

4K Restoration of *Apocalypse Now*

Francis Ford Coppola chose to remaster his classic *Apocalypse Now* to take advantage of advances in modern home theater technology. For the new Blu-ray™ version, he wanted to preserve the original saturated texture and shadow detail of the original movie and maintain a filmic quality.

Doug Delaney, the digital intermediate colorist who led the remastering project, scanned the original IP of the film at 4K and did the restoration on those 4K source files. From there he color graded the HD master for Blu-ray. Due to the complexity involved in updating the film while maintaining its iconic look, Delaney turned to the Dolby® Professional Reference Monitor for its consistency, accuracy, and ability to reproduce all of the film's exceptional dark detail.



Because the original capture of the film involved a wide dynamic range and many scenes relied heavily on dark shadows for dramatic effect, the use of the Dolby Professional Reference Monitor was instrumental in defining true blacks. Precisely delineating the colors was a critical visual element used by Coppola to enhance the story of *Apocalypse Now*. Therefore, color precision was critical to the success of the restoration project. The Dolby monitor gave Delaney the confidence that other display technologies could not, allowing him to make the bold color decisions called for with this film and to judge those choices accurately.

“One of the many things we look for in a reference monitor that Dolby provides is low-end shadow detail,” said Delaney. “It’s one of the great distinguishers between display devices, whether they be flat panel or projection. Creating very dark, lush, deep images with shadow separation is very important to convey nuance of mood within a very dark scene, for example.”

For Delaney, the benefits of using the Dolby Professional Reference Monitor were clear:

- Stability and accuracy, a consistent day-to-day standard with which to evaluate images
- True blacks with exceptional dark detail
- Accurate color reproduction
- Ability to work in multiple standards: DCI P3, Rec. 709, EBU, or SMPTE C
- Native 12-bit depth display without dithering for accurate, pixel-perfect reproduction of very fine detail

Filling the gap left by the CRT, the Dolby Professional Reference Monitor delivers true blacks, exceptional dark detail, high contrast, wide dynamic range, and precise color rendering. It is the most consistent, accurate reference monitor for creating any type of entertainment content.

For more information, please visit

www.dolby.com/professional/case-studies/monitors/apocalypse-now-case-study.html.

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