

# EOS C300 Mark III

# EOS C500 Mark II

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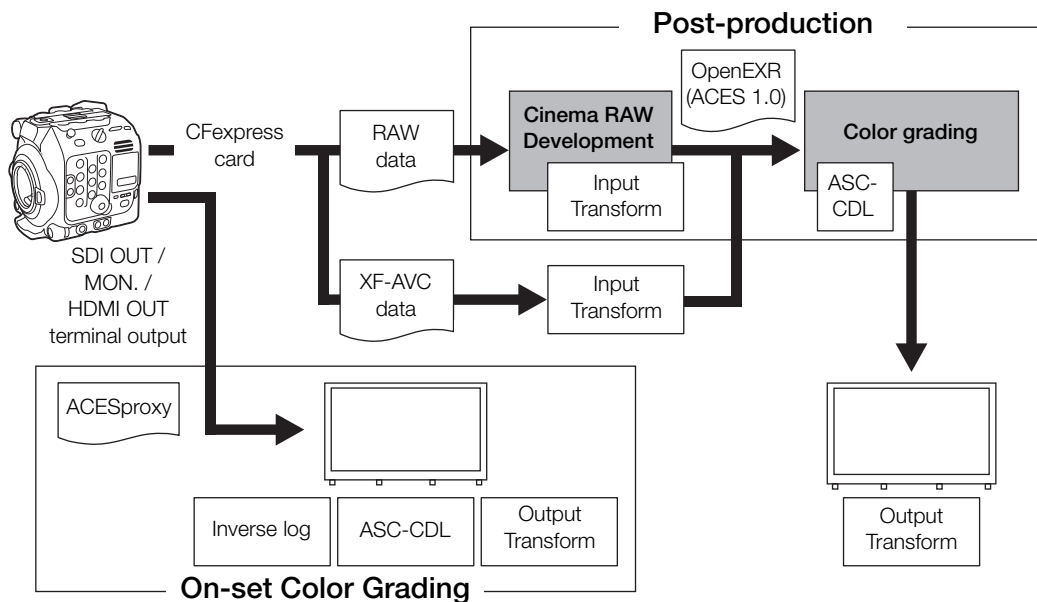
Digital Cinema Camera

Firmware ver. 1.0.0.1 (C300 Mk III)  
ver. 1.0.1.1 (C500 Mk II)

## Color Grading with the ACES Workflow

You can perform color grading using ACES2065-1, the color encoding system defined by the Academy of Motion Picture Arts and Sciences. This workflow allows you to perform on-set color grading\* while continuing to shoot.

\* Requires monitors compatible with ASC-CDL and 3D LUT color correction.



**ACESproxy:** ACESproxy video data that is output from the camera's output terminals when performing on-set color grading. Select the [ACESproxy] option for the LUT setting, depending on where the video is to be output.

**Input Transform:** Refers to the table used for converting color information of the input device to ACES2065-1 color space.

**Output Transform:** Refers to the table used for mapping ACES2065-1 color space information to the specific color information scheme used by the display device.

**ASC-CDL:** Refers to the list that contains color grading adjustment data. This step requires equipment compatible with ASC-CDL.

## Applying a LUT to Video Outputs

While recording using special gamma curves, you can apply a LUT to the image displayed on external monitors (SDI OUT terminal, MON. terminal, HDMI OUT terminal), the supplied LCD screen (VIDEO terminal) or an optional viewfinder. When a LUT is applied, the displayed image will look as if a standard gamma curve were used, making it easier to check the image on the display device used. To check the image on an external monitor, you will need a monitor that is compatible with the video's color space.

You can also load and apply LUT files (.cube format) created with Blackmagic Design's DaVinci Resolve.

### Available preset LUT options

Available LUTs depend on the [Gamma/Color Space] setting in the custom picture file.

