

## Reference Book - Tips for creating Graphic-Files



# Sony DADC

## Tips for creating Graphic-Files

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## More important informations for creating Graphic-Files

- Reference Book Label
- Reference Book Template
- Reference Book PDF from InDesign including ICC Profile, Distiller Settings and Preflight
- Reference Book PDF from XPress including ICC Profile, Distiller Settings and Preflight
- Reference Book PDF from Corel Draw including ICC Profile, Distiller Settings and Preflight
- Sony DADC Download Area



## Specifications

Different press plants have different disc- and packaging styles and specifications for their products. Measurements of these specifications must be considered when doing your layout. Otherwise unwanted costs for file correction will be charged.

You will find PDF and Adobe Illustrator templates for most products on our homepage at the [Template PDF](#). Our templates are 1:1 and include bleed, cutting lines, artbox (design area) and folding lines. For the labelprint we use – if desired by the customer (in most cases recommended) – a white base. For this we have existing films with various specific cut outs, which means when you do the layout for your CD calculate the lacquering ring and centre-hole in but do not knock them out of your design. In order to guarantee a 100% agreement, we do that for you.

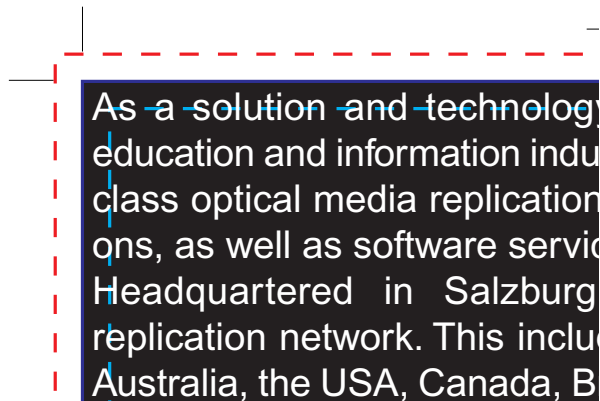
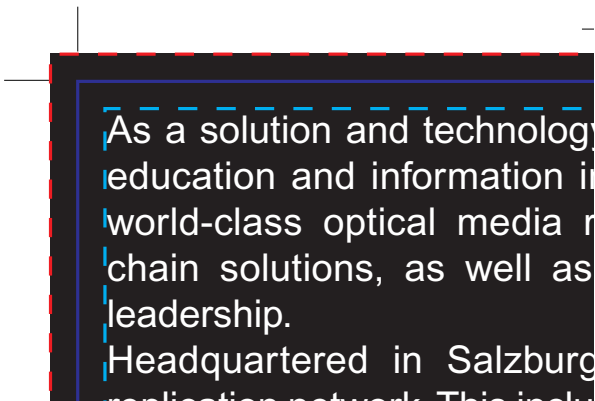
## Bleed, cutting tolerance and cutting marks

Please ensure that a 3 mm bleed is used, if you want images to go right to the edge of the page in your packaging-design. Otherwise a white line may be visible after cutting. A minor movement of the paper whilst cutting demands this 3mm tolerance. Graphic and text elements should not be placed too close to the cutting edge (cutting line – dark blue in the template). 3mm distance to the inner side (image 1 – artbox – light blue dots in the template) is ideal. Also we have the risk, that these elements are cut or cut off (image 2). Cutting marks have to be specified in each artwork, to define the net paper format. These marks are essential for the printer.

Image 1: correct



Image 2: incorrect



## Ink-Coverage

Cyan, Magenta, Yellow and Black printed on top of each other in 100% solids, gives you an ink-coverage of 400%. This is requested for cutting and register marks, but not for text, logos, areas and pictures. 350% should not be exceeded. This can lead to following problems: Ink doesn't dry on paper = ink is setting off underneath the next printed sheet and smears the design; the paper expands = register problems appear; the printer has to reduce the colour on the printing machine = correct colouring changes. This problem is very serious when printing larger areas of solids and images. To high ink-coverage will be claimed by us by screenshots (image 3 + 4), in which the affected parts are dyed green.

