Film Punch LUT (V1.0) for LOG footage

I thought I'd start to share some of my LUTS (Lookup Table) with you beginning with **'Film Punch'**. With its balanced skin tones, filmic colors, cool blue shadows and punchy (not crushed) contrast, it's useful for a fast, great looking grade for your LOG footage using Adobe Camera Raw and After Effects, Premier, Resolve etc.

Figure 1: ML Raw to Log CDNG using VisionLog DCP in ACR

Figure 2: Log CDNG with only Film Punch LUT applied

Figure 3: Log DNG with Film Punch LUT, a little contrast and a vignette applied

The Film Punch LUT was developed for Magic Lantern Raw footage (legacy Raw & the new MLV formats) but it will work equally well on any LOG footage (i.e. Cinestyle H.264. It does not need to be Raw but raw footage will deliver the best results). For the purposes of this instruction guide I have used Magic Lantern Raw video recorded on an EOS 50D and converted to Cinema DNG format using raw2cdng.exe.

If you already understand how to convert your footage into LOG colorspace you can skip the majority of this document but please read the section on White Balance (Step 3 c & d) as the Film Punch LUT was designed to work best with the described WB/Tint method.

If you are shooting raw video and processing with Adobe Camera Raw you will need to use a Linear to Log DCP (Digital Camera Profile). Vision Color have released VisionLog DCPs for most DSLR cameras and I recommend using them as a base profile. You will still need to manually tweak your white balance temperature and tint settings for each shot but it's very fast and easy to do ;)

Download the FREE Vision Log DCP and check out their other great products: Vision Log DCP

Note for Magic Lantern Raw footage: You need to make sure your raw2dng converter (i.e. raw2dng.exe / mlv_dump.exe etc) adds your 'camera model' to the metadata of your DNG files. Some raw2dng apps add a default profile called 'Canikon'. I doubt using the default model name will affect things too much as VisionLog includes a default DCP for when this happens but it's best to use the DCP specific to your camera.

Tip: If you use raw2cdng (by Chmee) you can add the model number in the app. Make sure to write it exactly as **Canon EOS 50D** or **Canon EOS 7D** etc (just using 50D/7D etc will not work)

How to (from making ACR adjustments to applying the LUT)

Step 1: Make sure you have the VisionLog DCP profile for your camera installed

Step 2: convert your raw footage to DNG or CDNG (I recommend 16bit if using CDNG)

Step 3: Open Adobe Camera Raw (ACR) either from After Effects or Premier (or Photoshop if you intend to export TIFFs for Resolve or another Non Linear Editor (NLE)

a) In ACR, Select the Vision Log DCP for your camera *(It is important to do this before the next steps)*

b) Zero (0) all settings. Do not make any adjustments to highlight, shadows, contrast etc. All settings should be '0'. *(you can switch on the fix for Chromatic Aberration and adjust sharpness and Noise Reduction to your own taste but be conservative with your adjustments)*

c) Now we need to manually adjust the exposure and White Balance settings. As we are using a very flat LOG profile, the highlights and shadows should now be occupying only a small area of the ACR histogram. If your shadows or highlights extend beyond the histogram you will need to use the exposure slider to pull them back in.

d) For this LUT to work correctly we need to adjust White Balance manually using the Temperature and Tint sliders. I find it best to select AUTO first then make minor adjustments to bring RGB peaks at the 'highlight' (right) end of the histogram into line. (i.e. the peaks of the red, green and blue channels should be on top of one another. Don't worry if the RGB channels are not overlapping fully at the mid-low end of the histogram as it's the highlights we are balancing for. See figures 4 & 5 below). If you do not adjust WB in this way you will likely end up with completely blue footage once the LUT is applied.