[Gamma/Color Space]	Available LUTs					
	[BT.709]	[BT.2020] <sup>1</sup>	[DCI] <sup>1</sup>	[PQ] <sup>1</sup> / [HLG] <sup>1</sup>	[ACESproxy] <sup>1</sup>	[HDR Assist.] <sup>2</sup> (1600%/400%)
[Canon Log 2 / C.Gamut], [Canon Log 3 / C.Gamut]	●	●	●	●	●	●
[Canon Log 3 / BT.2020]	●	●	–	●	–	●
[Canon Log 3 / BT.709]	●	–	–	–	–	–
[PQ / BT.2020], [HLG / BT.2020]	●	–	–	–	–	● <sup>3</sup>
[BT.709 Wide DR / BT.2020]	●	–	–	–	–	–
[BT.709 Wide DR / BT.709], [BT.709 Normal / BT.2020], [BT.709 Normal / BT.709]	–	–	–	–	–	–

<sup>1</sup> Not available for the VIDEO terminal (supplied LCD monitor/optional LV-M1 LCD Monitor/optional EVF-V70 OLED Electronic Viewfinder).

<sup>2</sup> Available only for the VIDEO terminal (supplied LCD monitor/optional LV-M1 LCD Monitor/optional EVF-V70 OLED Electronic Viewfinder).

<sup>3</sup> When [Gamma/Color Space] is [HLG / BT.2020], only the [HDR Assist. (400%)] LUT is available.

1 To apply the LUT to the supplied LCD screen, select **MENU** > [⏏] Monitoring Setup] > [LUT: VIDEO Term.] > [On].

2 Select **MENU** > [⏏] Monitoring Setup] > [LUT Selection: VIDEO Term.] > Desired LUT.

- The gamma curve and color space of the video output will change.
- Repeat steps 1 and 2 as necessary to apply LUTs to other video outputs with the following settings:  
[LUT: SDI OUT] and [LUT Selection: SDI OUT]: video output from the SDI OUT terminal,  
[LUT: MON.] and [LUT Selection: MON.]: external monitor connected to the MON. terminal,  
[LUT: HDMI] and [LUT Selection: HDMI]: external monitor connected to the HDMI OUT terminal,  
[LUT: EVF-V50] and [LUT Selection: EVF-V50]: optional viewfinder.

## Options

Applied LUT	Output Settings with LUT applied		Description
	Gamma curve	Color space	
[BT.709]	BT.709 Wide DR	BT.709	LUT for viewing on the LCD screen and external monitors compatible with BT.709 specifications.
[BT.2020]	BT.709 Wide DR	BT.2020	LUT for viewing on external monitors compatible with ITU-R BT.2020 standards, which define parameters for ultra-high-definition television (4K/8K).
[DCI]	DCI	DCI-P3	LUT for viewing on external monitors that support color spaces and gamma curves that follow the guidelines established by DCI (Digital Cinema Initiatives).
[PQ]	PQ	BT.2020	LUT for viewing HDR (high dynamic range) images on external monitors compatible with the PQ standard defined by ITU-R BT.2100. The signal output will use narrow range (video range) coding.
[HLG]	HLG	BT.2020	LUT for viewing HDR (high dynamic range) images on external monitors compatible with the HLG standard defined by ITU-R BT.2100. The signal output will use narrow range (video range) coding.
[ACESproxy]	ACESproxy	ACESproxy	LUT for viewing on external monitors compatible with the ACESproxy standard established by ACES (Academy Color Encoding System). The signal output will use narrow range (video range) coding.
[HDR Assist. (1600%)]	Original gamma curve	BT.709	LUT for viewing HDR (high dynamic range) images on the LCD screen and optional viewfinders connected to the VIDEO terminal. The LUT follows the ITU-R BT.2100 transfer function to convert a brightness range of 1600% or 400% respectively into a linear brightness scale.
[HDR Assist. (400%)]			

### NOTES

- When you apply the [ACESproxy] LUT to the SDI OUT terminal, MON. terminal or HDMI OUT terminal, the terminal will output ACESproxy video data. Using a compatible monitor, you can perform on-set color grading and check the image after color correction as you continue shooting (📖 2).
- If you set an assignable button to [LUT: All], [LUT: VIDEO Term.], [LUT: EVF-V50], [LUT: SDI OUT], [LUT: MON.] or [LUT: HDMI], you can press the button to turn the selected LUT on and off on all monitoring devices, the supplied LCD screen, an optional viewfinder or external monitors, respectively.

The information in this document is verified as of April 2020. Subject to change without notice. Visit your local Canon website to download the latest version of the complete Instruction Manual.