



Why does my colour not match?

Why does it look different than on my screen?

PMS



**Additive Colour
(RGB)**



**Subtractive Colour
(CMYK)**





Why Does My Colour Not Match?

When you look at colours on a computer screen, they are made according to a system that is similar to how the human eye sees colour. This is **RGB (Red, Green, Blue)** system. In the RGB system, all colours are derived from combinations of Red, Green and Blue. This system is an additive colour system as colours are added to a black background on the monitor. Printed inks are composed from two different systems altogether. Printed inks use either the **CMYK (Cyan, Magenta, Yellow, Black)** system or the **PMS (Pantone Matching System)**.

The CMYK system is considered a subtractive colour system, and in this system all colours are made from a combination of four colours: **Cyan, Magenta, Yellow and Black**. CMYK is usually used in multicoloured layouts and magazines because of the simple ability to print so many colours by mixing just four tones.

PMS colours are comprised from **nine basic colours, including white**. From the specific combination of these nine colours, PMS can produce over 1000 exact colours. This system is often used in creating business cards, letterheads and corporate logos and marketing.

The main difference in on-screen colours opposed to printed ink colours occurs because all three systems described above initially **combine different colours that make different tones**. This is the reason why what you see on your computer screen may be different than what is actually printed.

A Computer Screen Will Always Look Brighter

If you notice a decrease in your design's contrast when printed, remember that on-screen images have **light shining behind them**, which causes images to appear more bright and vibrant. Printed artwork's brightness depends on the contrast between printed colours and the white of the paper. Keep this in mind when adjusting the contrast and brightness of your artwork before print. In general, brighter and higher contrast is better!

RGB - Computer Screen



Pantone - How it Will Print



CMYK - How it Will Print

