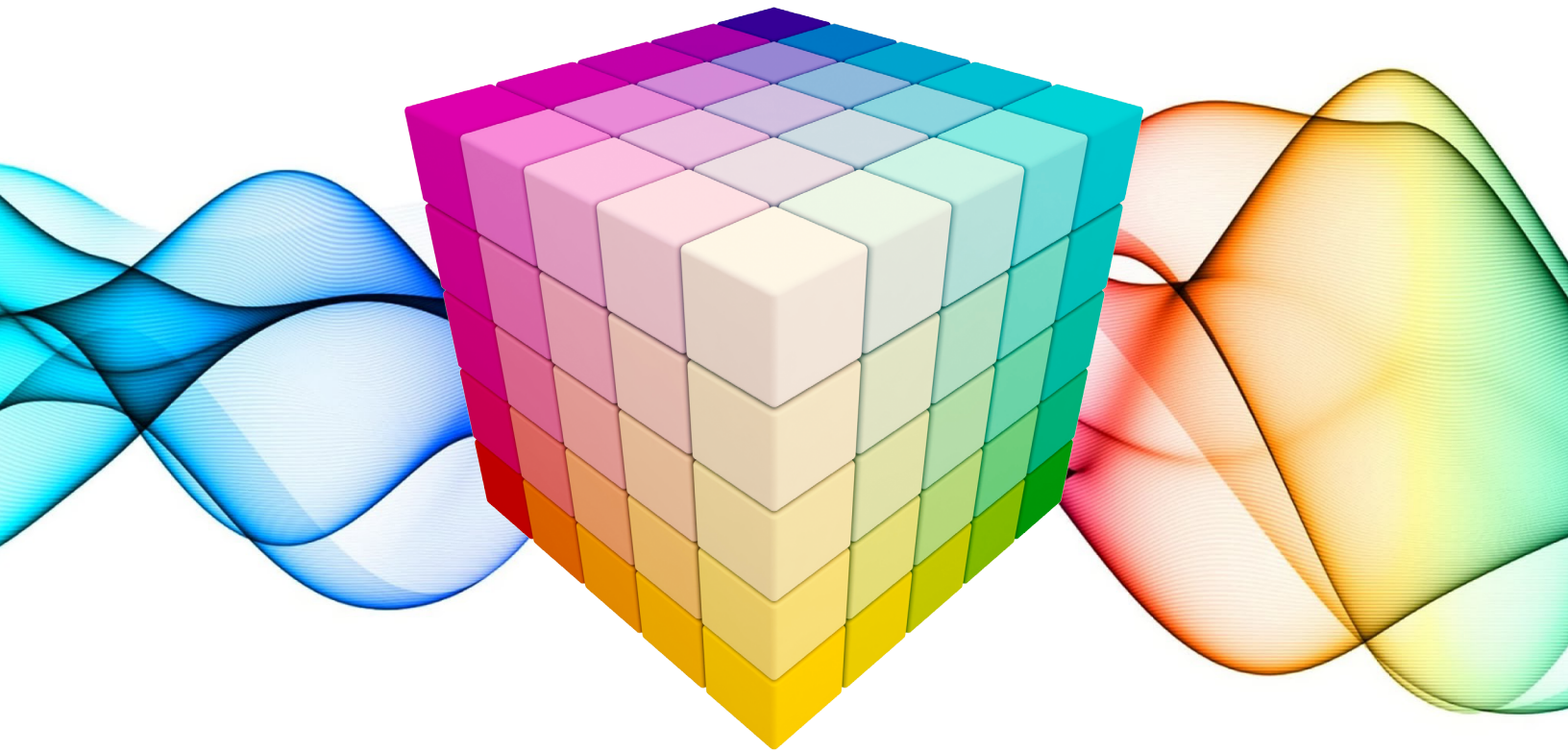# ODYSSEY™

Odyssey7Q+
Odyssey7Q

HD/4K Apple ProRes
Uncompressed DPX
Raw (ARRI, Canon, Sony FS7, FS700, POV)
Raw to Apple ProRes
4K to 2K/HD Downscale ProRes
Multistream Viewing

Updated June 2, 2015 | Firmware Release 2015.5

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design**

NOTES ABOUT USING THE ODYSSEY WITH 3D-LUTS

Odyssey7Q and Odyssey7Q+ have support for 3D-LUTs while recording/monitoring in the following modes:

- **HD/4K Apple ProRes**
- **Uncompressed DPX**
- **Raw (ARRI, Canon, Sony FS7, FS700, POV)**
- **Raw to Apple ProRes**
- **4K to 2K/HD Downscale ProRes**
- **Multistream Viewing**

Recording video or RAW data with a LUT applied is not supported at this time. LUTs are for monitoring and reference only.

