

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

Camera Setup Guide:	DJI Osmo Action 4
Based On:	DJI Osmo Action 4 (fw 01.02.06.10)
Colour Space:	Rec709 gamma 2.4
Target Exposure:	ETTR
LUT Version:	Athena III & Pro III
LUT Release Date:	2023.09.13
Guide Version:	2023.09.13

## 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 Osmo Action 4.
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 Osmo Action 4.

**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-Log M (10bit)	Normal
Overexposure Alert (ETTR Zebras)	ON	ON
Color	D-Log M	Normal
Sharpness	-2	-2
Noise Reduction	-2	-2
Video Compression	HEVC	HEVC

## FULL CAMERA SETUP GUIDE

Based on the Osmo Action 4, using the DJI Mimo phone app interface.

1. Connect to your Osmo Action 4 using the DJI Mimo app, then press the Connect button next to your Osmo Action 4 listing to see your camera view. You can also set the camera via the rear touchscreen but it's easier to use the app!
2. Select the Video tab on the right side of the screen.
3. Now tap on the three dots bottom left of screen to enter the Video Settings Menu.
4. In the Video tab, set Pro mode ON, then set Color to D-Log M (my recommended profile because it's 10bit) or Normal, Overexposure Alert ON, Histogram OFF, FoV to Standard (Dewarp) and EIS to RockSteady+ or as desired.
5. Set White Balance to Custom and adjust to the correct Kelvin value. If you hold a white balance card in front of the camera when switching from Auto to Custom, the first custom value will be very close to neutral, so this is my recommended method for consistency and avoiding any colour shift during shooting. 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 beforehand in the light you expect when shooting, for best accuracy in post.
6. Tap on the four squares icon bottom left of screen to get to the General tab.
7. Here you can format your SD card and set Video Compression to HEVC (needed for D-Log M 10bit recording).
8. Exit the Settings Menu by tapping outside of the box back to the main screen.
9. Tap the AUTO Camera icon left side of screen to access the exposure functions, then choose the Manual (M) option. Adjust your ISO and Shutter as needed. You can use Auto but be aware that it may shift during the shot in that case.
10. Tap on the 4K24 button to open the resolution and framerate section. I recommend 4K at 24fps for cinematic mode, but you can choose as desired for your project.

11. Lastly, go to your camera screen and tap the Settings icon right middle side of the screen, make sure Pro mode is ON, then scroll down to Image Adjustment. Tap on it, then choose Custom, then **adjust Sharpness and Noise Reduction to -2**, then Confirm. This gets rid of the harsh edge enhancement of default sharpening as well as getting rid of the smoothing effect of Noise Reduction.

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:

[www.LeemingLUTPro.com](http://www.LeemingLUTPro.com)

## **HARDWARE / SOFTWARE QUIRKS AND BUGS**

1. Some functions such as anti-flicker and power saving modes are easiest to access from the rear touchscreen so do go through these and set them up as desired.

## **GUIDE CHANGELOG**

2023.09.13          Initial release.