ARTWORK AND PRINT GUIDELINES

CONTENTS

General Guidelines

Your finished project, visually-speaking, can only be as good as the artwork supplied for print, so it's important to get your artwork correct at the outset! We're always happy to help you achieve the best results for your project and we do offer a full design and repro service, so give us a call if you're in need of assistance. The following basic guides are applicable to any printed item, but please also check the specific guidelines for discs and packaging on the following pages.

• Please use the artwork templates we supply you. These are designed specifically for our production methods and templates you may have sourced online or from other suppliers may not be useable. Please be careful not to resize or rescale these templates during use.

• Please supply print-ready PDF files made from artwork designed in a professional software package such as Adobe Illustrator or InDesign, or Quark Express; this is the print industry standard. We can accept Photoshop PDFs but we do not recommend Photoshop for final print design. Supplying artwork as Photoshop .psd files or InDesign .indd files often causes problems, particularly with colour management and text. We may have problems with PDFs made from Corel Draw and we are not able to accept artwork in Microsoft Word, Excel or Publisher files.

• Though we can accept whole designs as bitmap image files, this is not recommended. If you have no other option, please supply them as .tif rather than .jpg format. JPEG files are of very poor quality, heavily compressed and designed for internet publishing rather than print.

• Any images (as opposed to text and vector art) used in your artwork should be supplied at least 300dpi (dots-per-inch) resolution. Low-resolution images can be used, but the pixellation is usually visible on the finished goods. Please also ensure any images you import/link into your artwork are embedded.

• Regardless of what software you use for design, always set your document to CMYK mode and not RGB. The RGB colour mode is only of use for web design and when we convert supplied RGB artwork files to CMYK as necessary there is often a noticeable shift in the document colours.

• So long as the supplied templates are adhered to, we do not require any extra printers' marks on your finished files. This is especially relevant to designs made in Adobe InDesign. Colour bars and registration marks are simply not required and often have to be removed.

• A full set of PDF proofs will be sent to you for final checking prior to print. Please read the accompanying email we'll send very carefully; once the proofs have been approved, the print process will begin. Any mistakes missed or changes required after this point may be very costly and we cannot be responsible for this.

CD/DVD/Blu-ray Disc Artwork

Known in the industry as *on-body* artwork, this is what's to be printed on the disc face itself. Paper labels or stickers are never used on discs; print is done directly onto the disc surface using a method appropriate for your design and/or budget: screen-print, litho-print or inkjet.

Screen- or litho-printing are the standard methods for all replication orders. We can print by these methods for small duplication orders as well, or inkjet print directly onto white or silver CDR. Printing onto plastic is not subject to quite the same science as printing on paper and there are some constraints on what we can be effectively printed on discs regardless of the print method. We always suggest that you contact us before spending time on artwork that might not be viable.

- Please supply disc artwork as a solid circle with no centre hole. Allow for the hole to be there (using our template as necessary) but remove it and any guide rings before supplying the finished artwork as a solid circle. We will mask off the hole and outer circle prior to sending proof files of your design.

- Artwork that has a simple graphic design is probably best screen-printed if within your budget. Such designs need to be supplied in spot (Pantone) colours and not CMYK. See images below. Please contact us if you're unsure about how to supply to this standard.

- If we are to screen-print your discs, use spot (Pantone) colours but please be aware that tints below around 12% ink coverage may disappear completely; those over 87% may flood to 100%. This is obviously especially relevant if supplying disc artwork with very light or very heavy coverage areas, or graduated tints.

- If your design is to be litho- or screen-printed and you wish to have certain areas reversed-out to show unprinted silver areas will usually require a custom white base. Because white ink cannot be outputted with white areas of artwork, in such instances the white base will need to be supplied as a solid (100%) spot colour. Again, do contact us if you're unsure about how to do this.

- Partial varnishes are effective, especially on single-colour discs, can also be applied. These layers must be supplied as vector artwork.

Spot colours are screen-printed with premixed inks.

All colours here are litho-printed as dots of cyan, magenta, yellow and black

Packaging, Booklets and Insert Artwork

Previous general guidelines apply to any paper and card parts required for your project. Prices we estimate, unless otherwise requested, are based on printing four process (CMYK) colours on a standard weight and finish of material. If you require print using spot (Pantone) colours, special material (such as reversed or recycled board), varnishes or laminate finishes please let us know as soon as possible as any non-standard items will incur a small surcharge.

Bleed

The most common fault with artwork supplied for packaging is the lack of external bleed. Any items we print on paper or card are printed first and cut to size afterward, usually on an automated cutting line. If your artwork is supplied only at cut size, it's likely that at least one edge of the finished item will bear a white, unprinted line. The background of your design should thus extend beyond all cut edges by 3mm – this area to be trimmed off is the bleed. Some of our print suppliers may reject any artwork without bleed.

Digipack artwork supplied on template with external bleed to be trimmed.

Scan of finished item with bleed trimmed off prior to folding, gluing etc.

