

الفراغات اللونية الرقمية ودورها فى التأثير والتحكم فى الجودة اللونية للصورة السينمائية التقليدية والرقمية

Digital color spaces and its role in influencing and controlling color quality of traditional and digital cinema image

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Introduction:

The digital color element is difficult to be described graphically, over the past decades, many digital color models have been created, all of which have been used to define and classify colors according to their different characteristics. However, there are a certain number of digital color models that are related to film production relies on the color model (CIE) which is the most color system used to describe the color space limits of a film (either traditionally or digitally).

Statement of the problem:

At the end of 2013, the digital color space (ACES) was created, which had the advantage of approaching the color vision limits of the human eye, making it suitable to work in parallel with the stages of photography and cinematic display, This requires studying the color limits of the digital color space (ACES) with a compare to the color boundaries of the previous color spaces used prior to its appearance to determine how important it is to control the color quality of the cinematic image.

Research Objective:

The research aims to study the features and color limits of the digital color space (ACES) and compare it with the previous color spaces used before its appearance to determine its importance in controlling the color quality of the cinematic image both in the stage of photography and in the stage of cinematic digital presentation.

Hypothesis:

By studying the color limits of digital color space (ACES), we can see the possibility of replacing it with the digital color spaces used prior to its creation in the stage of digital cinematic photography and in the stage of cinematic digital presentation.

Methodology:

The research follows the analytical descriptive method to describe the features, possibilities and color limits of digital color space (ACES), which is used in the stages of digital cinematography and display to control the quality of the digital cinematic image before projection.