NBCUniversal Operations & Technology TECHNICAL OPERATIONS

Version 2.1 Format Spec Sheet #CM-004P J2K Archival Master File

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1.0 DELIVERY AND FORMAT SPECIFICATIONS

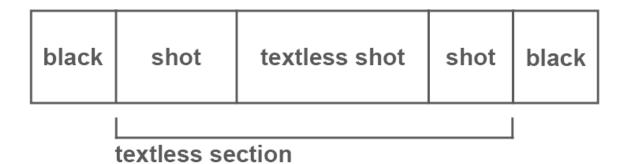
- 1. All High Definition Video Datacine transfers to digital file shall be from the final, color-corrected version, 23.976psf, 1920x1080, 1.78:1 (16x9) aspect ratio, encoded <u>similar</u> to a DCP package:
 - a. A MXF-wrapped (OP-Atom), JPEG2000 file at 500Mb/s in the XYZ colorspace
 - b. A MXF-wrapped (OP-Atom) 24bit, 48Khz, multi-channel, LPCM Audio file
 - c. Associated XML text files (e.g. CPL, PKL, AssetMap)
 - d. The deliverable files must comply with Section 4 (Compression) and 5.3 (Packaging-Composition) of the DCI Digital Cinema System Specification ver 1.2 (March 7, 2008) (http://www.dcimovies.com) with the following exceptions:
 - The maximum bitrate of the video should be 500Mb/s and NOT 250Mb/s.
 - ii. Finalized Data should be 4:2:2 Legal Code Values (CV 64-940) when set to Full Range.CV 0-1023 Full Range is NOT Acceptable.
 - The MXF header of the J2k file should include the starting timecode of the content.
 - iv. The pixel dimensions of the content should be 1920x1080.
- 2. Each OP-Atom MXF file should contain a single essence type (i.e. audio or picture) and be labeled per the NBCU J2k file spec below.
- 3. None of the J2k files should include any MXF Track File, essence encryption or other encryption of any kind.
- 4. The session or project files from every pan and scan session (i.e. the 4x3FF, 16x9FF, 16x9LB) should be included with the XML files from the DCP package if the PS was done on a Davinci Resolve or Filmlight Baselight.
- 5. Content files (i.e. the video and audio MXF files) should be delivered with a MD5 checksum file. Checksum tools are freely available for all operating systems.
 - a. Sample of MD5 338084e1c7ad6cb81c5bb259cfbaaebd
 - b. If a file has a relative path with MD5:
 - 338084e1c7ad6cb81c5bb259cfbaaebd /J2Kfile

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- 6. File deliverables should be electronically delivered (See Section 2.3) and as an alternative via hard drive with encryption approved by Universal Content Management.
- 7. Hard drives used to transfer digital files should be compatible with both Mac and PC operating systems and free of any viruses, Trojans, or spyware.
- 8. Material mastered should contain 23.98p start timecode in the header of the MXF file (Note: Time code is not part of the DCI spec and is an additional requirement of NBCU.)
- 9. The audio files must sync to the picture elements. A 2-pop must be included in both the audio and video files.
- 10. Program should be recorded as a longplay file with continuous timecode. The timecode should sync Hour 1 (01:00:00:00) to the first frame of picture or program start. The file should include the full normal header (See "Head Format"), prior to program start and textless material after end of program. Textless material should be included as part of the longplay J2K file, and should match the texted sections of the content to the frame.
- 11. If elements are delivered with pulled commercial blacks and bumpers, then pulled commercial blacks should be :01 second in duration.
- 12. Format the textless as follows: Starting one (1) minute after the last frame of program (video or audio ring-out, whichever comes last). Encode textless sections with no breaks in between shots (not sections) starting 1 minute after last frame of picture. (A section may contain multiple shots of text that will be replaced with textless material in this area. Include <u>all</u> textless backgrounds for all texted and textless shots within a section). If the next texted section occurs within 5-10 seconds of the previous section, please make it inclusive with the previous section. Otherwise, place (:01) second of black in between each section.

