

Iterative White Balance Adjustment Process in Production Line

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Abstract : White balance adjustment of LCD TVs is an important procedure which has a direct influence on quality perception. Existing methods adjust RGB gain and offset values in different white levels during production. This paper suggests an iterative method in which the gamma is pre-adjusted during the design stage, and only 80% white is adjusted during production by modifying only RGB gain values (offset values are not modified). This method reduces the white balance adjustment time, contributing to the total efficiency of the production. Experiment shows that the adjustment results are well within requirements.

Keywords : color temperature, LCD panel deviation, LCD TV manufacturing, white balance

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