

## Introduction

If you have been sent this sheet it is likely that there is a problem with pixilation on the design that you have asked us to print. Hopefully this sheet will not only explain to you what the problem is but also how to fix it.

Please note this is not a technical explanation and hence is not fully accurate in technical terms, we are aware of this but have created this to simplify an otherwise very complex topic.

## What is the Problem?

Most pictures on a screen are made up from small dots of colour. Each picture is made up by a certain number of dots or pixels. Quite simply the higher the number of pixels the higher quality the picture and the larger it can be displayed or printed without distorting. If a picture is enlarged beyond a certain point it will begin to distort and appear blurry.

## But my Picture/Logo looks fine on screen?

A screen displays at 72dpi (dots per inch) where commercial presses print to 300dpi (Different type of dpi compared to consumer printers!). To see how a press would print your logo or picture, zoom in to 400%, or display the image four times as large as you would like it to appear when printed. This will give you an idea of how it would look when printed.

## Example

There are three examples of the Graphic Realm logo below, each is at a different resolution. At 100% zoom all the logos should look clear, however when you zoom in you should see the differences.



Logo 1 - JPEG at 150dpi



Logo 2 - JPEG at 300dpi



Logo 3 - Vectored File Type

If you zoom into this document to 400% you will be able to see;

- Logo 1 is very distorted and if printed this would be very obvious. (Don't believe us, try it yourself).
- Logo 2 does not distort at 400% and would print well, however if made any larger would also distort.
- Logo 3 is a vectored logo, meaning it is made up from a mathematical formula as opposed to dots. Because of this it will never distort regardless of zoom.

TIP - If a picture displays clearly on a screen at 4 times the intended printed size it should print clearly.

OK, I understand the problem, what's the solution?

1. Replace - The best solution is to replace the offending logo/picture with one that is a higher resolution or vectored. If your looking for better resolution files good places to check are; you web designer, any old proofs from printers and electronic versions of corporate documents what have been professionally produced. Logos should usually be in an .ai illustrator file or .eps format.

2. Re size - You can sometimes get away by making a picture or logo smaller which can reduce pixilation. Use the four times rule of thumb to check however this isn't ideal.

3. Rebuild - This is by far the most complex and expensive option, pictures unfortunately cannot normally be rebuild. With logos it is often possible to rebuild, however it is notoriously expensive as it requires a lot of design time. If this is your only option we will be happy to provide a quote.

4. Risk it / Regret it - We can print your artwork as it is however we will need your signed consent to go ahead with sending this down to print. Obviously we would not recommend this