Timecode for the textless material should be continuous from the end of program through the end of textless material.

If the Main and/or End Title sections are over black, it is not necessary to place black at the end of program for those sections.



- 13. After the end of textless material, encode one (:01) second of video black without sound. Timecode should be continuous from the end of textless through this one-second section of black.
- 14. If no textless exists, after the conclusion of program, add **one minute** of black and digital silence.
- 15. In all types of archival masters (with the exception of the full aperture), all boom mics, camera flags, dolly tracks, frame lines and optical matte lines, etc... should be eliminated from the video picture entirely and should not be seen when viewed in underscan. All titles should fit within safe titles for the respective aspect ratio. All titles for the Full Frame versions (16x9 & 4x3) need to be transferred in Full Frame. Letterboxing or Matting the titles is not acceptable for the Full Frame versions. Pre-approval from NBCU is required; if no other options are available. Please contact your NBCUniversal representative.
- 16. Please note for Title Safe / Action Safe NBCUniversal now uses the 90/93 screen percentage for all aspect ratios. If you have any questions, please contact your NBCUniversal Representative.
- 17. Any website / URL information contained anywhere in logo or end credits should be brought to the attention of your NBCUniversal representative for further direction.
- 18. Any Emergency Alert System- EAS (audio) or Broadcast (video) signals need to be brought to the attention of your NBCUniversal representative.
- 19. Universal tour tag should always be removed from end of program

20. *Archival masters should have the Universal Logo placed at the start of the program, 01:00:00:00.

*For Focus Features titles, the Focus logo should go at the head of program.

*For TV product, picture should start at hour 01:00:00:00, without the Universal logo at the head.

*For Acquisition titles where Universal logo is not available, slug24 seconds of black at the head of program starting at 01:00:00:00.

If you are unclear as to what category this file falls into, please check with your NBCUniversal Representative.

21. For feature length content last frame of picture will be content either the end of audio ring out or last frame of fade or content. This should be noted in all QC reports.

For TV product, there is always a logo at tail. Last frame of picture would be either last frame of the logo or the end of audio ring out. This should be noted in all QC reports.

22. The color range of the content should not be scaled in any way during the creation of the J2k file. The J2k file should meet the spec for video and chroma levels. SDR files should always be created as YUV legal but the metadata is tagged as "Full."

NBCUniversal – Content Management – Mastering Team has adopted a requirement that <u>all OLED</u> color monitoring be set up with the <u>"Judd Modification, Modified Target, or Offset"</u> D65 white point. These settings shall <u>apply to all</u> Color Grading, QC, and <u>any other OLED monitoring</u> of either High Dynamic Range or Standard Dynamic Range content, when viewed on a professional or consumer OLED monitor.

NOTE ON MONITOR CALIBRATION:

- 1. <u>All OLED</u> (Organic Light-Emitting Diode) monitors, High Dynamic Range or Standard Dynamic Range, must be set to a D65 white point with the "Judd Modification, Modified Target or Offset" applied. The standard X, Y values are listed below for reference.
 - a. For BVM X300, BVM E-250/250A
 - i. X= 0.3067
 - ii. Y = 0.3180
 - b. For PVM X550
 - i. X =0.3047
 - ii. Y = 0.3170
- 2. Other types of flat monitors (non-OLED) and/or CRT's are required to be set to a standard D65 white point based on the CIE 1931 standard.
 - a. X = 0.3127
 - b. Y = 0.3290
- 3. Please refer to the specific OLED monitor manufactures recommendation for properly applying the "Judd Modification, Modified Target, or Offset". The Sony specifications for various white points are listed below for reference should a different white point be needed:

All but PVM X55	50	CIE 1931 Coordinates	Judo	l Corrected
X	У	X		У
D93	0.2831	0.2971	0.2771	0.2861
D65	0.3127	0.3290	0.3067	0.3180
D61	0.3198	0.3360	0.3138	0.3250
D55	0.3324	0.3474	0.3264	0.3364
DCI White	0.3140	0.3510	0.3080	0.3400

