

L e e m i n g L U T



Camera Setup Guide:	Nikon Z
Colour Space:	Rec709 gamma 2.4
Target Exposure:	ETTR
LUT Version:	Pro 4
Guide Version:	2025.04.14

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

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.

	N-RAW ²	N-Log	Flat	HLG
Zebras (ETTR)	255	255	255	235
Quick Sharp ¹	N/A	N/A	0	0
Sharpening ¹	N/A	N/A	0	0
Mid-range Sharpening ¹	N/A	N/A	0	0
Clarity ¹	N/A	N/A	0	0
Contrast	N/A	N/A	0	0
Brightness	N/A	N/A	0	0
Saturation	N/A	N/A	0	0
Hue	N/A	N/A	0	0
Active D-Lighting	N/A	N/A	OFF	OFF

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

² ProResRAW uses the same LUT as N-RAW.

FULL CAMERA SETUP GUIDE

Menu setup based on the Nikon Z8. Your camera may not have all the same features so adjust as necessary.

1. Set the camera mode dial to M mode and the DISP mode switch to Movie mode.
2. Press the MENU button to enter the menu system and use the four-way directional buttons to navigate the menus.
3. Tap or select the Movie Shooting Menu (the movie camera icon). **Make sure you are NOT connected via HDMI to an external monitor or recorder during menu setup and that there is no XQD card in the camera.** Use the D-pad to navigate or the touchscreen if you prefer.
4. Set Video File Type as desired (I recommend N-RAW if your editing software supports it) and set Tone Mode to N-Log via the right D-pad control.
5. Set Frame Size/Frame Rate as desired.
6. If shooting N-RAW set Video Quality (N-RAW) HIGH for best quality compression.
7. Choose Image Area as required (FX for full frame or DX for Super35 frame).
8. Set your ISO sensitivity Auto ISO Control (mode M) OFF. Set your camera ISO as needed for the conditions.
9. Set White Balance to PRE1 (Preset Manual) to use with a custom white balance target later.
10. **Set Picture Control to Flat (if not shooting N-Log)**, then use the right D-pad selector to enter the sub-menu for the Flat controls and zero them all out (see table above).
11. **Set Active D-Lighting OFF**, High ISO NR as required (I recommend OFF). Video Flicker Reduction to Auto or manually to your local grid frequency.
12. Set Vibration Reduction ON and Electronic VR OFF (to avoid cropping the image).
13. Set your audio functions as needed.

14. Enter the Timecode sub-menu and set Record Timecodes ON (with HDMI output), and the rest as desired. I recommend Drop Frame OFF unless using that function.
15. Set External rec. cntrl (HDMI) ON so that pushing your camera Rec button starts the external recorder at the same time.
16. Now tap or select the Custom Setting Menu (the pencil icon).
17. Set c3 and set Power Off Delay - Standby Timer to NO LIMIT. This prevents your camera from sleeping and turning off during a shot. Set the rest as desired.
18. Set g2 and set Fn1 to WHITE BALANCE if your camera isn't equipped with a dedicated WB button. This makes it convenient to long press the front Fn1 button on the camera when you want to custom white balance using a neutral card.
19. Set g13 Shutter Mode to ANGLE if your camera supports it.
20. Set g14 View Assist OFF as using it with N-Log will give a false sense of exposure for ETTR Shooting.
21. Set g15 Zebra Pattern and enter the sub-menu. Set Pattern Tone Range HIGH and Highlight Threshold to 255 for N-RAW, N-Log and Flat, or 235 for HLG. Set g16 Limit Zebra Pattern Tone Range to NO RESTRICTIONS.
22. Set g22 Red REC Frame Indicator ON to help you see when the camera is recording.
23. Tap or select the Setup Menu (the wrench icon).
24. Set Camera Sounds – Shutter and Beep Options OFF.
25. Enter the HDMI sub-menu and choose your Output Resolution (I recommend 2160p unless your monitor or recorder doesn't support that resolution). Set Output Range FULL, Output Shooting Info OFF.
26. In the Network Menu, Set Airplane Mode ON unless you want to use wifi.
27. Tap or select My Menu (the checkmark icon).
28. I recommend adding the Movie White Balance and HDMI options here for quick access. You can add further items as desired, then exit the menus.
29. To custom White Balance, long press the Fn1 button (for ~1 second or more) on the front fascia of the camera to bring up the target square. Frame up your neutral card to fill the yellow target square and then press the OK button to measure the white balance. Once you see "Data Acquired" you can half-press the shutter or press the info button to go back to the main screen. Your camera is now white balanced.

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. You need to remove the memory card from the camera when recording externally, for the Record button to function to activate the recorder.
2. If shooting internal ProResRAW instead of N-RAW you can use the same N-RAW LUT as it covers both raw formats correctly.

ATOMOS NINJA V / BLACKMAGIC VIDEO ASSIST 12G RECORDER SETUP

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

	N-RAW	N-Log	Flat	HLG
Zebra LUT On	100%	100%	100%	100%
Zebra LUT Off	105%	105%	105%	105%
Log/HDR	OFF	OFF	OFF	OFF
Camera	Standard	Standard	Standard	Standard
Gamma	Rec709	Rec709	Rec709	Rec709
Gamut	Rec709	Rec709	Rec709	Rec709
HDR Auto	OFF	OFF	OFF	OFF
Legalize ¹	ON	ON	ON	OFF
HDMI Trigger	ON	ON	ON	ON
Timecode	HDMI	HDMI	HDMI	HDMI

¹ Camera HDMI output set to FULL RANGE.

GUIDE CHANGELOG

2025.04.14 Initial release.