Odyssey firmware v2015.5 includes support for both legal and extended LUT support.

In order to use a 3D-LUT other than one of the preset LUTs with your Odyssey, you will need to convert the LUT file from the .CUBE format into the .CDLUT format using the CD LUT App that is available for download from the Convergent Design website.

Once the file has been converted you will need to copy the .CDLUT file to the Odyssey using an Odyssey SSD or Utility Drive or convert the files directly to the SSD. LUTs must be placed in the CD_LUT folder of the SSD to be recognized by the Odyssey.

Up to 140 3D-LUTs can be stored in .CDLUT format on the Odyssey7Q or Odyssey7Q+

Note: Odyssey7 supports the built-in preset LUTs only.

Exporting LUTs from the Odyssey is not supported at this time.

3D-LUT FORMAT SUPPORT

Odyssey7Q and Odyssey7Q+ support standard 3D-LUTs in .CUBE file format, which can be generated by various software suites such as DaVinci Resolve, Pomfort LiveGrade and others.

3D-LUT or 3D.cube files must converted to the Odyssey LUT format (.CDLUT) by the CD LUT App v1.1 in order for the LUTs to work with the Odyssey.

ODYSSEY PRESET LUTS

Odyssey features built-in preset LUTs that have been provided by Convergent Design as part of firmware version 2015.5 as well as additional preset LUTs, which are not built-in, but can be converted and loaded onto the Odyssey. Both the built-in and additional preset LUTs are available for download as .CUBE files from the Convergent Design website at https://convergent-design.com/download-luts.html

BUILT-IN PRESET LUTS

The following preset LUTs are preloaded onto the Odyssey7Q and Odyssey7Q+ with firmware version 2015.5. The accompanying .CUBE files are available for download through our website.

LUT	Description	Camera
ARRI_EE_LOG_R709	Standard Alexa LogC to Video LUT – camera default *AlexaV3_EI0800_LogC2Video_Rec709_EE_davinci3d.cube*	ARRI
BMD_CC_EE_FILM_V	Version 2 Blackmagic Cinema Camera LUT from Resolve *Blackmagic Cinema Camera Film to Rec709 v2.cube*	BMCC
BMD_PC_EE_FILM_V2	Version 2 Blackmagic Production Camera 4K LUT from Resolve *Blackmagic Production Camera 4K Film to Rec709 v2.cube*	BMPC 4K
Canon_EE_709_LOG_WDR	CanonLog/Rec.709 to Wide Dynamic Range Rec.709 *BT709_CanonLog-to-BT709_WideDR_17_Ver1.0.cube*	Canon
Canon_EE_Cin_LOG_WDR	CanonLog/CinemaGamut to Wide Dynamic Range Rec.709 *CinemaGamut_CanonLog-to-BT709_WideDR_17_Ver1.0.cube*	Canon
PANASONIC_EE_LOG_709	Duplicate of the ALEXA Rec.709 LUT, provided for convenience *VLOG-VGAMUT to Rec709.cube*	Panasonic
RED_EE_RLF_RG3	REDlogFilm to REDgamma3 with colour space as input, e.g. REDcolor3 *REDlogFilm to REDgamma3.cube*	RED
SONY_EE_Slog1_R800	S-Log1 to Rec.709(800%) with no colour space change, matching the in-camera MLUT *S-Log1 to Rec709_800.cube*	Sony
SONY_EE_Slog2_LC709A	Alexa style Low Contrast Rec.709, converted from the Sony original to Extended range in and out, to match the in-camera MLUT *SLog2-SGamut_To_LC-709TypeA.cube*	Sony
SONY_EE_Slog2_R800	S-Log1 to Rec.709(800%) with no colour space change, matching the in-camera MLUT *S-Log2 to Rec709_800.cube*	Sony

