



The WALT DISNEY Studios

Disney International Acquisition Specifications

(Local Productions, Local Acquisitions &
National Geographic)

Version 2.0

Revision History

Version/Date	Changes	Author
1.0 - 2020-02-20	<ul style="list-style-type: none"> Initial Draft 	Dave Kneeland / Sam Johnson
1.2 - 2020-02-22	<ul style="list-style-type: none"> Timecode Typo Amendment 	Dave Kneeland / vfSam Johnson
1.3 - 2020-02-26	<ul style="list-style-type: none"> Compliance Section Added - Incl. PSE verbiage. Requirement for 29.97 progressive timebase against HD content. Add verbiage around National Geographic textless masters. 	Dave Kneeland / Sam Johnson
1.4 - 2020-03-03	<ul style="list-style-type: none"> Added 25.00fps headbuild timing. Support for up to 2 second part breaks. 	Dave Kneeland / Sam Johnson
1.5 - 2020-03-07	<ul style="list-style-type: none"> File nomenclature Support for additional optional tracks in self-contained masters. 	Dave Kneeland / Sam Johnson
1.6 - 2020-03-07	<ul style="list-style-type: none"> Quicktime ProRes 422 (HQ) PID Requirements Defined nomenclature to be adhere to. 	Sam Johnson
1.7 - 2020-07-08	<ul style="list-style-type: none"> EMEA Delivery methods added for local production and acquisition titles. 	Sam Johnson
2.0 - 2020-11-01	<ul style="list-style-type: none"> NEW POINT RELEASE Incorporates New Disney/Fox Consolidated Specifications. Revised ProRes Requirements. <ul style="list-style-type: none"> SOM / TC Start New lineup / conformance. Now known as 'Program Layout' New Technical Metadata Section Updated UHD-HDR / SDR D2C disclaimer. Updated Audio Track Layout Updated ProTools Super Session Requirements Added IMSC 1.1 as a preferred Timed-Text Deliverable Updated Deliverable Information Updated FoxEnt. Ops File Nomenclature Reference Link Added Production Documentation Requirements 	Dave Kneeland / Sam Johnson

Table of Contents

Revision History	2
Table of Contents	3
Introduction	4
Video Specifications	5
UHD HDR BT.2100 PQ ProRes 4444 (XQ)	5
UHD SDR ProRes 422 (HQ)	6
HD SDR ProRes 422 (HQ)	7
Standard Definition NTSC ProRes 422 (HQ)	8
Standard Definition Apple ProRes 422 (HQ)	8
Program Layout	10
Technical Metadata	11
Color Tags / NCLC Atoms	11
HDR Metadata	11
Apple Quicktime Packet Identifier (PID)	11
Audio Track Layout	12
Audio ProTools Sessions	13
Timed-Text/Subtitle Specifications	14
Preferable Timed-Text/Subtitle Formats	14
IMSC 1.1 Subtitle Specifications (.ttml)	14
EBU-STL (.stl)	14
Additional Supported Formats	15
Lambda CAP (.cap)	15
Subrip Text Based Subtitles (.srt)	15
Cavena (.890)	15
Compliance	16
File Nomenclature	16
Production Documentation	17
File Delivery	18

Introduction

This document defines the acquisition delivery specifications for the Walt Disney Company International Channel/Affiliate Businesses as well as the Direct-to-Consumer (D2C) and content sales divisions. It is primarily to be utilized for Local Productions, Local Acquisitions and National Geographic Content. This has been created by collaborating with numerous business units at The Walt Disney Company in order to agree upon common specifications for multiple lines of business.

Video Specifications

UHD HDR BT.2100 PQ ProRes 4444 (XQ)

Video Technical Requirements	
Container / Wrapper	Quicktime (.mov)
Time Code Track	00:00:00:00
Program Layout	See below
Codec	Apple ProRes 4444 (XQ)
Resolution	3840x2160
Display Aspect Ratio	16x9
Pixel Aspect Ratio	1:1
Frame Rate	23.976, 25, 29.97 [as source]
Scanning Method	Progressive
EOTF	ST 2084 (PQ)
Color Space	BT.2020
Mastering Color Space	P3 (ST 2113) or BT.2020
Audio Technical Requirements	
Codec	Linear PCM
Sample Rate	48kHz
Bit Rate	Uncompressed
Bit Depth	24-Bit
Channels	Discrete
Audio Configuration	See below
Quicktime Atoms	
NCLC Color	Required (See below)
Progressive Frame	Required
CLAP (Clean Aperture)	Not allowed

UHD SDR ProRes 422 (HQ)

