Leeming LUT PRO

Camera Setup Guide: Blackmagic Design V4 Film

Manual Version: 20190723

INTRODUCTION

Thank you for purchasing Leeming LUT Pro™, the most accurate and professional Look Up Table (LUT) for Blackmagic Design cameras using V4 Film colour science (eg BMPCC4K, Ursa Mini).

The LUT has been carefully developed to get the maximum dynamic range and colour accuracy out of the V4 Film profile, giving you unparalleled Rec709 precision as well as perfect camera matching with other supported cameras in the Leeming LUT Pro™ range.

Use it 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 this the most accurate LUT for supported Blackmagic Design cameras. 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

REQUIREMENTS

1. Blackmagic Design digital camera which supports V4 Film colour science.
2. Spectrally neutral white or grey card, for white balancing the camera (eg. the white balance side of the X-Rite Colorchecker Passport Photo is designed for this).
3. Leeming LUT Pro™ for Blackmagic Design V4 Film 1.5.

CAMERA SETUP

(Using the BMPCC4K with firmware 6.2 as representative of menu structure. Your camera may not have all the same features so adjust as necessary)

1. Press the Menu button.
2. Record tab page 1 – Select your preferred codec, compression and resolution depending on your attached media capabilities and project requirements. I recommend BRAW Q0 for critical work when recording to SSD via USB-C or CFast, and Q5 for SD card recording and general work (make sure your SD card is 100MB/s minimum).
3. Record tab page 2 – Set Dynamic Range to Film for the LUT to work properly, then choose your project frame rate and other settings as desired.
4. Record tab page 3 – Set Detail Sharpening OFF (greyed out when recording RAW) and Record LUT to Clip OFF (if you set this to ON you will bake the LUT into the recording).
5. Monitor tab page 1 – Select LCD, then set Zebra ON, and the other settings as desired. Select HDMI, then set the other settings as desired. Select BOTH and set Zebra Levels to 95%, then set Focus Assist to Colored Lines, Level HIGH, Focus Color GREEN. You can set your Frame Guides as required for your project.

6. Monitor tab page 2 – Select LCD, then set Status Text to ON and Display as desired (I normally set Codec and Resolution). Select HDMI and set Clean Feed. Select BOTH, then set your Grids and Safe Area Guides as desired.
7. Audio tab page 1 and 2 – set your inputs and levels as required on both pages.
8. Setup tab page 1 – Set your date and time, then set Shutter Measurement to Shutter Angle and Flicker Free Shutter to your local power frequency standard.
9. Setup tab page 2 – You can choose your own functions but I set Function F1 to Display LUT, F2 to Focus Assist, and F3 to Frame Guides. Choose where each displays.
10. Setup tab page 3 and 4 – Set Tally Light LED to OFF, LED Brightness to Low, and Playback to All Clips. Set Bluetooth as desired.
11. Presets tab page 1 – You can save your camera presets here using the + button and save them to your media for easy copying to another camera.
12. LUTs tab page 1 and 2 – First copy the "Leeming LUT Pro - Blackmagic Design V4 Film 1.5.cube" file to your media card in the root directory of the card, then insert it into the camera. Press the two arrows button, Import LUT, then press Import. Choose the card your LUT is on, then select it from the list so it is highlighted in blue, then Import.
13. Once the import is finished you will see it appear in the list. Select it, then press the tick button at the bottom of the screen to set it active. The active LUT has a blue line underneath.
14. Press the menu button to exit the menus.
15. With the main screen active, tap on the timecode to toggle between Record timecode and time of day. Tap on the Battery icon to switch between Voltage (recommended) or percentage/bars.
16. To white balance your shot, place your grey or white balance card in front of the camera, focus on it and ETTR until just below the zebras, then press the WB button on the grip area, or tap on the WB area on screen, and select AWB. Ensure that the target square is completely within the grey or white card, then press Update WB. Your camera will now be neutrally balanced.
17. Use Function 1 to toggle the LUT on or off, Function 2 to toggle Focus Assist on or off, and Function 3 to toggle your frame guides on or off. The HFR button can be used to quickly toggle between normal project framerate and your chosen high speed framerate and resolution. Use the Magnify button to zoom in 1:1 for focus checking.
18. Version 6.2 of the BMPCC4K firmware has a bug whereby the zebras in ProRes do not accurately show the highlight clipping at non-base ISOs, so for now, if shooting ProRes, I recommend shooting at the base ISOs of 400 or 4000 only to ensure accurate zebras. BRAW shooting will correctly show clipping so all ISOs are usable in that mode.

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 LUT to your footage in post-production:

www.LeemingLUTPro.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. All updates to the product are free of charge. You may not upload the LUT anywhere, share it with other people or incorporate it into other LUTs, whether they be for sale or not. Please respect the work that has gone into the LUTs and support those supporting you. Thank you!

COMPATIBILITY

Leeming LUT Pro™ is compatible with any NLE that uses a 33x33x33 .cube LUT format. It has been successfully tested with Adobe Premiere CC 2018, Davinci Resolve 15, Final Cut X and Magix Vegas 13.