

L e e m i n g L U T



Camera Setup Guide:	Canon EOS
Colour Space:	Rec709 gamma 2.4
Target Exposure:	ETTR
LUT Version:	Pro 4
Guide Version:	2025.01.01

INTRODUCTION

Thank you for purchasing Leeming LUT Pro™, the most accurate and professional Look Up Tables (LUTs) for your camera.

The LUTs have been carefully developed to get the maximum dynamic range and colour accuracy out of the supported profiles, giving you unparalleled Rec709 precision as well as perfect camera matching with other supported cameras in the Leeming LUT Pro™ range. Use them in conjunction with ETTR shooting principles and you will get the highest possible quality images out of the camera every time.

I am confident you will find these the most accurate LUTs for your camera. Anything less and I wouldn't have put my name on them!

Enjoy :)

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LICENCE

You are granted a personal licence to use Leeming LUT Pro™ on three devices. For use with more devices, please contact Visceral Psyche Films for bulk discount pricing. You may not upload the LUTs anywhere, share them with other people or incorporate them into other LUTs for derivative use (i.e. making creative LUTs using Leeming LUT Pro™ as the underlying base), whether they be for sale or not. Please respect the work that has gone into the LUTs and support those supporting you.

COMPATIBILITY

Leeming LUT Pro™ is compatible with any software or hardware device that supports a 33x33x33 cube LUT.

REQUIREMENTS

1. Canon EOS series camera.
2. Spectrally neutral white or grey card, for white balancing the camera.
3. Leeming LUT Pro 4 – Canon EOS.

NOTE: Items highlighted in yellow have an adverse effect on LUT accuracy if changed away from the recommended values in this guide.

QUICK REFERENCE OF IMPORTANT CAMERA SETTINGS

The settings below are recommended for the LUTs to work properly, in conjunction with an accurate white balance and using the ETTR zebras to show where the highlights of an image are clipping. Not all profiles are available on all cameras.

If you deviate from these settings, your colorimetry and luma curves won't match precisely to Rec709 and you may get other errors in your footage. You can find the details of how to set these in the next section.

	BT709 Wide	C-Log2	C-Log3	C-Log3 R
Zebras (ETTR) ¹	100%	75%	95%	95%
Canon Log	OFF	ON	ON	ON
Picture Style	OFF	OFF	OFF	OFF
Sharpness	0	0	0	0
Contrast	N/A	N/A	N/A	N/A
Saturation	0	0	0	0
Hue	0	0	0	0
Color Tone	N/A	N/A	N/A	N/A
Gamma	Wide DR	C-Log2	C-Log3	C-Log3
Color Space	BT.709	C.Gamut	C.Gamut	BT.709
Color Matrix	Neutral	Neutral	Neutral	Neutral

¹ These settings won't affect your colorimetry or luma curves but they will affect overall picture quality if altered.

FULL CAMERA SETUP GUIDE (C Series)

Menu setup based on the Canon R5C. Your camera may not have all the same features so adjust as necessary.

1. Press the Menu button to enter the main menus. Each top menu section has a title and number (eg Camera Setup 1) and the guide is laid out the same way. Use the little joystick to navigate left or right through the sections and use the down function to get into each section's individual pages (use it now to get into the Camera Setup section).
2. Camera Setup – Set Shutter Mode and ISO options as desired. I recommend Shutter Mode to ANGLE. Set Shockless WB to ON to help smooth shifts in auto white balance. You can also run an Auto Black Balance (ABB) if needed to ensure your sensor has the cleanest noise profile.
3. Custom Picture – Here you can choose the colour profiles you wish to use. For 10bit 4:2:2 recordings I recommend Canon Log 2 (C-Log2) if your camera supports it, or Canon Log 3 (C-Log3) if it doesn't, as they maximise dynamic range.
4. Recording/Media Setup – Here you can set your System Frequency and Framerate as desired, along with Rec Format and Bitrate. I recommend shooting RAW or XF-AVC YCC422 10bit for Rec Format and Resolution/Bitrate as desired. I recommend Rec Command (EXT REC) ON and HDMI Timecode ON.
5. Audio Setup – You can set your parameters as desired in this section.
6. Monitoring Setup – I recommend setting OSD Output: HDMI to OFF to ensure you have a clean feed to your external monitor or recorder.
7. Assistance Functions – I recommend Peaking: LCD and EVF to ON using Peaking 1 to help if you are using manual focusing lenses. Set Zebra: LCD and EVF to ON

using Zebra 2. Set Zebra 2 level as per the setup guide table on the previous page depending on the profile you have selected. Adjust the markers and waveform functions as desired.

8. Assignable Buttons – Set these as desired.
9. System Setup – You can set various functions here as desired.
10. My Menu – Here you can add any functions you wish to access quickly.
11. You can exit the menus now. On the touchscreen there is a small box bottom left of the screen. Tap this to open the first level touch options where you can adjust white balance, ND level, F-stop etc. With this menu open there is a second level touch menu tap zone top left of the screen. If you tap that you get quick access to functions such as sensor mode, record format, framerate etc. Swipe left or right to access the different pages, or tap the X to close back to the first level, then tap bottom left X to close all touch menus. You also have physical buttons mapped to various functions. I recommend familiarising yourself with the custom white balance function (default Button 13 on the R5C) and the Custom WB options A and B (in the first level touch menu) as this will give you the best starting points for the LUTs.

