



ANALYSIS OF THE RESPONSE TIME COMPENSATION SYSTEM FOR LIQUID CRYSTAL DISPLAYS (WedAmPO4)

✳ Author(s) :

Sanjeev Kumar
Mainak Biswas
Truong Nguyen

(University of California, San Diego, United States)
(University of California, San Diego, United States)
(University of California, San Diego, United States)

✳ Abstract :

Liquid Crystal Displays (LCD) has become a universal choice for television displays in the recent years. Due to the electro-optic nature of the LC materials the response time for gray to gray transitions is not fast enough for high quality video applications. The slow response time of the LCD results in motion artifacts, which are visible as blur of moving objects. In this paper we analyse this non-linear behavior of the LCD and suggest a method to compute the actual acceleration voltage based on the value of the current pixel, motion in the scene and LCD characteristics.