

Metadata | Part B

Our eye's sensitivity will determine why some encodings have different numbers of bits per colour channel.

So how much detail does our eye need? Let's take an image with a gradient, now a gradient is a transition of brightness between the two colours. They are often used for metallic or fake 3D effects as they repeat how light spreads on a real metallic surface. As you can see, by changing the number of bits in this image – its "bit depth" we can get this gradient to break down and appear less smooth, until it becomes solid colour at about 1 bit colour depth.

Apart from the information on how much red, green and blue each pixel contains, higher quality images also store the so-called alpha information – the transparency value. By changing alpha value you can get a pixel to become ghostly – so you can see through it. While not very useful by itself, it is great for blending various photographs together.