

Monitor Calibration

An Introduction

Monitor Calibration and why do it?

- What is it?
 - The process of setting your monitor to a desirable and well-defined state
 - Creation of a profile so images accurately display white point, luminance and color
- Why do it?
 - Monitors are not calibrated out of the box
 - Initially set too bright
 - Default colors are usually over-saturated
 - Initially set for web browsing and productivity applications:
 - Color space tends to be too blue
 - Whites and blacks are pushed to limits to make the display more appealing

You can't trust your eyes

- Your eyes and brain lie to you!
 - We subconsciously remove color casts
 - We don't see them
 - We don't know that they're there
 - Examples:
 - If you step from sun to shade, white still looks white
 - A camera will capture it as more blue
 - If you go indoors with incandescent lighting, white still looks white
 - A camera will capture it as yellow

A Properly Calibrated Monitor . . .

- Will have well defined mid-tones
- Smooth transitions from full black to full white
- No Banding in color gamut ramps
- Natural looking skin tones
- Shadow detail

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Resources

- <http://www.outbackphoto.com/printinginsights/pio4g/essay.html>
- <http://www.northlight-images.co.uk/>
- <http://www.cambridgeincolour.com/tutorials/monitor-calibration.htm>