Overview

TV, camera, printer and other visual equipment are evolving to provide an abundant palette of colors. In the past, hardware limitations made it impossible to reproduce all colors perceived by the human eye. However, visual devices now boast an extended color range thanks to advances in display and printing technologies. Moreover, consumer demand for an extended color range is rising along with the growing popularity of digital cameras and camera-equipped digital products.

In response to these changing demands, Samsung Electronics has launched the world’s best monitor featuring CCFL (Cold Cathode Fluorescent Lamp) technology with 97% color gamut. In addition to sharper images, the monitor can display colors previously impossible to reproduce.

Color Innovation by CCFL 97% Wide Color Gamut

LCD panels generally use CCFL (Cold Cathode Fluorescent Lamp) as the backlight. The CCFL is similar to very slim fluorescent lamps used in the home, except that it does not emit heat. The advantages of the CCFL are low power consumption and bright white backlight. The CCFL 97% Wide Color Gamut monitor features CCFL with enhanced fluorescent material that enables the reproduction of a broader range of colors.
The CCFL 97% stated above refers to 97% coverage of the NTSC color standard. NTSC stands for the National Television Systems Committee and also refers to the technical standard for display products, broadcast equipment and video signal level in the US. (An LCD monitor with 82% NTSC color reproduction means that it covers 82% of the NTSC RGB color gamut.) A monitor with 97% coverage signifies the reproduction of almost all colors in the NTSC standard. That signals a radical improvement from the 82% coverage (lacking depth and variety in color), which had been cited as a drawback of the CCFL LCD monitor. The wider color range of CCFL 97% enables the reproduction of colors previously impossible to display, resulting in more vibrant and richer images.
Wide Color Gamut products allow viewers to enjoy sharper and true-to-life picture quality with redder reds and greener greens. The 97% Wide Color Gamut CCFL reproduces intense and natural colors previously unseen on LCD products due to the constraints of existing LCD panels.

Besides the basic pre-configured settings, the “Color Innovation” solution allows users to adjust color settings according to their preferences.

- **Brilliant**
  - Crisp and clear picture quality

- **Mild**
  - Natural and soft images

- **Customized**
  - User-adjusted color, contrast and brightness.