For PVM X550		CIE 1931 Coordinates		l Corrected
X	У	X		У
D93	0.2831	0.2971	0.2751	0.2851
D65	0.3127	0.3290	0.3047	0.3170
D61	0.3198	0.3360	0.3118	0.3240
D55	0.3324	0.3474	0.3244	0.3354
DCI White	0.3140	0.3510	0.3060	0.3390

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1.1 VIDEO FORMAT

1. When viewed with a broadcast monitor and scope, 1080 line mastered material shall comply to SMPTE 274M (1920 horizontal samples x 1080 active lines)

Total Horizontal Blanking	11.18-11.34
First Active Line:	Field 1 / 2: See Spec CM-001C See Spec CM-001C
Last Active Line: Video Level:	700 MV-730MV
Chroma Level:	770 MV -840 MV

1.2 TYPES OF DIGITAL VIDEO MASTERS REQUIRED -FEATURE

Digital Video Masters should match the content and specifications below. The information below is provided for reference. <u>All title elements should fit within the respective aspect ratio's safe title area.</u>

***Please note for Title Safe / Action Safe NBCUniversal now uses the 90/93 screen percentage for all aspect ratios. If you have any questions, please contact your NBCUniversal Representative.

- 1. 16x9 (1.78:1) Full Frame May be created either by Pan and Scan process (if original film elements are 2.0:1 or greater), or by sizing Super 35 and 1.85 spherical elements to accommodate the 1.78:1 aspect ratio of the HD master.
- 2. For all aspect ratio line counts (first/last) please reference Spec CM-001C If the original intended aspect ratio is 1.85:1, the 16x9 Full Frame archival master file should be sized to accommodate the 1.85:1 matte in the cloning or down-conversion process. Universal will <u>not</u> accept any line variance from those stated in spec CM-001C for the first and last line of active picture. Matte lines should not fluctuate within the feature. If delivering a theatrical version and an extended or unrated version, then matte lines must be consistent between versions.

- 3. 16x9 Letterbox (2.0:1, 2.35:1, etc.) Letterbox versions are to be consistent with theatrical exhibition aspect ratios. Matte settings should be set according to spec CM-001C. Universal will **NOT** accept any line variance from the stated first and last line of active picture. Matte lines should not fluctuate within the feature. If delivering a theatrical version and an extended or unrated version, then matte lines must be consistent between versions.
- 4. (If Applicable / If ordered) 4x3 (1.33:1) within 16x9 The 4x3 image contained within the 16x9 aspect ratio of HD should be determined by applying a 4x3 reticule to the center of the 16x9 video raster.
 - a) All Super 35 and 1.85:1 spherical elements should be sized to accommodate the 4x3 raster reticule. This will ensure that 4x3 full frame down conversions will receive the full intended film image during the conversion process.
 - b) When adapting an anamorphic or cinemascope film element (eg. 2.35:1 aspect ratio), all Pan and Scan decisions should be made using the 4x3 safe action reticule as displayed by the HD monitor.
 - c) When side matting the 4x3 Digital File master, ensure that the side matte is narrower than the 4x3 raster reticule, as displayed on the HD monitor, giving approximately 1.35 of picture information.
 - 5. Full-Aperture Scan The original, full-aperture scan from the telecine or digital element, should be color-corrected and delivered as HD 1920x1080 (full aperture), 2k 2048x1556 (full aperture), or 4k 4096x3112 (full aperture) uncompressed DPX files 23.976, 10bit RGB 4:4:4, Rec 709. DPX files should be delivered electronically (see delivery section) or on LTO data tape of the most current format, following the SMPTE RP189 guidelines. The DPX files should also be transcoded to J2k following the same DCI DCP-based file spec mentioned above.

1.3 TYPES OF DIGITAL VIDEO MASTERS REQUIRED - EPISODIC

Digital Video Masters should match the content and specifications below. The information below is provided for reference. <u>All title elements should fit within the respective aspect ratio's safe title area.</u>

***Please note for Title Safe / Action Safe NBCUniversal now uses the 90/93 screen percentage for all aspect ratios. If you have any questions, please contact your NBCUniversal Representative.