SONY_EE_Slog3C_L709A	Alexa-style Low Contrast Rec.709, converted from the Sony original to Extended range in and out, to match the in-camera MLUT *SLog3SGamut3.CineToLC-709TypeA.cube*	Sony

ADDITIONAL PRESET LUTS

The following preset LUTs are not preloaded onto the Odyssey7Q and Odyssey7Q+, but have been provided for use with the Odyssey7Q or Odyssey7Q+. The .CUBE files are available for download throught the Convergent Design website and must be converted using the CD LUT App then loaded onto the Odyssey using an SSD drive.

LUT	Description	Camera
ARRI_EE_LOG_DCIP3	Standard Alexa LogC to Video LUT – camera default *AlexaV3_EI0800_LogC2Video_Rec709_EE_davinci3d.cube*	ARRI
BMD_CC_EE_FILM_V1	Version 2 Blackmagic Cinema Camera LUT from Resolve *Blackmagic Cinema Camera Film to Rec709 v2.cube*	BMCC
BMD_PC_EE_FILM_V1	Version 1 Blackmagic Production Camera 4K LUT from Resolve *Blackmagic Production Camera 4K Film to Rec709.cube*	BMPC
Canon_EE_CineG_R709	CinemaGamut/Canon Log to Rec.709 colour and pure Rec.709 curve with clipped highlights *CinemaGamut_CanonLog-to-BT709_BT709_17_Ver1.0.cube*	Canon
Canon_EE_P3_LOG_P3	DCIP3+/CanonLog to DCI P3 gamma (2.6) and colour space *DCIP3+_CanonLog-to-DCIP3_DCI_17_Ver1.0.cube*	Canon
Canon_EE_P3_LOG_R709	DCIP3+/CanonLog to Rec.709 colour and pure Rec.709 curve with clipped highlights *DCIP3+_CanonLog-to-BT709_BT709_17_Ver1.0.cube*	Canon
Canon_EE_P3_R709_WDR	DCIP3+/CanonLog to Wide Dynamic Range Rec.709 *DCIP3+_CanonLog-to-BT709_WideDR_17_Ver1.0.cube*	Canon
PANASONIC_EE_VLOG_P3	Duplicate of the ALEXA P3 LUT, provided for convenience *VLOG-VGAMUT to Rec709DCI P3*	Panasonic
SONY_EE_SL2_L709A-1	S-Log2/S-Gamut to Alexa-style Low Contrast Rec.709, "printed down" one stop *SLog2-SGamut_To_LC-709TypeA_pull_1.cube*	Sony
SONY_EE_SL2_L709A-2	S-Log2/S-Gamut to Alexa-style Low Contrast Rec.709, "printed down" two stops *SLog2-SGamut_To_LC-709TypeA_pull_2.cube*	Sony
SONY_EE_SL3C_L709A-1	S-Log3/S-Gamut3.Cine to Alexa-style Low Contrast Rec.709, "printed down" one stop SLog3-SGamut3.Cine_To_LC-709TypeA_pull_1.cube	Sony
SONY_EE_SL3C_L709A-2	S-Log3/S-Gamut3.Cine to Alexa-style Low Contrast Rec.709, "printed down" two stops SLog3-SGamut3.Cine_To_LC-709TypeA_pull_2.cube	Sony
SONY_EE_Slog2_Cin709	S-Log2/S-Gamut to simulated "film colour" SLog2_To_Cine+709.cube	Sony
SONY_EE_Slog2_R709	S-Log2/S-Gamut to Rec.709 colour and pure Rec.709 curve with clipped highlights SLog2-SGamut_To_Rec709.cube	Sony
SONY_EE_Slog3C_R709	S-Log3/S-Gamut3.Cine to Rec.709 colour and pure Rec.709 curve with clipped highlights SLog3-SGamut3.Cine_To_Rec709.cube	Sony

NOTES ABOUT THE 3D-LUT CONVERTER APP

The Convergent Design 3D-LUT Converter App converts 3D LUTs into the Convergent Design 3D-LUT format with a .CDLUT file extension.

