Leeming LUT

P R O

Camera Setup Guide: GoPro 8

Based On: GoPro 8 Black (firmware 01.60)

Target Colour Space: Rec709 gamma 2.4

Target Exposure: ETTR

LUT Version: Pro II & Athena

LUT Release Date: 2020.04.21
Guide Version: 2020.04.21

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^{TM} on two computers. For use with more computers, 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^{TM} 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. For a full list, please see the website.

REQUIREMENTS

- 1. GoPro 8 action camera.
- 2. Spectrally neutral white or grey card, for white balancing the camera (eg. the white balance side of an X-Rite Colorchecker Passport is designed for this).
- 3. Leeming LUT Pro[™] for the GoPro 8.

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 prior to applying the LUT in post.

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.

	ProTune
Color	Flat
White Balance	Native

FULL CAMERA SETUP GUIDE

Based on the GoPro 8 Black. Your camera may not have all the same features so adjust as necessary.

- 1. Install the GoPro app on your phone or tablet and connect to your GoPro 8. Once you have connected to your GoPro 8, tap on Control Your GoPro to enter the main screen, then tap on the Video icon if not already selected to switch to video mode.
- 2. Tap on the Standard profile button (it shows resolution and framerate info underneath the title) at the bottom of the screen to enter the camera technical settings.
- 3. Choose the type of activity you want to optimise for. I will use Cinematic as the guide, and note which settings should be carried across to the other profiles. Tap on the little Edit pencil icon next to the profile type to edit the technical camera settings.
- 4. Mode Settings Resolution as desired (I use 4K as default), Frames Per Second as desired (24 is my default), Lens LINEAR, Hypersmooth HIGH, Short Clip OFF.
- 5. ProTune Bit Rate HIGH, Shutter as needed (Auto is default), EV Comp to 0 (you can set this lower if your footage is often clipping the whites), ISO Min and Max as needed (I recommend ISO 800 as max unless you are ok with noisier looking footage), White Balance NATIVE, Sharpness LOW, Color FLAT, RAW Audio as needed, Wind as needed (AUTO as default).
- 6. Set your On-Screen Shortcuts as desired, then tap on Done top right to exit.
- 7. Now tap on the Wrench icon to set your overall camera setup and preferences.
- 8. Setup You can set most of these as desired. Set your Default Preset to the one you just completed (eg Cinematic) so that the next time the camera boots up, that preset is automatically set to the default.
- 9. I recommend setting Anti-Flicker to your local frequency, and Video Compression to HEVC only unless you wish to record in both HEVC (H265) and H264. You can also send the current date and time to the camera from this screen via Set Date and Time. Once finished, tap on Done top right to exit.

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. The camera has a wireless connection which, if left ON, can sometimes cause the camera to turn on automatically at random times. I recommend setting the wireless connection OFF unless actually using the function. In daily use after the initial app setup, I just use the camera's touchscreen menus to change settings.
- 2. Due to the nature of the ProTune Flat NATIVE white balance preset, you MUST apply a white balance change in post-production before applying the LUT. I recommend shooting a white balance target in the first second or so of your clip so that you can use the WB picker function of your editing software to quickly and accurately set this in post.
- 3. The LUT will NOT work with ANY of the other White balance presets. You MUST use the NATIVE preset (which is a kind of pseudo-log type special profile).

GUIDE CHANGELOG

2020.04.21 Initial release.