo Right
- Additional Audio Specifications Note:
 - For unscripted or documentary programs the M&E tracks must be mixed minus narration, dipped. Please keep the audio mixed as if the narration/voice over was still present.

*Please confirm with your YTO Post Manager what will be required for your Textless Master audio.

HD Downconverts

One HD downconvert must be delivered for each YTM.

Video Specifications

• Frame Size: 1920x1080

Aspect Ratio: 16:9

o Frame Rate: 23.98 fps or native

o Forced Narratives burned-in, if applicable

Burned-in English subtitles (for Non-English programs only)

Codec: H.264Container: .MP4

Data Rate: between 10 - 20 mb/s

o Remove bars & tone, slate, and black from header

Audio Specifications

Stereo AAC audio at no less than 128 kbps

Filename: Master ID + [HD]

■ Ex: ETN103YTM01USHD.mov

Audio Elements

- Required elements:
 - Full Mix Printmasters, in 5.1 and stereo
 - DME Stems, in 5.1 and stereo
 - Fully-Filled M&E (scripted series or features only) or
 - ENG / Original Language Mix Minus Narration, in 5.1 and stereo
 - The Mix Minus tracks must be mixed without narration but still have the music, effects, and dialogue dipped. Please keep the audio mixed as if the narration (Voice Over) was still present.
 - o If VoiceOver is not present, then this deliverable can be waived.
 - Uncompressed .Wav / 24 bit / 48 khz
 - 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. Interleaved tracks will be rejected.
- Three 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) 5.1 + Stereo M&E Mix

- (a) M&E LEFT
- (b) M&E RIGHT
- (c) M&E CENTER
- (d) M&E LFE
- (e) M&E LEFT SURROUND
- (f) M&E RIGHT SURROUND
- (g) M&E STEREO LEFT
- (h) M&E STEREO RIGHT

(3) 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
- (d) 5.0 VO / Narration Stem if applicable

- Please label and organize all audio files as follows:.
 - ShowSeries_episode#_framerate_content-channel_masterID.wav
 - ex: CobraKai_102_2398_PM51_Ls_CK102YTM01US.wav
- Important: The start timecode of all audio elements must match the YouTube Master (00:58:30:00)
- Additional notes:
 - The DME (Dialogue, Music, Effect) stems are the isolated (not mixed) tracks.
 - The DME stems are different from the M&E mix.
 - Create and deliver these assets only after your YouTube Master (YTM) has been QC approved.
 - For additional information regarding M&E mixes, please refer to the <u>M&E</u> Guidelines.

<u>Timed Text: Closed Captions / Subtitles / Forced Narratives</u>

- For programs originally produced in English, closed caption files must be delivered in Scenarist Closed Caption format (.SCC).
- For programs originally produced in a language other than English, closed caption files AND English subtitles must be delivered:
 - Closed Caption file in program's primary language in .ITT format
 - o English subtitles in .ITT format
- If applicable, a separate Forced Narrative (FN) file must be delivered that clarifies
 communications or alternate languages meant to be understood by the viewer. They
 can also be used to clarify dialogue, texted graphics or location/person IDs that are not
 otherwise covered in the original or dubbed/localized audio. Unless pre-approved by
 Google, there should be no subtitle burn-ins on the YTM.
 - File format: .ITT
 - Note: a <u>forced narratives log</u> must be delivered noting all instances of forced narratives for each master.

The frame rates for all Timed Text files **must match** the YTM's frame rate.

- If there are instances of overlapping subtitles with burned-in text or graphics, then the captions and subtitles must be repositioned to avoid overlapping text.
- Please refer to YTO's subtitle and caption guidelines <u>here</u>.
- Note: All Timed Text files must be created by a Google approved vendor.