The tool will accept any valid 3D .cube file, with dimensions 2^3 up to 100^3 and output the corresponding .cdlut file, for use in Odyssey7Q and Odyssey7Q+.

NOTE: All 3D LUTs must be converted with this tool into the .cdlut format before use in Odyssey7Q and Odyssey7Q+.

USING THE 3D-LUT CONVERTER APP

1. DOWNLOAD THE APP

Visit the Firmware/Downloads page of the convergent Design website to download and install the version of the app that corresponds to the type of computer you are using.

Software/Utilities: https://convergent-design.com/support/software-utilities.html

Note: Versions are available for Windows, Mac OSX 10.10 and Mac OS w/ Java 6.

Java is Required: Java software must be installed on your computer to run this tool. (JRE 1.6)

2. INSTALL THE APP

Unzip the downloaded file and double-click the CD3DLUTConverter_v1.1 installation file to install the app.

3. RUN THE APP

Click on the application icon to open and run the application.

4. CHOOSE THE SOURCE FILE OR FOLDER TO BE CONVERTED

Select the 3D-LUT (.CUBE) file you wish to convert by clicking on the ... button or simply drag and drop the file or folder into the text area labeled 'Source'.

NOTE: Source FileNames MUST be 100 characters or less not including the ".cube".

The tool checks the length of all file name BEFORE PROCESSING ANY FILES and generates an error if any are found.

If an error is detected, up to 10 filenames will be listed in the error pop-up. All filenames causing an error will be listed in the log file.

Rename all files with filenames longer than 100 characters before rerunning this tool to avoid repeating the error.

5. ENTER LUT INFORMATION

Project Name and Notes/Title are optional user-supplied fields that can be displayed on the Odyssey and are entered in the area labeled LUT Information.

You may enter a **Project Name** of up to 12 characters which will be applied to each file being converted. If you are converting a folder it will be applied to all files being converted.

You may enter **Notes/Title** information of up to 38 characters to add/modify the TITLE "String" line. The Notes/Title field is only available when processing one .cube file at a time. The "Title" from the .cube file (if present) is used as the default.

NOTE: The Project Name and Notes/Title changes are in the Odyssey only and NOT in the original .cube file. (ie they are not tracked.) If you re-convert the original .cube file you will need to change/re-add the Project Name and Notes/Title fields.

NOTE: In your LUT generation/editing software, prior to conversion you may edit the .cube file and add/modify the TITLE String line. The Cube LUT Spec v1.0 supports lines of 250 characters.

6. SELECT THE DESTINATION FOLDER

Select the destination file for your converted 3D-LUTs by clicking on the ... button or simply drag and drop the destination folder into the text area labeled 'Destination'.

Converted files will be placed in the (Destination)/}CD_LUTS{ subfolder.

Example: E:\/}CD_LUTS{

Note: If the DESTINATION field is empty, the SOURCE folder (plus /}CD_LUTS{) will be filled in as the default Destination. (You can replace it.)

You may select your Odyssey SSD or Utility Drive as the Destination to avoid having to move the files after conversion..

7. CONVERT THE FILE(S)

Click on the Convert button to begin the conversion process.

The converted file will have the same filename as the source file, except that the file .cube file extension will be replaced with the .cdlut file extension.

SONY_EE_Slog2_Cin709.cube will become **SONY_EE_Slog2_Cin709.cdlut** when converted by this utility to the CDLUT format.

If the destination file already exists the app will prompt you as to whether you wish to replace it or not.

• *No – Do not replace it.*
• *Yes – (Default) Replace it.*
• *Yes All – Replace it and any others during this run.*
• *Cancel – Stop this run.*

NOTE: If you want to always overwrite, select File Pulldown then Prompt/Overwrite Destination and then Overwrite and Save Configuration.
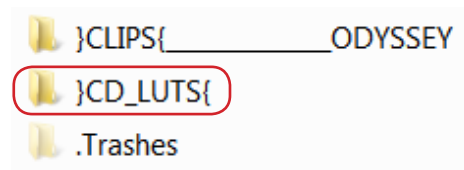
If you use Drag and Drop, you may locate the }CLIPS{_____ODYSSEY folder in the root directory of the SSD and drop it in the destination field. The tool will adjust the destination to point to the volume/device and append /}CD_LUTS{.