Video Technical Requirements	
Container / Wrapper	Quicktime (.mov)
Time Code Track	00:00:00:00
Program Layout	See below
Codec	Apple ProRes 422 (HQ)
Resolution	3840x2160
Display Aspect Ratio	16x9
Pixel Aspect Ratio	1:1
Frame Rate	23.976, 25, 29.97 [as source]
Scanning Method	Progressive
Color Space	BT.709
Audio Technical Requirements	
Codec	Linear PCM
Sample Rate	48kHz
Bit Rate	Uncompressed
Bit Depth	24-Bit
Channels	Discrete
Audio Configuration	See below
Quicktime Atoms	
NCLC Color	Required (See below)
Progressive Frame	Required
CLAP (Clean Aperture)	Not allowed

Please Note: UHD-SDR Only masters are not currently accepted on Disney's D2C platforms. If a channel acquisition has cross-distribution rights to Disney's Direct-to-Consumer platforms, UHD-SDR master will only be accepted when a UHD-HDR master is also delivered.

HD SDR ProRes 422 (HQ)

Video Technical Requirements	
Container / Wrapper	Quicktime (.mov)
Time Code Track	00:00:00:00
Program Layout	See below
Codec	Apple ProRes 422 (HQ)
Resolution	1920x1080
Display Aspect Ratio	16x9
Pixel Aspect Ratio	1:1
Frame Rate	23.976, 25, 29.97 [as source]
Scanning Method	Progressive
Color Space	BT.709
Audio Technical Requirements	
Codec	Linear PCM
Sample Rate	48kHz
Bit Rate	Uncompressed
Bit Depth	24-Bit
Channels	Discrete
Audio Configuration	See below
Quicktime Atoms	
NCLC Color	Required (See below)
Progressive Frame	Required
CLAP (Clean Aperture)	Not allowed

Standard Definition NTSC ProRes 422 (HQ)

Video Technical Requirements		
Rendition	16x9	4x3
Container / Wrapper	Quicktime (.mov)	Quicktime (.mov)
Time Code Track	00:00:00:00	00:00:00:00
Program Layout	See below	See below
Codec	Apple ProRes 422 (HQ)	Apple ProRes 422 (HQ)
Resolution	720x480	720x480
Display Aspect Ratio	16x9	4x3
Pixel Aspect Ratio	32:27	8:9
Frame Rate	23.976, 29.97 [as source]	23.976, 29.97 [as source]
Scanning Method	Progressive	Progressive
Chroma Sub-Sampling	4:2:2	4:2:2
Color Space	BT.601	BT.601
Audio Technical Requirements		
Container / Wrapper	Quicktime (.mov) [Self-Contained]	Quicktime (.mov) [Self-Contained]
Codec	Linear PCM	Linear PCM
Sample Rate	48kHz	48kHz
Bit Rate	Uncompressed	Uncompressed
Bit Depth	24-Bit	24-Bit
Channels	Discrete	Discrete
Tracks	16-24	16-24
Audio Configuration	See below	See below

Standard Definition Apple ProRes 422 (HQ)

Video Technical Requirements		
Rendition	16x9	4x3
Container / Wrapper	Quicktime (.mov)	Quicktime (.mov)
Time Code Track	00:00:00:00	00:00:00:00
Program Layout	See below	See below
Codec	Apple ProRes 422 (HQ)	Apple ProRes 422 (HQ)
Resolution	720x576	720x576
Display Aspect Ratio	16x9	4x3
Pixel Aspect Ratio	64:45	16:15
Frame Rate	25	25
Scanning Method	Progressive	Progressive
Chroma Sub-Sampling	4:2:2	4:2:2
Color Space	BT.601	BT.601
Audio Technical Requirements		
Container / Wrapper	Quicktime (.mov) [Self-Contained]	Quicktime (.mov) [Self-Contained]
Codec	Linear PCM	Linear PCM
Sample Rate	48kHz	48kHz
Bit Rate	Uncompressed	Uncompressed
Bit Depth	24-Bit	24-Bit
Channels	Discrete	Discrete
Tracks	16-24	16-24
Audio Configuration	See below	See below

Program Layout

:01 second - SOP	EOP		
Program	30s	Textless	
Video + Audio			

24CH Program + Textless ProRes

Program Event	Timestamp	Duration
Black	0s	1 second
Program	1s	Per TRT
Black		30 seconds
Textless		TBD
Black		1 second

Textless Material*

The textless material must match the framing and aspect ratio of its corresponding texted shot.

Textless material should begin 30 seconds after the end of the program (this may be a few seconds shorter or longer to accommodate speed-up or speed-down conversions). Each textless piece must be cut to cut with 1-2 seconds between each piece.

A slate is not allowed at the beginning of the textless sequence.

