HP Dreamcolor LP2480zx
Professional Display
and applications in animation

In 2001, DreamWorks Animation SKG™—the creators of the *Shrek* series of full-length animated movies— enlisted HP to help provide computing power to the animation teams. In 2006, DreamWorks needed a system to manage color accuracy, and HP's 25 years of printing and color science expertise led to a natural blending of DreamWorks' expertise and HP's technology.
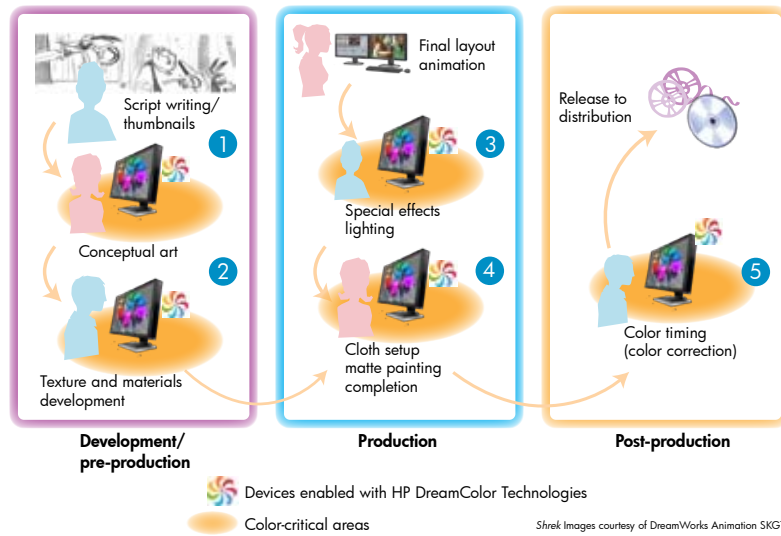
When green is green
When the creators of *Shrek* finally identified the perfect shade of green for their ogre's skin tone, they knew they had it exactly right. The challenge was to keep the same green across the entire workflow—from the artist's paper to computer monitors, printed proofs, and ultimately to the movie theatre. With HP DreamColor Technologies, the animation studio is able to lock-in a color space for an entire project—allowing color accuracy and consistency from concept through production.

Like DreamWorks, your animation workflow can probably benefit from color-matching technology that is affordable, consistent, and doesn't require a PhD in computer science to manage.

Replace that old CRT
Because of their visual performance, you may still be using CRTs for your color-critical animation work; LCD displays could not compete—until now. The HP DreamColor LP2480zx display is an affordable alternative to expensive and power-hungry CRTs, and provides:

- Black levels that are up to 4x lower than LCD studio reference monitors priced up to 4x more
- 30-bit color resolution to reduce banding
- Five factory-calibrated color spaces (Rec. 601, Rec. 709, sRGB, Adobe® RGB and DCI-P3 emulation (97%))
- An RGB LED backlight with wide gamut, CRT-class blacks and programmable white point

Script writing/
thumbnails ①

Conceptual art ②

Texture and materials
development

**Development/
pre-production**

Final layout
animation

Special effects
lighting ③

Cloth setup
matte painting
completion ④

Production

Release to
distribution

Color timing
(color correction) ⑤

Post-production

Devices enabled with HP DreamColor Technologies

Color-critical areas

Shrek Images courtesy of DreamWorks Animation SKG™

HP DreamColor Technologies and animation workflows

Whether you're using Microsoft® Windows® or Apple Mac OS, HP DreamColor Technologies can reduce overall design times and lower costs within your animation workflow:

1. During development, writers and artists develop the storyline, then sketch storyboard panels to present to the directors. The Art department creates conceptual art for characters, props, and environments; a color-critical step as the final approved images are used as reference for the rest of the duration of production.

2. In pre-production, textures and materials are created for models of the characters, props, and environments. In this step, the HP DreamColor LP2480zx display gives texture and materials designers accurate and consistent color fidelity, rich visual quality, and predictable results.

As early development artwork passes from concept to lighting and effects, the studio benefits from knowing that all participating artists and technical directors—regardless of their location—will see the same colors.

3. During production, final layout installs final models, and sets up shots for character animation and lighting.

Special effects, like smoke, dust, fire, and water are added. Adding effects is a color-critical step, relying on consistent colors throughout the length of the story.

Lighting places lights in each shot, and composites and renders elements together to create final frames—also a color-critical step.

4. Production is also where character effects like cloth and fur simulations are created. Background layers (matte painting) are painted and composited in, and rendering errors are corrected.

5. Finally, in post-production the entire feature is color-timed (placed through a color correction process). For this process, directors and color-timers rely upon the accuracy, wide gamut, and black levels of the HP DreamColor LP2480zx display to represent how the movie will look in digital cinema and on film. The feature is then recorded to film and disk and distributed to theatres.

The next step in animation

HP DreamColor Technologies are the next step in streamlining the animation workflow. Using HP DreamColor Technologies can help reduce development and production cycle times, increase quality, and lower development and production costs.

To learn more, visit www.hp.com

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