If you use "..." to select a destination folder you will start in your home folder/directory and can navigate to your selected destination folder from there.

Mac Only: The "Volumes/Computer/Device" button will take you to the Volumes folder/ directory where the SSDs can be found. The \"Home\" button will take you to your Home folder/directory.

8. LOAD CONVERTED LUTS ONTO THE SSD

To load the converted LUT file(s) onto the Odyssey, copy the **}CD_LUTS{** subfolder into the root directory of the Odyssey SSD.

9. SAVE LUT TO THE ODYSSEY

Select the LUT from the Preview SSD button, then select IMPORT FROM SSD and save it to a folder on the Odyssey. *only 3 Folders are supported at this time.

Note: LUTs do not have to be saved to the Odyssey, LUTs can remain on SSD's but if SSD is removed, the LUT will no longer be available.

10. SELECT LUT TYPE

Depending on the type of LUT you have imported, you may need to select Extended or Legal, to make the LUT match correctly to your NLE / Colorist.

11. SET/CUSTOMIZE LUT OUTPUT

The output of the LUT, as well as the use of the LUT with image analysis/monitoring tools can be set in multiple ways to suit your application or production environment.

Under Customize Outputs you have the following choices for each output (SDI-A, SDI-B and HDMI):

• **LUT OFF** - *No lut will be applied to the output*
• **LUT ON** - *Selected LUT will be applied to output*
• **MIRROR OLED (LUT & OVERLAYS)** - *Applies LUT and overlays (image tools, etc.) to output.*

You may also choose whether or not to apply the LUT to image analysis/monitoring tools.

FILE & HELP MENUS

CREATE NEW LOG FILE

If "Selected/Checked" a new log file will be created. Default is unchecked - No, Append to the existing log file. This setting is cleared after each "CONVERT".

DISPLAY RESULTS PER FILE (MENU)

Display Error, Warning, and Success Messages as each file is processed.

MENU OPTIONS..

No, Display Summary Only – Don't display messages (Error, Warning, and Success) as each file is processed. (Use summary or log to review results.)

Pop-up Timeout – Below are the options for how long a message is display before automatically continuing to the next file.

- **2 Sec – Display for 2+ seconds ...**
- **5 Sec – Display for 5+ seconds ...**
- **10 Sec – (Default) Display for 10+ seconds ...**
- **15 Sec**
- **20 Sec**

If messages are displayed, the users can hit "Cancel" (quit processing) or "Continue to next file" immediately.

NOTE: Critical messages (such as Source not Found, Destination File Exists, Can't write..., etc.) do not time out and require a user response.

PROCESS SUBFOLDERS

Specifies whether Subfolders should be processed. Default is checked - Yes, Process any Subfolders.

PROMPT/OVERWRITE DESTINATION (MENU)

If an output destination file exists, should the tool display a pop-up and "Prompt" the user if they want to overwrite it? or simply Overwrite it.

- **Prompt - (Default) Prompt user if the output file exists. The tool will display a pop-up and "Prompt" the user if they want to overwrite it?**
- **Yes(default) – Overwrite**
- **Yes All – Overwrite and all future during this "Convert"**
- **No – Keep the original destination file and discard the just converted file.**
- **Cancel – Stop processing, discard the just converted file.**
- **Overwrite – Overwrite all existing destination files.**

SAVE CONFIGURATION

Save your current configuration for future use. This overwrites your previously saved configuration.

The following configurations items are saved.

- **Project Name**
- **Destination**
- **File dropdown options:**
    Display Results per File
    Process SubFolders
    Prompt/Overwrite Destination
- **UI Screen Size**

RESTORE CONFIGURATION

Restore the save configuration listed above. If the saved configuration can not be found, the default values are restored.

RE-DISPLAY RESULTS & LOG

Allows you to redisplay the previous "CONVERT/RUN's" esults and log file.

EXIT

Exit the tool.

RELEASE NOTES - VERSION 1.1, MAY-2015

Initial Release. Converts 3D LUTs into the Convergent Design 3D LUT format. The tool will accept any valid 3D .cube file, with dimensions 2^3 up to 100^3 and output the corresponding .cdlut file, for use in Odyssey7Q and Odyssey7Q+.