Please note that if more than 33% of a title is texted, a fully textless or fully semi textless master will be requested in place of a textless bed. **This additional deliverable must include the audio from the texted program.*

Technical Metadata

Color Tags / NCLC Atoms

Color Tags / NCLC Atoms	SDR	Atom	HDR	Atom
Color Primaries	BT.709	1	BT.2020	9
Transfer Characteristics	BT.709	1	ST 2084 or PQ	16
Matrix Coefficients	BT.709	1	BT.2020	9

Media Info:

Color primaries : BT.709
Transfer characteristics : BT.709
Matrix coefficients : BT.709

Color primaries : BT.2020
Transfer characteristics : PQ
Matrix coefficients : BT.2020 non-constant

Switch Pro:

Color Primaries: ITU-R BT.709-5
Matrix Coefficients: ITU-R BT.709-5
Transfer Characteristics: ITU-R BT.709-5

Color Primaries: ITU-R BT.2020
Matrix Coefficients: ITU-R BT.2020 (non-constant)
Transfer Characteristics: SMPTE ST2084

HDR Metadata

Disney requires a Dolby Vision XML metadata file to be included with any HDR master. These specifications can be found here:

[Disney DolbyVisionSpecifications](#)

The Dolby Vision XML shall be conformed to the applicable video asset.

Apple Quicktime Packet Identifier (PID)

All Apple ProRes Quicktimes must be provided to Disney with adherence to a defined video track ID. The first track should be listed as 'Stream 0' when viewed through a command line or data level utility. Some software based players will interpret the video track as 'Track 1' regardless of its data order which is unacceptable. Disney recommends MediaInfo and will correctly interpret the position of the track and list it as 'ID:1'

Audio Track Layout

Channel	5.1 and 2.0	2.0 only*
1	Primary Lang - 5.1 L	MOS
2	Primary Lang - 5.1 R	MOS
3	Primary Lang - 5.1 C	MOS
4	Primary Lang - 5.1 LFE	MOS
5	Primary Lang - 5.1 Ls	MOS
6	Primary Lang - 5.1 Rs	MOS
7	Primary Lang - 2.0 Lo	Primary Lang - 2.0 Lo
8	Primary Lang - 2.0 Ro	Primary Lang - 2.0 Ro
9	Secondary Lang, M&E, or MDE - 5.1 L	MOS
10	Secondary Lang, M&E, or MDE - 5.1 R	MOS
11	Secondary Lang, M&E, or MDE - 5.1 C	MOS
12	Secondary Lang, M&E, or MDE - 5.1 LFE	MOS
13	Secondary Lang, M&E, or MDE - 5.1 Ls	MOS
14	Secondary Lang, M&E, or MDE - 5.1 Rs	MOS
15	Secondary Lang, M&E, or MDE - 2.0 Lo	Secondary Lang, M&E, or MDE - 2.0 Lo
16	Secondary Lang, M&E, or MDE - 2.0 Ro	Secondary Lang, M&E, or MDE - 2.0 Ro
17	MOS or Mono Dialogue	MOS or Mono Dialogue
18	MOS or Stereo Effects Left	MOS or Stereo Effects Left
19	MOS or Stereo Effects Right	MOS or Stereo Effects Right
20	MOS or Stereo Music Left	MOS or Stereo Music Left
21	MOS or Stereo Music Right	MOS or Stereo Music Right
22	MOS or Narration	MOS or Narration
23	MOS or Opt	MOS or Opt
24	MOS or Opt	MOS or Opt

* Please Note: If only mono is available, 2.0 pair tracks shall be DMO.

Audio ProTools Sessions

Should Disney require separate audio stems/mix(es) to be delivered, the preferred format is a ProTools session.

These include flattened audio WAV files for each Pro Tools track, and are arranged in a way to allow for easier interoperability between facilities and downstream workflows.

The ProTools sessions specifications can be found in this supplemental document:

[Disney AudioMasteringSpecifications](#)

Timed-Text/Subtitle Specifications

Subtitles may be requested to be created and provided in the following file format;

Preferable Timed-Text/Subtitle Formats

IMSC 1.1 Subtitle Specifications (.ttml)

Disney has standardized on IMSC 1.1 for the master subtitle elements.

Technical Requirements	
Format	IMSC 1.1 (ttml-imsc1.1)
File Extension	ttml
Frame Rate	As source
Display Standard Code	Open Subtitling

The full Disney IMSC 1.1 specifications can be found here:

[Disney_DigitalSupplyChain_SubtitleSpecifications](#)

The Disney IMSC 1.1. Style Guide can also be found here;

[Disney_DigitalSupplyChain_SubtitleandCCStyleGuide](#)

EBU-STL (.stl)

When providing EBU-STL files they must comply with EBU TECH. 3264-E (1991) and conform (with the accurate timecode and timebase) to the primary video bed.