- 1. 16x9 (1.78:1) Full Frame May be created either by Pan and Scan process (if original film elements are 2.0:1 or greater), or by sizing Super 35 and 1.85 spherical elements to accommodate the 1.78:1 aspect ratio of the HD master.
- 2. For all aspect ratio line counts (first/last) please reference Spec CM-001C

If the original intended aspect ratio is 1.85:1, the 16x9 Full Frame archival master file should be sized to accommodate the 1.85:1 matte in the transcode, cloning or down-conversion process.

- 3. (If Applicable / If ordered) 4x3 (1.33:1) within 16x9 The 4x3 image contained within the 16x9 aspect ratio of HD should be determined by applying a 4x3 reticule to the center of the 16x9 video raster.
 - a) All Super 35 and 1.85:1 spherical elements should be sized to accommodate the 4x3 raster reticule. This will ensure that 4x3 full frame down conversions will receive the full intended film image during the conversion process.
 - b) When adapting an anamorphic or cinemascope film element (eg. 2.35:1 aspect ratio), all Pan and Scan decisions should be made using the 4x3 safe action reticule as displayed by the HD monitor.
 - c) When side matting the 4x3 Digital File master, ensure that the side matte is narrower than the 4x3 raster reticule, as displayed on the HD Monitor, giving approximately 1.35 of picture information.
- 4. Full-Aperture Scan The original, full-aperture scan from the telecine or digital element, should be color-corrected and delivered as HD 1920x1080 (full aperture), 2k 2048x1556 (full aperture), or 4k 4096x3112 (full aperture) uncompressed DPX files 23.976, 10bit RGB 4:4:4. DPX files should be delivered electronically (see delivery section) or on LTO data tape of the highest generation, following the SMPTE RP189 guidelines. The DPX files should also be transcoded to J2k following the same DCI DCP-based file spec mentioned above.

1.4 HEAD FORMAT

The current Universal Content Management head format specification requires 60sec of Hi-Def SMPTE Color bars.

Time Code	Video	Audio
00:57:30:00	Hi- Def SMPTE Color Bars -75% Vector bars (Program must match bars) (60 seconds)	
00:58:30:00	Slate (30 seconds) Digital Silence	
00:59:00:00	Digital Black Digital Silence	
00:59:58:00	Flash Frame (2 over blk)	Sync Pop
01:00:00:00	Program Program	

1.5 TAIL FORMAT

- 1. Only if TV Episodic product Episodic Logo At Tail (not at head of content)
- 2. After the conclusion of program (prior to any textless material),add **one minute** of black and digital silence before the start of textless.
- 3. After the end of textless record **one second (:01)** of video black and digital silence to indicate end of file.

1.6 TEXTED/TEXTLESS INFORMATION & VERSIONS

1. TEXTED (Subtitled) MASTERS:

All Texted Masters are to include any or all of the following text: Main and End Titles, Dates, Locals, Epilogues, Prologues, and Subtitles. All Textless Material should be recorded 1 minute after end of program. The time code on the Textless sections should be continuous, including pre-roll and post-roll of at least :01 second of black before/after each section (please see diagram earlier in this spec). If the Main and/or End Titles are over black, it is not necessary to place black at the end of program for those sections. Slates should indicate "Texted" Master.

If there are **more than 20 texted shots**, it will be necessary to also provide a <u>fully</u> Textless Master. (Please see textless section below*)

* If a fully Textless master is required, the <u>only</u> Textless material to be placed at the tail of the TEXTED master are the **Textless backgrounds for the main and end titles**. If the main and/or end titles are over black, no material is required.

2. TEXTLESS MASTERS:

If a title has more than 20 texted shots and a fully Textless Master is required, it should have no text in the program (fully Textless) and will include all textless backgrounds within the program for all subtitles, epilogues and prologues, dates and locals. The fully textless version **should still contain**Texted Main and End credits. Only Textless shots of Main and End Titles should be recorded 1 minute after end of program on last part of file. The time code on the Textless backgrounds should be continuous, including preroll and post-roll of at least :01 second of black per background (please see diagram earlier in this spec). If Main and/or End Titles are over black it is not necessary to place black at the end of program. Slates should indicate this is a "Textless" Master.

