Leeming LUT PRO

Camera Setup Guide:	DJI Mavic Air
Based On:	DJI Mavic Air
Colour Space:	Rec709 gamma 2.4
Target Exposure:	ETTR
LUT Version:	Athena III & Pro III
LUT Release Date:	2021.02.05
Guide Version:	2021.02.05

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 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™ 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.   DJI Mavic Air.
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 DJI Mavic Air.

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.

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.

	D-Cinelike
Zebras (ETTR)	Overexposed ON
Color	D-Cinelike
Style	Custom
Sharpness (triangle)	-1
Contrast (circle)	0
Saturation (square)	-3

FULL CAMERA SETUP GUIDE

Based on the camera listed on the title page of this guide. Your camera may not have all the same features so adjust as necessary.

1. Connect your Mavic Air controller to your iOS or Android device and turn on both the Mavic Air drone and the controller, then start the DJI Go 4 app.
2. Insert a MicroSD card into the rear slot of the drone.
3. Go through all the relevant updates etc (first time users) until the app says "Ready To Go (Vision)" and you can see the camera feed and main screen info.
4. Tap on the Settings icon underneath the Record button on the app (it looks like three lines with circles intersecting them).
5. In the Settings, first tap on the Gear icon and set Histogram ON, Overexposed ON, Smart Arm LEDs as desired, Storage Location – SD Card, then Format SD Card and Internal Storage.
6. Tap on the Camera icon in Settings and select your desired Video Size (I recommend 4K 3840x2160 at 24fps for cinema work but you can change this as you wish).
7. Set Video Format to MP4 or MOV as desired for your operating system.
8. Set White Balance to Custom or one of the preset types. Be careful using AWB as it will shift the white balance during the shot if your image changes significantly. Ideally, shoot a white balance card at the beginning of your shot before takeoff so that you can adjust white balance more accurately in post.
9. Set the Color to D-Cinelike, then set Style to Custom, Sharpness -1, Contrast 0, Saturation -3. NOTE: Sharpness 0 gives a much grainier image so I have chosen -1 as the best sharpness. You can adjust this as desired as it won't affect the LUT colorimetry. Do keep the Contrast and Saturation settings as recommended though as these will affect the LUT if set differently.
10. Tap on the Iris icon and choose the M (manual) option for exposure controls (you can use Auto but this may introduce more noise when it auto-selects a higher ISO). Set your ISO as low as possible while watching for the overexposure zebras on

screen. If there are still zebras showing at ISO 100 (likely outside in the sun) then adjust your shutter until the zebras and/or histogram no long show overexposure. You can also use ND filters attached to the lens as another way of reducing exposure instead of, or combined with, the shutter.

11.   There are lots more drone and gimbal specific settings that are outside of the scope of this setup guide, so please be sure to check those as well. The main purpose of this guide is to get your colour profile and important settings correct so that the LUT works as intended. The LUT will cause the image to get a bit darker in the mids – this is fixing the default curve of D-Cinelike to be more accurate for Rec709 luma. If you feel that the image is too dark, you can follow the LUT with one of my Apollo Pro Quickies to brighten the image again without clipping any highlights. See your purchase email for the link and further instructions.

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:

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www.LeemingLUTPro.com

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HARDWARE / SOFTWARE QUIRKS AND BUGS

1.   ==Be careful using AWB as it will shift the white balance during the shot if your image changes significantly==. Ideally, shoot a white balance card at the beginning of your shot before takeoff so that you can adjust white balance more accurately in post.

GUIDE CHANGELOG

2021.02.05   Initial release.