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CARTER RAE COMMUNICATIONS LTD

DIGITAL PHOTOGRAPHY

A BRIEF GUIDE TO SUPPLYING
DIGITAL PICTURES FOR PRINT

INTRODUCTION

There is a lot of confusion concerning digital pictures. One of the most commonly asked questions is "are they really good enough for use in printed publications?" The simple answer to this is yes, if the original image is supplied at a good enough quality.

Also in connection with digital pictures, you will hear terms such as pixel, jpeg, tiff and resolution. But what do they all mean? And how do you know if a digital picture is of good quality? This brief guide hopes to enlighten you.

WHAT IS A PIXEL?

Think of a mosaic. It is made up of hundreds of tiny tiles, which together form a picture. If you look really closely at any digital image, you will see that it is made up of a matrix of tiny coloured squares just like a mosaic. This is especially obvious if you make the picture bigger or print it out. It is these little dots that are known as pixels.

WHAT ARE JPEGS, GIFS AND TIFFS?

Digital images can be supplied in a variety of formats. The most common are jpegs (pronounced 'jay-pegs'), gifs and tiffs. But what do these terms actually mean?

- The JPEG (Joint Photographic Experts Group) format is by far the most popular format for capturing images on digital cameras and displaying photographic images on the web. This is the best format to supply images electronically. It compresses the data, meaning a smaller file size.
- GIF (Graphics Interchange Format) images are widely used on the web but mostly for line art, not for photographic images. This format is only suitable for web work.
- TIFF (Tagged-Image File Format) was originally developed to save images created by scanners and photo editing programs. It has now been widely accepted and supported as an image transfer format. This is the format in which pictures are actually sent to print.

IMAGE SIZE

The quality of a digital image, whether printed or displayed on screen, depends in part on the number of pixels used to create the image (sometimes referred to as resolution).

You may also hear of digital files being described as 'so many' pixels per inch (ppi) or dots per inch (dpi). Most cameras produce files that are described as 72ppi. This relates to the standard resolution at which computer monitors display images.

An average photographic image file, shot at the camera's default setting will probably be about 300x200 pixels (0.6 Megapixels). To reproduce well in print, however, a photograph needs to be at least 2100x1500 pixels (3.1 Megapixels). Therefore, if you are taking a photograph for reproduction in print, check that the file size is either at least 3.1 Megapixels or 300ppi.

SO WHAT'S THE BOTTOM LINE?

When you are supplying digital images for print, they either need to be at least 3.1 Megapixels (2100x1500 pixels) or 300ppi. Otherwise, you will find that your printed photograph 'pixellates' (looks like a mosaic). Cameras usually save pictures automatically as jpegs and this is fine, providing the resolution is high enough.

HOW DO I CHANGE SETTINGS ON MY CAMERA?

Digital cameras all have some sort of display, usually on the back, that allows you to change various settings. Set your camera to take pictures at the largest image size available and set quality to high. You will find that this means fewer images can be stored on your camera's memory card, as the higher the quality of the picture, the larger the file size.

If you are unsure as to how to change the settings on your camera, refer to your instruction manual. For a brief overview of most digital cameras on the market and user instructions, a good website to visit is www.steves-digicams.com*.

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Further Information

If you have any questions relating to digital pictures, their use or the terms that are used in connection with them, please contact:

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Glossary

- dpi – dots per inch
- GIF (Graphics Interchange Format) – an internet graphics file format
- JPEG (Joint Photographic Experts Group) – the best picture file format for supplying electronically
- Pixel – one of the tiny dots that makes up a digital image
- ppi – pixels per inch
- Resolution – number of pixels per inch
- TIFF (Tagged-Image File Format) – the picture file format that is actually used in print