1.7 MAIN & END CREDITS: (INCLUDING ALL TEXT)

- 1. If there is a 1.33:1 deliverable required, then the following shall apply:
- 2. If the title sequences projected for Theatrical Distribution does not fit within a 1:33 Full Frame Video, then a TV Safe 1:33 Flat File will be required. This file will need to be created immediately after the original titles are completed, so that it can be delivered in time for use.

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- 3. Any applicable backgrounds must be repositioned and/or pushed into so that no mattes, unrendered black area, or any grip equipment is visible in TV 1:33. The Full Frame image should be clear of anything that will require a blow up during the mastering process. The titles should be re-composited over the new background, keeping uniformity and should be in safe action*.
- 4. *No title may exceed safe action. Any title going beyond safe action must be recomposited to fit into safe action.

1.8 AUDIO FORMATS

Audio should be delivered as uncompressed linear PCM Broadcast WAVE files fully rendered and flattened, wrapped in a single OP-Atom MXF file in accordance with the DCI specs for a DCP package.

All audio channels should contain a 1K tone "2-pop" for one full frame, 2 seconds before the hour of each hour 00:59:58.00 for Hour 1.

(Note: Since NBCU requires long-play files, more than one part per title and version will be an exception.)

SOUND FORMAT FOR <u>ALL</u> VERSIONS:

IF 6-TRACK MIX (5.1 & LEFT TOTAL/RIGHT TOTAL SURROUND ENCODED):

If 6-Track (5.1Audio):

Channel #	Channel Assignment
Channel 1:	Left
Channel 2:	Right
Channel 3:	Center
Channel 4:	L.F.E.
Channel 5:	Left Surround
Channel 6:	Right Surround
Channel 7:	LT +12dB (PL2)
Channel 8:	RT + 12dB (PL2)
Channel 9	M&E LT +12dB (PL2) (Fully Filled)
Channel 10:	M&E RT +12dB (PL2) (Fully Filled)
Channel 11:	LT +20dB (PL2)
Channel 12:	RT +20dB (PL2)

If 5.1 Audio Is Unavailable:

Channel #	Channel Assignment
Channel 1:	LT +12dB (PL2)
Channel 2:	RT + 12dB (PL2)
Channel 3:	M&E LT +12dB (PL2) (Fully Filled)
Channel 4:	M&E RT +12dB (PL2) (Fully Filled)
Channel 5:	LT +20dB (PL2)
Channel 6:	RT +20dB (PL2)
Channel 7:	M&E LT +20dB (PL2) (Fully Filled)
Channel 8:	M&E RT +20dB (PL2) (Fully Filled)

If Monaural with Separate M&E:

Chanel #	Channel Assignment
Channel 1:	"Limited" Mono Mix (+12dB)
Channel 2:	"Limited" Mono Mix (+12dB)
Channel 3:	"Limited" Mono M&E (+12dB) (Fully Filled)
Channel 4:	"Limited" Mono M&E (+12dB) (Fully Filled)
Channel 5:	"Wide" Mono Mix (+20dB)
Channel 6:	"Wide" Mono Mix (+20dB)
Channel 7:	"Wide" Mono M&E (+20dB) (Fully Filled)
Channel 8:	"Wide" Mono M&E (+20dB) (Fully Filled)

If Monaural without Mu/Fx:

Chanel #	Channel Assignment
Channel 1:	"Limited" Mono Mix (+12dB)
Channel 2:	"Limited" Mono Mix (+12dB)
Channel 3:	"Wide" Mono Mix (+20dB)
Channel 4:	"Wide" Mono Mix (+20dB)

1.9 SLATE & LABEL INFORMATION

UNIVERSAL CONTENT MANAGEMENT ARCHIVAL MASTER FILE - HD 1080 / 23.98P TITLE: PROD #: VERSION: **TEXTED** FORMAT: (e.g., 4x3 P/S, 16x9 Letterbox – 2.35) DAISY ID# PART# OF **PART RUNNING TIME:** MASTERING FACILITY/DATE SOUND INFO TEXTLESS AT TAIL OF (LAST) PART # RUN TIME **(see below)

*Please note that aspect ratios should be labeled as they are. Ex. 1.35, 1.37, 2.39, 2.40. No rounding on aspect ratios please.