<https://tech.ebu.ch/docs/tech/tech3264.pdf>

Technical Requirements	
Format	EBU-STL (TECH 3264-E)
File Extension	stl
Frame Rate	As source
Display Standard Code	Open Subtitling

Additional Supported Formats

Lambda CAP (.cap)

When providing Lambda CAP files they must comply with the Netflix specification and conform (with the accurate timecode and timebase) to the primary video bed.

<https://partnerhelp.netflixstudios.com/hc/en-us/articles/214807928-Lambda-Cap-Creation-Guide-v1-1>

Technical Requirements	
Encoding	Shift-JIS / UTF-8 with BOM / UTF-16
File Extension	cap
Frame Rate	As source
Display Standard Code	Open Subtitling

Subrip Text Based Subtitles (.srt)

Disney can accept SRT files should EBU-STL not be available.

Technical Requirements	
Format	Subrip Text SRT
File Extension	srt
Frame Rate	As source
Display Standard Code	Open Subtitling

Cavena (.890)

Disney can accept Cavena subtitle files should Lambda CAP not be available.

Technical Requirements	
Format	Cavena
File Extension	.890 / CIP
Frame Rate	As source
Display Standard Code	Open Subtitling

Subtitle Placement

Subtitles should be anchored to the bottom center of the screen with center justified text. If there is already text burned into the picture at that location on-screen, the subtitle text should move to the top of the screen.

- Graphically localized BDN subtitles may require micro positioned placement on the screen. Disney Operations team(s) will provide direction if this is required.
- Subtitles shall not cover or be on top of any readable text on screen.
- Subtitles shall NOT be located in the matte or touch the matte of letterboxed material. The text should be at minimum of 2% above or below the letterbox matte.
- All text shall fall within the Safe Title Area (90% of width and height or centered 1728 x 972) per ST 2046-1:2009.

Compliance

Photosensitive Epilepsy (PSE)

Servicing masters that are acquired or produced for The Walt Disney Company should comply with relevant territory regulatory PSE compliance requirements. Including but not limited to Ofcom, ITU, NAB-J and ISO standards.

File Nomenclature

For FNGI Titles

Titles/files should adhere to the abridged nomenclature as per defined in the [Enterprise Operations File Naming Convention](#).

File naming shell/mask;

SHOW_WPR/VERID*_REND_FPS_CL/CU-TF_NOTE.EXT

For Example;

Legion_YSS104_PROHQ1080p_23_LAS_EP104.mov

**Please Note: WPR/Version IDs should be provided by operations to distributors / productions in advance of delivery.*

For Disney Titles

Titles/files should adhere to the Disney abridged nomenclature as per the below;

File naming shell/mask;

SERIES_PROGRAM/EPISODE-TITLE_EPISODENUMBER_FILETYPE_ASPECT+TIMEBASE_LANGUAGE.EXT

For Example;

Scrubs_F001_prhq_1080p23_a16x9-178_SPA.mov

Production Documentation

Where possible the following production documents should be delivered in parallel to the A/V deliverables;

- Compliant PSE report
- QC report
- Music cue sheet
- Full original language (OV/Foreign) script – including;
 - Timecode notation *per line* that corresponds to the delivered video master
 - Word count per character
 - Creative series overview
 - List of on-screen text inserts
 - List of vocals

Please ensure that the relevant nomenclature is applied to the production document(s);

For FNGI Titles

SHOW_WPR/VERID_CL/CU-TF_DOCUMENTTYPE.EXT

For Example;

Legion_YSS104_LAS_Script.doc

For Disney Titles

SERIES_PROGRAM/EPISODE-TITLE_EPISODENUMBER_LANGUAGE_DOCUMENTTYPE.EXT

For Example;

Scrubs_F001_FRP_MusicCue.xls

File Delivery

EMEA

The Walt Disney Company - EMEA, have three primary delivery methods in which to receive content;

Aspera Faspex

For small volume / irregular distribution to The Walt Disney Company and for those with Aspera infrastructure, files can be sent via FASPEX to the following distribution list;

TWDC.Media.Deliveries@disney.com

Disney Media Monorail

For larger volumes / regular distribution to The Walt Disney Company, please use Disney's Media Monorail (Template - <https://mediamonorail.com/home?w=82&t=13607>). Users will have to authenticate using their Disney MyID credentials. If user(s) have issues with access or do not have a MyID account, please contact your Disney representative for assistance. If using Media Monorail please include the above recipients on notifications.

Disney SendIT

For small volume / irregular distribution to The Walt Disney Company and for those without internal UDP technology, please use Disney's Aspera Faspex infrastructure [Disney SendIT](#)*. Users can register for an account without having to be registered with a Disney MyID account (SSO). If using Disney SendIT, files can be sent via FASPEX to the following distribution list;

TWDC.Media.Deliveries@disney.com

**Please Note: Disney SendIT's terms and conditions before using.*