Image 3

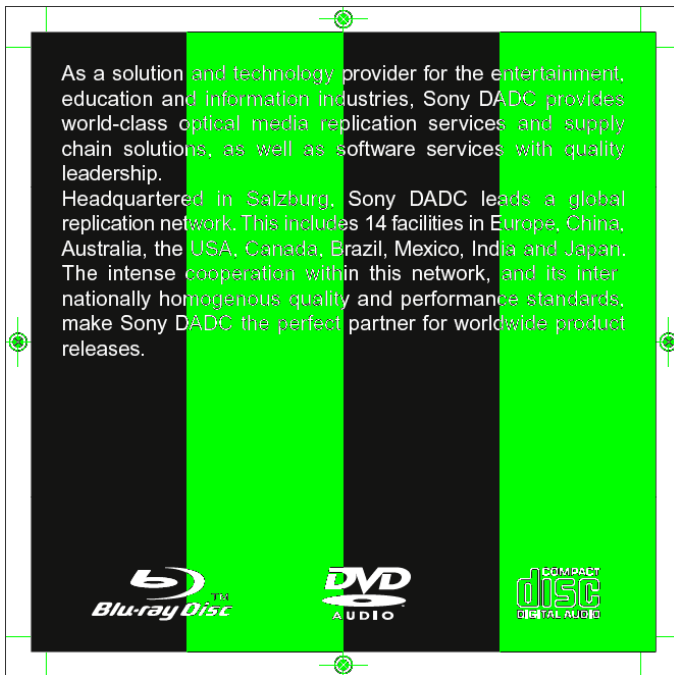
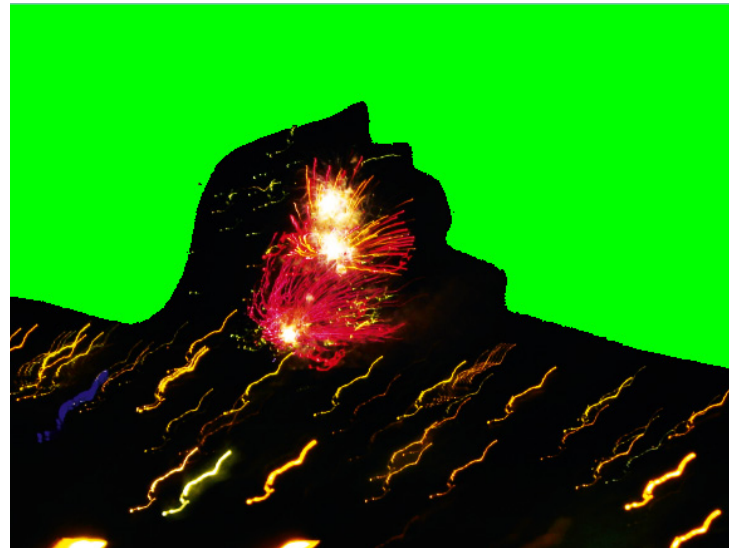


Image 4



## Register problems

If a small text, EAN Code or logo is written in 4-colour black, or in another 4-colour composition, there can be register problems during printing. The 4-colour black element differs from 100% black elements. They appear either thicker (image 5) and a little bit bleary or there is the so called register impreciseness (image 6). First line in the example is coloured wrong.

Image 5

**As a solution and technology provider for the entertainment, education and information industries,**  
Sony DADC provides world-class optical media replication services and supply chain solutions,  
as well as software services with quality leadership.

**As a solution and technology provider for the entertain**

Sony DADC provides world-class optical media replica

as well as software services with quality leadership.

Image 6

**As a solution and technology provider for the entertainment, education and information industries,**  
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as well as software services with quality leadership.



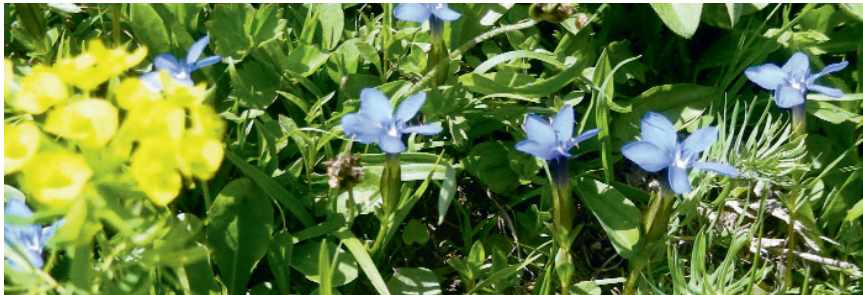
## Colours

The colours to use in offset- or screenprint are CMYK (image 8) or special colours (pantone and HKS). If we have to convert special colours – RGB (image 7) or LAB – to CMYK, the colour tone can change. Charges accrue and the possibility of not desired abnormal colour results.

Image 7: RGB



Image 8: CMYK



## Vector graphics vs. pixel graphics

Vector graphics (image 9)

Way of administration of graphic data through mathematical functions. An element consists of mathematic described curves and lines. One line is described by 2 dots, a circle by the coordinates of the centre and its radius etc. Texts and logos should be applied as vector graphics. A clean ending line is guaranteed.

Pixel graphics (image 10)

Way of administration of graphic data as single dots. An image consists of single image dots. Each single image dot can be controlled and manipulated separately. Adequate for images – not for texts and logos – these appear blurred due to the image dots.