**For Run Time Calculations – Please round up for all run times. Please use end of picture or audio whichever extends longer as the out frame of the content.

Ex – end of picture is 02:15:16:04 – TRT would be **75:17**

1.10 QUALITY CONTROL

Vendors are expected to apply the same level of quality control to file deliverables that they would to an archival master tape deliverable. All deliverables must be checked for errors or defects as well as to ensure compliance with the specifications above, before being delivered to NBCU.

A QC report is required in both an electronic format (e.g. PDF, Word, Text, Excel), and as a hard copy, with each deliverable.

NBCU will randomly QC vendor files to ensure on-going compliance with the standards and specifications of NBCU. In the event that a file package fails this random QC, NBCU reserves the right to charge the vendor to QC any or all of the files from the vendor whose quality may be reasonably and fairly called into question.

1.11 APPROVED JPEG-2000 DIGITAL FILE VENDORS

1.11.1 DCI Specification Information

NBCU has adopted the DCP portion of the DCI Specification as a starting framework for its JPEG 2000 Digital Master files. The complete DCI specification as well as more information about the DCI process can be found at

http://www.dcimovies.com. Please note, NBCU guidelines may supersede the DCI specification in some instances. When in doubt, please contact your NBCU representative for clarification.

1.11.2 Approved Vendors

In order to maintain quality and interoperability, NBCU has developed a list of vendors who have demonstrated the conformance to the DCI specification, the NBCU specification and the quality levels that NBCU requires when creating a JPEG 2000 digital master file. The current approved vendors and products are:

R&S – Clipster v.6.2 and beyond

1.11.3 Vendor Certification

Since NBCU realizes that not all Suppliers will want to use the same vendor(s), a NBCU J2k Vendor Certification Test Plan is available. Suppliers or manufacturers, who would like to have other equipment certified for the creation of NBCU J2k master files, will need to complete the Certification Test Plan and submit the results to NBCU for verification. New vendors will be added to the approved list as they are certified and the list will be published periodically or available upon request at any time. To request the NBCU J2k Vendor Certification Test Plan please contact:

Name: Harvey Landy

Telephone: (818) 777-2858

E-Mail: <u>Harvey.Landy@nbcuni.com</u>

1.12 NBCU J2K LABELING SCHEMA

The NBCU J2k Labeling Schema includes the following information which is generated by our PO system:

Sample file name:

EXAMPLE 1 Feature

DA000101942 08C40 FTR 240 LB ENG

EXAMPLE 2 Episodic

DA000102214 UYH71 EPS 178 FF ENG

2.0 DELIVERY INSTRUCTIONS

Preferred delivery method for <u>all</u> content is digital delivery. To be onboarded, please contact your NBCU Content Management Representative. Hard drives are only accepted by first speaking with your NBCU Content Management Representative and obtaining authorization.

2.1 DELIVERY NOTIFICATION

The NBCU purchase order creator will need to be email notified when a ProRes file order has been fulfilled by the vendor and has been shipped. This notification should include the following:

- PO Number
- J2K Filename(s)
- Hard Drive Barcode (if applicable)

2.2 PACKING SLIP

A packing slip is required for the delivery of each external hard drive. The packing slip will need to include the following:

- PO Number
- ProRes Filename(s)
- Hard Drive Barcode

2.3 APPROVED EXTERNAL HARD DRIVES FOR MEDIA TRANSPORT

All vendors are expected to provide their own external hard drives to transport the digital files outlined in this document.