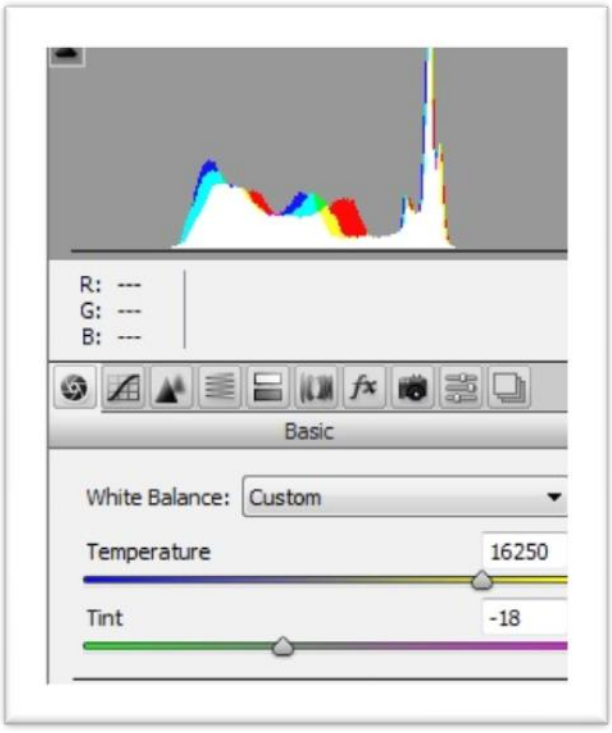

Figure 4: WB Correct for use with Film Punch LUT

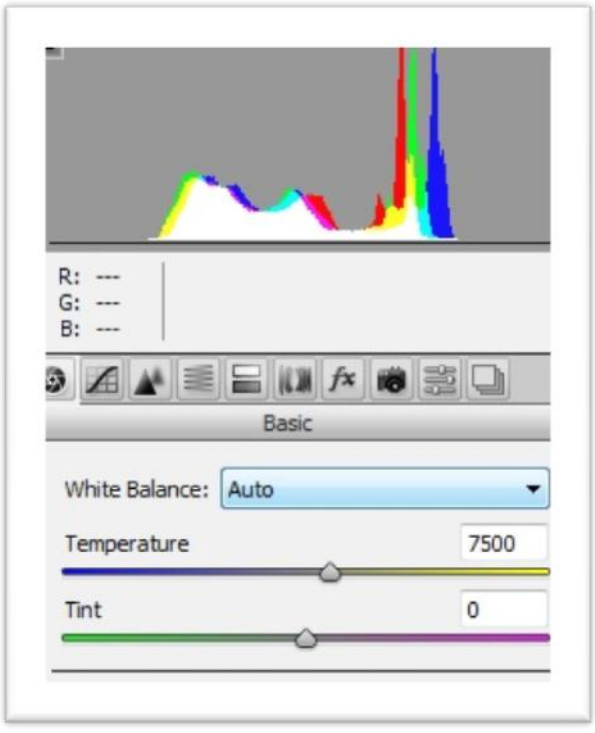

Figure 5: Incorrect WB for Film Punch LUT

e) If you are using a non-Adobe NLE or Color Grading App you can now export 16bit TIFFs of your flat frames.

f) if you're using After Effects or Premier Pro click 'done' to import the DNG's into the app.

Important Tip: Always set your project to 16bit or higher when working with raw footage

Step 4: Once the footage is imported, conformed to the correct frame rate (i.e. choose Interpret Footage) and added to the timeline we can apply the LUT. In After Effects or Premier Pro you can do this using the **Apply Lut** plugin found in the Effects>Utilities directory.

Step 5: If your footage looks blue you need to readjust your ACR White Balance settings *(see section d).* ACR can be accessed at any time by clicking 'Interpret Footage' and clicking on the MAIN button.

Alternatively you can access ACR using Adobe Bridge but be sure to reload your footage in After Effects /Premier Pro to update the settings. If your footage looks a little dark you can use an exposure plugin placed 'BEFORE' the LUT plugin to increase exposure or use curves, Lift, Gamma and gain controls to adjust the luminance. **Don't be tempted to use the highlight or shadow recovery sliders in ACR as this will likely introduce flickering to your footage.**

Step 6: *(optional)* In your NLE : use plugins to tweak saturation, vibrance, sharpness etc and add vignettes etc to your own taste.

Important tip: Always make technical adjustments to exposure and white balance BEFORE the LUT is applied (i.e. exposure plugin > curves plugin > LUT). If you want to increase saturation or contrast I recommend trying the adjustments both before and after the LUT is applied as results can vary.

Davinci Resolve and other color grading apps:

As most non-Adobe NLE's can't import ACR adjustments to DNGs you can either export flat TIFFs from ACR with the VisionLog DCP already applied OR use your NLE to first apply a 'Linear Raw to Log LUT' to your DNG raw footage before applying the Film Punch LUT. You will still need to manually balance/adjust WB and Exposure to achieve the same results. The Film Punch LUT should be compatible with other apps but let me know if you need another format and I'll convert it for you.

Contact me (Andy600) through the Magic Lantern Forum

Lastly...

My Film Punch LUT (and others coming soon) are available to download and use free-of-charge but if you find them useful and are feeling charitable I will graciously accept any donations. All money donated will be put towards future development of LUTs and help me launch a new website dedicated to shooting and post production of Raw video.

Donations: Click to donate with Paypal

Thankyou!

Andy600