Leeming LUT PRO

Camera Setup Guide:	Freefly Ember S5K
Colour Space:	Rec709 gamma 2.4
Target Exposure:	ETTR
LUT Version:	Pro 4
Guide Version:	2025.12.13

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 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.   Freefly Ember S5K.
2.   Spectrally neutral white or grey card, for white balancing the camera.
3.   Leeming LUT Pro 4 – Freefly Ember S5K.

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.

	Rec.709	HLG
Zebras (external monitor)	95%	95%
Color	Rec.709	HLG

FULL CAMERA SETUP GUIDE

Based on the Freefly Ember S5K. The menu system and settings are very minimalist so there's really not a lot to adjust.

1. Turn the camera on and set your preferred profile between Rec.709 and HLG.
2. Set your Project Framerate (PROJ FPS) as needed for the end framerate your project is built around (eg 23.98p, 25p etc).
3. Set horizontal and vertical resolution and ISO as needed. For Shutter I recommend 180 degrees to maintain film-like motion blur.
4. Set your Pre-Record time as desired.
5. Set other parameters as desired and format your SSD.
6. The camera only has White Balance preset temperatures and tint adjustment, so I recommend using an external monitor with waveform display, then holding up a quality white balance card in front of the camera and seeing where the RGB channels line up the closest, and using that temperature as your white balance setting. Make sure you do this without clipping any channel, otherwise the results won't be valid. Once you've set white balance, record a couple of seconds of the white balance card for later use in post-production to tweak white balance to make it perfect.

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

ATOMOS NINJA V / BLACKMAGIC VIDEO ASSIST 12G RECORDER SETUP

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

	Rec.709	HLG
Zebras LUT On	95%	95%
Zebras LUT Off	95%	95%
Log/HDR	OFF	OFF
Camera	Standard	Standard
Gamma	Rec709	Rec709
Gamut	Rec709	Rec709
HDR Auto	OFF	OFF
Legalize	OFF	OFF
HDMI Trigger	ON	ON
Timecode	HDMI	HDMI

HARDWARE / SOFTWARE QUIRKS AND BUGS

1. The camera doesn't have internal zebras, so you will need to rely on external zebras or waveform monitoring to properly judge where overexposure happens. The best thing to do is use a monitor with LUT support and place my LUTs into the monitor to see what the image looks like and where it begins to clip using the monitor zebras or waveform.

GUIDE CHANGELOG

2025.12.13   Initial release.