

L e e m i n g L U T P R O

Camera Setup Guide:	DJI Mavic Air 2
Based On:	DJI Mavic Air 2 (firmware 01.00.0250)
Colour Space:	Rec709 gamma 2.4
Target Exposure:	ETTR
LUT Version:	Athena III & Pro III
LUT Release Date:	2021.02.09
Guide Version:	2021.02.09

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 :)

Paul Leeming
Director / Writer / Cinematographer / Actor
Visceral Psyche Films
www.visceralpsyche.com

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 drone.
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 DJI Mavic Air 2.

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
Overexposure Warning (Zebras)	ON
Color	D-Cinelike
Video Mode	Normal (NOT HDR)

FULL CAMERA SETUP GUIDE

Based on the Mavic Air 2, using the DJI Fly phone app interface. Your camera may not have all the same features so adjust as necessary.

1. Plug your phone or tablet into your remote controller and start the DJI Fly app, then press the Connect Aircraft button.
2. First tap on the camera icon above the red Record button on screen on the right hand side, and select Video Mode, then exit.
3. Tap on the three dots top right of screen to enter the Menus.
4. Safety – set your max altitude and distance as well the Auto RTH (Return to Home) Altitude. You can also calibrate your gimbal and compass here, as well as unlocking Geo Zones etc. I recommend setting Signal Lost to Return To Home (make sure your RTH Altitude considers local heights of objects to avoid the drone crashing into them when on autopilot!). Set APAS to ON unless you are confident you won't run into obstacles! Set Auxiliary LED to Auto (the downward facing LED used for landing).
5. Control – Choose your flight mode etc and Units as desired. Set Allow Upward Gimbal Rotation ON to give you more flexibility in shot tilting.
6. Camera – Set Format as desired, **Color to D-Cinelike** and Coding Format as desired (I recommend H265 unless your computer can't handle it in post). Turn Video Subtitles OFF.
7. Turn Histogram ON if desired and **Overexposure Warning ON**.
8. **Set White Balance to Manual and adjust to the correct Kelvin value**. If you hold a white balance card in front of the drone when switching from Auto to Manual, the first custom value will be very close to neutral, so this is my recommended method for consistency and avoiding any colour shift during flight. **You will need to tweak the white balance in post BEFORE applying the LUT, so I recommend shooting a few seconds of your white balance card before takeoff in the light you expect when flying, for best accuracy in post.**
9. Set Storage to SD Card and Format it here if needed.
10. You can use Cache When Recording with your selected size, to record a low quality backup to your phone or tablet if desired.
11. Transmission – Set as needed for your region to avoid interference.

12. About – Set your drone's name if needed. You can also check for firmware updates in this screen, to ensure you have the latest versions.
13. Exit the Menus.
14. Tap on the camera icon above the Record button to bring up the Camera functions.
15. Choose Video, then Normal mode, then choose your desired resolution and framerate. I recommend 4K at 24fps or 48fps for cinema work, but you can choose 1080p for higher framerates if desired. In post you can then re-time your footage to your project framerate for slomo effects. Do NOT choose HDR as it locks the exposure to Auto, limits you to 30p in 4K, and locks Color Mode to Normal instead of D-Cinelike.
16. Tap on the little Auto camera icon bottom right of the screen to switch it to M mode (manual adjustment). Here you can set your ISO and shutter speed manually for greater control over your exposure. Use the zebras to avoid clipping.

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. There are TWO different settings called Normal. There is the Color Mode (which should be set to D-Cinelike and NOT Normal), and the Video Mode, which SHOULD BE set to Normal and NOT HDR. Confused yet? Basically, set and forget your Color Mode to D-Cinelike and DON'T ever choose the HDR mode in the Video mode settings, as it is limiting in many ways and NOT what the LUT is expecting in terms of colorimetry or luma.

GUIDE CHANGELOG

2021.02.09 Initial release.