Booklets

To keep our costs to you as low as possible, we ask that you paginate the double-page spreads for booklets of eight pages and over as *printing pairs*. Each double-page layout needs to be supplied as required for the printing plates, rather than in the order you will read them. E.g. although page 2 will follow page 3 in a finished 8-page booklet, pages 2 and 3 are not on the same sheet of paper in the booklet. We've produced a handy guide to setting your artwork up for printing pairs on the next page.

Special papers/boards

We can print on almost any type of stock you require, within reason, but please be aware that though printing onto any uncoated surface results in an attractive matt finish, the ink soaks down into the material and colours will lack lustre and brightness. Digital-printing, the method we usually employ for very short runs, doesn't work so well on uncoated material as the printed toner "sits" on the paper/board surface and the matt effect of the board beneath is generally lost for designs with all-over colour print.

Varnishes, laminates, foiling and embossing

Litho printed material is finished with a satin machine seal as standard but we can apply partial or all-over (flood) varnishes to most items, matt or gloss. We can also laminate most outer packaging types in matt or gloss. We are excited to be able to offer silver or gold foil laminates for board packaging, such as vinyl sleeves, wallets and digipacks, which can be printed, even with white ink. We can also block-foil areas of text or logos in a wider range of colours and effects than just silver or gold! We can also emboss or deboss board packaging material – contact us for details.

Barcodes and sequential numbering

If your product requires a barcode, we can create one for you and add it to your packaging design as necessary, but we cannot grant you the numerical code itself. Officially, all UK retail barcodes are licensed by GS1 (www.gs1uk.org), though several online firms offer bulk deals on product codes. If you are adding a barcode to a design yourself, we recommend that you use plain black vector bars (not a CMYK black) where possible and do not scale the device to any smaller than 35mm width. Most packaging can be numbered if necessary; a common request for customers offering limited-edition products. We can also produce download cards from the supply of codes.

Printing Pairs Guidelines

The guide below should help you lay out booklets for most orders requiring them. If supplying a multipage PDF of double-page spreads for booklets with over four pages, please identify the page numbers on each spread. The total number of pages in stapled booklets must be a multiple of 4. Odd numbered pages are always on the right and the pattern can be followed for any booklets of 16 pages and over. For high page counts, contact us regarding the maximum number of pages that will fit in the packaging you require.

4-page - print single-sided

Page 2 Back	Page 1 Front

4-page - print double-sided

Page 4 Back	Page 1 Front
Page 2	Page 3

8-page

Page 8 Back	Page 1 Front
Page 2	Page 7
Page 6	Page 3
Page 4	Page 5

12-page

Page 12 Back	Page 1 Front
Page 2	Page 11
Page 10	Page 3
Page 4	Page 9
Page 8	Page 5
Page 6	Page 7

16-page

Page 16 Back	Page 1 Front
Page 2	Page 15
Page 14	Page 3
Page 4	Page 13
Page 12	Page 5
Page 6	Page 11
Page 10	Page 7
Page 8	Page 9

HANDY TIP: Page numbers of spreads should equal the total page count plus one, i.e. 12-page booklet spreads are 12 +1 = 2+11 = 10 + 3... = 13

Handy Tips

Even if much of your design is imagery and needs to be made in Photoshop, we recommend that these elements are later imported into a vector-based program (Illustrator, InDesign or Quark as previously iterated) for adding standard text and logos where possible. Although this is not imperative, the print results are invariably cleaner and sharper.

Using black in your design

Small black objects are best set to print as *plain black*, which is 100% K only. Small objects made from a black using all four CMYK colours, called *rich black* (which you will find is standard in Photoshop, for example) usually results in very slight fuzziness as all four colours lay down a certain amount of ink. An exaggerated example is shown below:

PLAIN BLACK   RICH BLACK

Coversely, if using large areas of solid black in your design, 100% K black tends to look a little washed-out. We suggest a black of 100% with 50% cyan to give extra depth. Please do not use blacks made up of 100% of all four CMYK colours (known as *400%* or *registration black*). Although this would appear to offer the deepest black on your computer screen, flooding ink onto paper or plastic like this is too much and prevents effective drying. Some printers will reject artwork with ink coverage over 320%. Always have your software set to display and output blacks accurately so you can see what you're working with and always have your colour toolbox window open!

Overprinting

If you are implementing small black objects on top of a background with colour in it, especially fine text or tiny logos, it's standard practice to set them to *overprint*. Options for this are usually found as a tickbox under *Attributes* in your design software. Overprinting such objects ensures that the black plate (the last of the four in standard print) lays down your type/small logo over the background already printed, as opposed to knocking out the shape of the object from the colours beneath. Although this is not an absolute necessity, black objects not set to overprint may display very fine, but noticeable, "ghosting" through plate misregistration. Even just a fraction of a millimetre shift, which is sometimes impossible to prevent in high-speed print, can result in this, demonstrated below.

Magenta plate	Black plate	Typical result
	OVERPRINT	OVERPRINT
KNOCKOUT	KNOCKOUT	KNOCKOUT