FULL CAMERA SETUP GUIDE (R Series, EOS Series)

Menu setup based on the Canon R5. Your camera may not have all the same features so adjust as necessary.

1. Press the Mode button, followed quickly by the Info button to switch into one of the video modes. I recommend M mode so that you have full control over all aspects of the exposure.
2. Press the Menu button to enter the main menus of the camera. Each page has a section title and number (eg Shoot1) and is how this guide is laid out.
3. Shoot1 – Set Movie Rec Quality as desired. I recommend setting 4K HQ Mode for most work as this does a clean downscale of the 8K sensor without line skipping, then choose Movie Rec Size as 4K-D or 4K-U depending on your final goal of DCI4K for cinema or UHD for TV. Choose your framerate as appropriate. You can also choose the compression method here. IPB is interframe compressed and gives the smallest file size. All-i is intraframe and creates a larger file size, but is easier to process in post. Canon RAW can only be selected if you choose 8K-D as your resolution at 24.00p (you must DISABLE 4K HQ Mode first for this option to become available). Finally, set Movie Cropping and Sound Recording as desired.
4. Shoot2 – Highlight Tone Priority OFF.
5. Shoot3 – Set your White Balance to CUSTOM or one of the presets. If you have an SD card inserted for photos, then to set a custom white balance, you need to be in PHOTO mode first, then take a photo of your white balance card. While in PHOTO mode, go into this menu page, select Custom White Balance, then pick the photo you just took, then SET. Now you can use the Mode button to switch back to VIDEO shooting mode and your custom white balance will be set. If you ONLY have a CFExpress card inserted, you can stay in VIDEO mode to Custom White Balance.
6. When shooting in the Canon Log profiles, go into Canon Log Settings and set Canon Log ON, View Assist OFF, Color Matrix NEUTRAL, Characteristics 0,0,0 and Color Space BT.709.
7. Shoot7 – Set your IS (image stabilizer) mode as desired. Set Shutter Button Function for Movies as desired (I recommend Fully-press to Start/Stop movie recording). Set Metering Timer to 30min.

8. Enter Zebra Settings and set Zebra ON. Set Zebra Pattern to Zebra 2, then choose the Zebra 2 value as per the Quick Reference table above depending on which profile you have chosen to shoot.
9. Shoot8 – Set Overheat Control as desired and HDMI Display to Camera + Monitor. Time code can be set as desired (I recommend HDMI time code ON and Rec Command ON).
10. AF1-4 – Set your AF parameters as desired if you use autofocus capable lenses.
11. Network1-2 – Set your wireless settings as desired.
12. Setup1 – Set your Record Function and Card Folder as desired. I recommend using the CFExpress slot for video and an SD card for photos. If you have one of each inserted the defaults split this appropriately. I recommend setting your File Name prefix to something more unique for multi camera situations. You can also format your cards here.
13. Setup2 – Set your Video System here as needed (NTSC or PAL). Framerate options in the Shoot1 menu will change based on this setting.
14. Setup4 – Set HDMI Resolution as needed (Auto is recommended).
15. Setup5 – You can reset the camera here or set up Custom Shooting modes C1-C3 but I recommend caution as the custom modes retain ALL settings which can sometime cause undesired settings such as White Balance shifts etc.
16. C.Fn1 – Set Exposure Level Increments to 1/3 and ISO Speed Setting Increments to 1/3 for the most precision.
17. C.Fn4 – Set Release Shutter W/O Lens to ON if using manual lenses.
18. My Menu1 – Here you can add any functions you wish to access quickly.

You are now ready to use Leeming LUT Pro™ with the maximum picture quality available.

Be sure to visit the website to read up on how to use ETTR (Expose To The Right) principles to get the most dynamic range out of your sensor, as well as the associated Leeming LUT Pro™ LUT Installation Manual on how to apply the LUTs to your footage in post-production:

www.LeemingLUTPro.com

HARDWARE / SOFTWARE QUIRKS AND BUGS

1. Canon RAW uses the C-Log2 profile so the same LUT will work for both profiles.

ATOMOS NINJA V / BLACKMAGIC VIDEO ASSIST 12G RECORDER SETUP

The LUTs are compatible with external monitors and recorders which use the 33x33x33 cube format.

	BT709 Wide	C-Log2	C-Log3	C-Log3 R
Zebras LUT On	105%	105%	105%	105%
Zebras LUT Off	105%	95%	105%	105%
Log/HDR	OFF	ON	ON	ON
Camera	Standard	Canon	Canon	Canon
Gamma	Rec709	C-Log2	C-Log3	C-Log3
Gamut	Rec709	Cinema	Cinema	Rec.709
HDR Auto	OFF	OFF	OFF	OFF
Legalize	OFF	N/A	N/A	N/A
HDMI Trigger	ON	ON	ON	ON
Timecode	HDMI	HDMI	HDMI	HDMI

GUIDE CHANGELOG

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