INTRODUCTION

Thank you for purchasing Leeming LUT Pro™, the most accurate and professional Look Up Tables (LUTs) for Sony cameras incorporating Picture Profiles or Creative Styles.

The LUTs have been carefully developed to get the maximum dynamic range and colour accuracy out of the various 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 supported Sony cameras. Anything less and I wouldn't have put my name on them!

Enjoy :) 

Paul Leeming
Director / Writer / Cinematographer / Actor
Visceral Psyche Films
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REQUIREMENTS

1. Sony digital camera which supports Picture Profiles or Creative Styles. Make sure you are running the latest firmware.
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 Sony (Cine2, S-Log2, S-Log3, HLG for Rec709 or Creative Neutral).

CAMERA SETUP

(Using A7III as representative of current Sony menu structure. Your camera may not have all the same features so adjust as necessary)

Due to the plethora of menus and sub-menus, the location of each setting will be referred to by their section number first, then the respective menu page within that section:

1-Camera     2-Movie     3-Network     4-Playback     5-Setup     6-My Menu

1. 5-7 Setting Reset - Restore defaults before continuing further, to ensure no buried settings changes will affect the image quality (especially in the Picture Profiles).
2. 5-2 NTSC/PAL Selector as required, depending on your project. You may have to format your SD card after changing this so be sure you have backed up your footage!
3. Rotate the top dial to MOVIE mode and the EXPOSURE dial to 0.
4. 1-10 Exposure step 0.3EV.
5. 1-12 White Balance CUSTOM, DRO/Auto HDR OFF, Picture Effect OFF.
6. **1-12 Creative Style NEUTRAL (Contrast 0, Saturation 0, Sharpness -3).** Note that this can only be adjusted with Picture Profiles set to OFF first if your camera has them.

7. **1-12** For Picture Profile supported cameras, select each Picture Profile in turn from PP1 – PP4 by pushing right on the control wheel to adjust the following settings:

<table>
<thead>
<tr>
<th></th>
<th>PP1</th>
<th>PP2</th>
<th>PP3</th>
<th>PP4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma</td>
<td>Cine2</td>
<td>S-Log2</td>
<td>S-Log3</td>
<td>HLG</td>
</tr>
<tr>
<td>Color Mode</td>
<td>Movie/Standard</td>
<td>S-gamut</td>
<td>S-gamut3.cine</td>
<td>BT.2020</td>
</tr>
<tr>
<td>Saturation</td>
<td>-5</td>
<td>+30</td>
<td>+20</td>
<td>+15</td>
</tr>
<tr>
<td>Detail</td>
<td>-7</td>
<td>-7</td>
<td>-7</td>
<td>-7</td>
</tr>
</tbody>
</table>

Keep the rest of the Picture Profile settings at their defaults:

- **Black Level**: 0
- **Black Gamma**: Range - Middle, Level - 0
- **Knee**: Mode - Auto
- **Color Phase**: 0
- **Color Depth**: 0

**It is REALLY important that you set the above parameters EXACTLY as written, otherwise the LUTs will NOT work correctly. The settings have been derived via extensive testing and are the optimal settings for your pre-LUT footage to give it the best quality for post. You cared enough about your image quality to buy the LUTs, so please feed them the correct settings to work with!**

8. **1-13 Peaking Setting – Peaking Display ON, Peaking Level HIGH, Peaking Color RED.**

9. **2-1 Exposure Mode MANUAL EXPOSURE, File Format XAVC S 4K, Record Setting 24p100M, S&Q Settings – Record Setting 24p, Frame Rate as required for slow motion.**

10. **2-2 Audio Recording ON, Audio Rec Level as required, Audio Level Display ON.**

11. **2-3 Audio Out Timing LIVE, Marker Display ON, Marker Settings as required.**

12. **2-4 SteadyShot ON, SteadyShot Settings as required for your lens.**

13. **2-6 Disp Button as required, Zebra Setting - Display ON, Zebra Level CUSTOM2 – LOWER LIMIT to accurately show the ETTR overexposure limit with a 5% safety margin to protect against extreme RGB single channel highlight clipping:**

<table>
<thead>
<tr>
<th></th>
<th>Cine2</th>
<th>S-Log2</th>
<th>S-Log3</th>
<th>HLG</th>
<th>Creative Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Limit</td>
<td>95+</td>
<td>100+</td>
<td>90+</td>
<td>95+</td>
<td>100+</td>
</tr>
</tbody>
</table>

**Don't forget to adjust the Zebras each time you change Picture Profiles, otherwise the ETTR warning function of the zebras will not work as intended.**

14. **2-8 For Custom Key (Movie) settings, I've found the following to be useful for video shooting, but you can adjust as you wish:**

- Custom Button 1: White Balance
- Custom Button 2: Picture Profile
- Custom Button 3: Zebra Level
- Custom Button 4: SteadyShot Focal Length
- Down Button: Peaking Display Selector
- AF-ON Button: Focus Magnifier (for use with manual lenses)
15. 2-9 Movie button ALWAYS.
16. 5-1 Gamma Disp. Assist OFF (the zebras are designed to function with this set to off, and may not behave as expected with it set to on).
17. 5-2 Auto Pwr Off Temp HIGH, NTSC/PAL Selector as required, Touch Operation ON.
18. 5-3 HDMI Settings as required depending on your external recorder or monitor.

**CAMERA OPERATION**

1. Select your desired Picture Profile or Creative Style for shooting. Be careful with S-Log3 and to some extent S-Log2 for 8bit 4:2:0 shooting as they have an increased risk of banding due to the lack of tonal precision in 8 bits (this is NOT the fault of the LUTs).
2. Adjust the Zebras to the relevant ETTR Lower Limit (see table above).
3. To Custom White Balance [rotate the TOP DIAL to M - not needed with newer cameras], press the C1 button (set earlier to Custom White Balance), choose Custom Setup and
4. Aim the target circle in the middle of the white balance card. Make sure the image is correctly exposed (no clipping but not too dark), then press OK to set the Custom White Balance. Then OK again to install it into the Custom slot.
5. [Rotate the TOP DIAL back to MOVIE if using an older camera] Get used to this white balancing process, as it’s the key to maximum dynamic range across the three RGB channels.
6. Using the zebras, ETTR (Expose To The Right) until you see the clipping point of the zebras, then adjust your exposure down until the zebras just disappear.

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 the .cube LUT format. It has been successfully tested with Adobe Premiere CC 2018, Davinci Resolve 15, Final Cut X and Magix Vegas 13.