NBCU has the following requirements of the external hard drives:

- The drives should be free from any viruses, malware, spyware, Trojans, or any other malicious code that could damage, destroy, or compromise the integrity of NBCU equipment.
- The drives should be provided in a hard plastic case suitable to protect the drive from the normal wear and tear of transport.
- Appropriate interface cables (e.g. USB, eSATA) as well as power cables should be included with the drive.
- Due to the large file sizes of the content in question, NBCU requires
 that all external hard drives used for media transport, have a USB 3.x
 USB 2.x or eSATA interface for backwards compatibility. Please note
 that content delivered on a device without a USB or eSATA interface
 may be rejected and returned to the vendor.

Hard Drives should be shipped to:

West Coast Quality Control 100 Universal City Plaza, Building 1440 - 17th Floor, Universal City, CA 91608 ATTN: Nathen Coyle or Jason LaMotte

****Please confirm ATTN with your Content Management Coordinator before sending

Once NBCU staff removes the content from the drive, it will be erased and returned to the vendor, within a reasonable period of time for the delivery of subsequent deliverables.

****Reminder the preferred delivery method for <u>all</u> content is digital delivery. To be onboarded, please contact your NBCU Content Management Representative. Hard drives are only accepted by first speaking with your NBCU Content Management Representative and obtaining authorization.****

2.4 KDM SECURITY ENCRYPTION FOR PRE-THEATRICAL CONTENT

NBCUniversal takes the security of our content as our top priority. Therefore, NBCUniversal has adopted a policy where all J2K's delivered prior to Theatrical Release (Domestic or International) must be protected.

Details below:

- All vendors are expected to use KDM Encryption for delivery of J2K content that is provided to NBCUniversal prior to any release date.
- The NBCUniversal certificate files will be provided upon request. Please consult your NBCUniversal Representative to obtain them.
- KDM Encryption should be applied without an end date, only "keyed" to all the NBCUniversal servers who keys / certificates are provided.
- Full access to edit, amend, copy, modify etc. should be granted to the files delivered.

3.0 DOCUMENT HISTORY

Version #	Date	Revised by	Reason for Change
10101011 11		The thou by	Troubon for onling
2.1	09/22/2022	Harvey Landy	Clarified 1 min. of black after conclusion if no textless exists
2.0	04/12/2022	Harvey Landy	Version 2.0 document created
1.18	04/28/2021	Harvey Landy	Added TRT rounding information to slate section
1.17	03/28/2021	Harvey Landy	Removed Sync Pop at tail missing references.
1.16	01/24/2021	Harvey Landy	Removed line count specific numbers and changed to reference spec CM-001C
1.15	09/17/2020	Harvey Landy	Added verbiage regarding any EAS signals need to be brought to the attention of Staff
1.14	08/18/2020	Harvey Landy	Added Focus Feature Logo information in item 1.0 #17.
1.13	02/10/2020	Harvey Landy	Added Hard Drive Delivery location/attn information
1.12	11/14/2019	Harvey Landy	Added digital delivery as the preferred method. Added pulled black/Episodic logo information.
1.11	10/18/2019	Harvey Landy	Corrected Stereo only audio channels from 6 back to 8
1.10	09/22/2019	Harvey Landy	Added KDM Encryption Requirements and 2-Pop head/tail added back
1.9	05/08/2019	Harvey Landy	Added title safe language for all aspect ratios and "if ordered" on 4x3 versions

1.8	02/22/2019	Harvey Landy	Added line count for multiple scopes and also added additional Aspect Ratios. Also removed 2pop head/tail
1.7	10/10/18	Harvey Landy	Added URL removal language
1.6	06/29/18	Gabrielle Gasser	Edited wording and added graphic for textless
1.5	06/20/18	Gabrielle Gasser	Edited wording on 1.17
1.4	04/06/18	Megan McMicking	Note on tour tag added
1.3	04/04/18	Megan McMicking	Spec number changed from CM-002F to CM-004P
1.2	02/02/18	Megan McMicking	Added Judd Specifications
1.1	02/20/18	Megan McMicking	Document formatting
1.0	03/15/11		Old format