

# Digital Artwork...

What Is It?



← Big-G

“What is Digital Artwork?  
I want to talk to you about the  
two main formats of design in  
print and online”.

# 1. What is Digital Artwork?

Digital Artwork is a term used by designers and marketing professionals a lot... But what does it actually mean?

What “is” digital artwork?

Digital artwork is a form of electronic data that can be used to produce a form of communication material in print or online. It can come in a variety of “file types” or “file formats” that are created and stored on computers such as Apple Macintosh or high powered Windows machines.

Usually, in order to create digital artwork specialist software is required to put together the structure and form of a design or layout and then save into an appropriate format that can be put into production.

# 2. Two Forms of Communication

There are essentially two main forms of communication - tangible printed material or internet based (websites or social media). Or in simpler terms - online and offline. To create digital artwork for each media, you need to have your designer set it all up as high resolution (for printing or offline) or low resolution (for internet or online).

There are resolution standards that generally conform to most production processes and they are 300 dpi for print and 72 dpi for internet use. Also, an important factor to consider with digital artwork for offline and online use is the colour format that is required for each, offline digital artwork should be set in CMYK format and online should be set in RGB format.

At a very basic level, that summary of the differences will help you navigate any awkward conversations between yourself and your designer but if you want to understand a bit more about digital artwork and the elements within it, read on...

# 3. Printing Formats

Let's separate this into two sections to make this a little easier to digest. We'll start with digital artwork for printing or offline media...

Your digital artwork for printing should always be set in CMYK format in high resolution. So what does this mean?

CMYK format. This is a colour format where all of the data within the Digital Artwork is made up of colour references that give values for different levels of 4 main inks: Cyan, Magenta, Yellow and black. Mixing these inks to different percentages will give you an end of product of a pre-defined and specific colour. Printers work in this way so they can all guarantee to produce colours correctly.



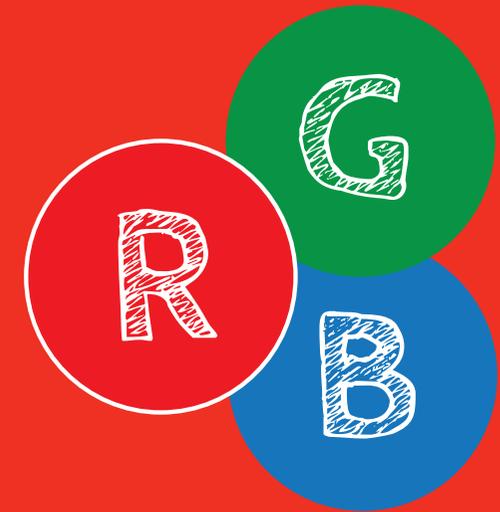
# 4. Print High Resolution

High resolution. This is important as the quality of the image printed is directly reflected in the resolution of your Digital Artwork. We've all pinched an image from the internet to stick into a Powerpoint before. And usually the image you really need and find is very small and pixelates when you drop it into place and scale it up in size. The quality breaks down because the resolution is not great enough to blow up in size. If your Digital Artwork is set to 300 dpi with all supporting and linked images also set to that resolution - you will ensure crisp and precise reproduction when your Digital Artwork is printed.

You will also need to include things like bleed and crop marks when you print things. These are added to Digital Artwork by the designer within the specialist software before they prepare it for the printer.

Bleed is added where an image runs off the edge of a page. The printer will print an area larger than the required page size and then use crop marks to cut away the additional area that is not required. This ensures that there are no nasty unprinted areas along the page edges.

# 5. Online Formats



With online media, the colour format needs to be RGB and the resolution set to low.

**RGB format.** This is the colour format that the web uses to display imagery with. This format is made of 3 primary colours: Red, Green and Blue. These 3 colours give us a spectrum where any colour can be made using different percentage mixes of R, G and B.

The web uses this colour format as it allows an even greater range of colour and flexibility than CMYK format but each format can be replicated by converting the format within the specialist software packages available to professional designers.

**Low resolution.** The web does not require such high resolution as offline media does. Imagery that is loaded onto the net should always be set to low resolution of 72 dpi so the file sizes of imagery are smaller in comparison to the high resolution files carried offline.

This low resolution ensures that images online load quickly when they are visited - there is nothing worse than a slow loading website and this can be down to unnecessarily large images being uploaded to sites on the net.

# 6. What is DPI?

Ok then, so what is DPI?

DPI stands for Dots Per Inch which technically means printer dots per inch. Today, it is a term often misused usually to mean PPI which stands for Pixels Per Inch. So when someone says they want a photo that is 300 dpi, they actually mean they want 300 ppi.

Below is an example of a section of an image that is 300 dpi or ppi and a 72 dpi or ppi image. This demonstrates the density of dots that make up the resolution of an image, this will hopefully reveal why low resolution images break down in quality and pixelate when blown up in size.





When working with your designers for print or web work, you should now have a bit more understanding of some of the terminology that they use when discussing Digital Artwork and files that they need to produce it for you. There are a several artworking factors to consider when producing any form of communications material for your business but as long as you stick to the basic principles, you won't go far wrong!!

## To Summarise..

**Offline** - printing lithographically or digitally, signage,  
car graphics, large format or exhibitions

**CMYK format**

**High resolution** - 300 dpi (ppi) or higher

Include bleed and crop marks where appropriate

**Online** - websites, social media, mobile apps,  
web banner advertising

**RGB format**

**Low resolution** (or screen resolution) - 72 dpi (ppi)