Image 9: vector graphics



image 10: pixel graphics



## Over print – omit

Black texts and logos should be set to „over print“ in general to avoid a register problem (image 11). White texts and logos have to be set to “omit”. White is not a printing colour, the paper shines through on these parts. If white elements are set to “over print”, they “disappear” during printing (image 12). Sony DADC is not responsible for such errors!

Image 11: set up in Adobe Illustrator

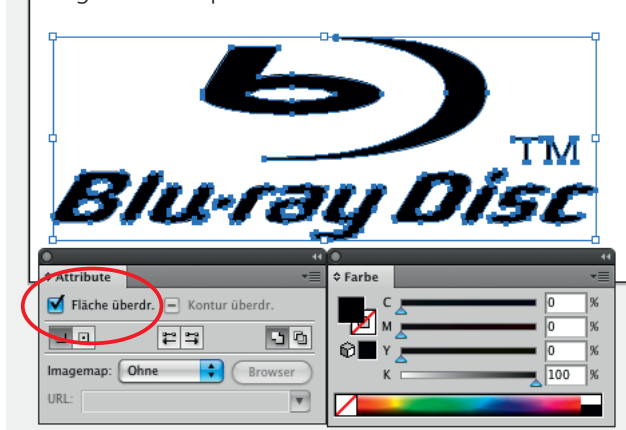
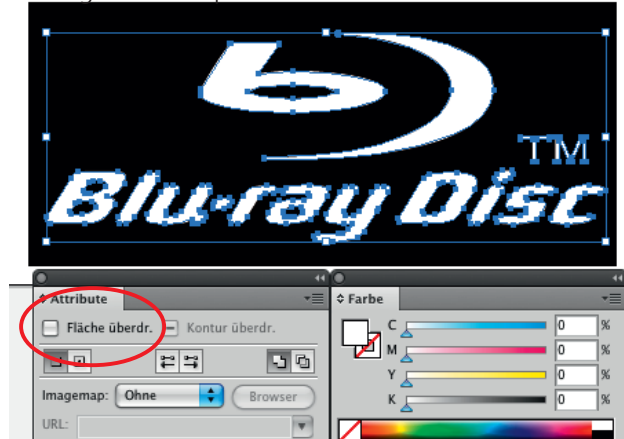


Image 12: set up in Adobe Illustrator



## Page sequence

Booklet pages must either be as single pages in sequence (image 13) or as printer pairs (image 14). Important is also, that the page sequence is clear. If no paging is in the document, the page sequence has to be written outside of the printing area.

Image 13: single pages for 8page booklet

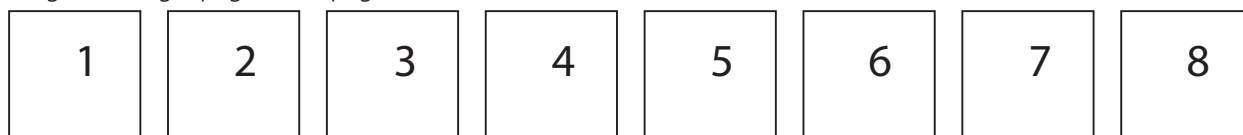


Image 14: printer pairs for 8page booklet



## OPI information

The abbreviation OPI stands for Open Prepress Interface, a universal interface, which is used in the printing pre-stage. When using this interface, so called OPI-server will be used. These servers consist of powerful processors, which calculate a high resolution image to be used for printing into a low resolution, to enable a smooth workflow with this image copy. The image is provided in a network to all work processors and is also used for check prints. During the actual printing process the low-grade image copy is then replaced again by the original image. This only happens, if these servers are directly connected to the computer, from which the outlay is done. To avoid quality losses the OPI information shall not be saved with the highres pdf.

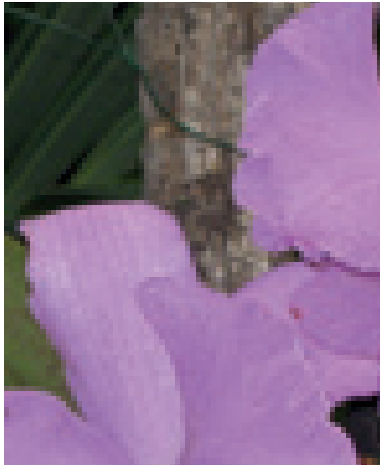
Image resolution

“DPI” is an abbreviation for “dots per inch” and states, how many image dots an inch of an image contains or should contain, whereas one inch is 2,54 centimetres. With ascending numbers the quality of the design increases and also the data quantity needed for the design. The more image dots an image contains, the better it can display for example colour devolution and colour change-overs, without looking half tone (with clear distinguishable colour areas). Relative low values let the viewer see each single image dot of a picture. Extreme low values eliminate recognition of the picture motive. For a real great print up to 600dpi (image 15) are essential, whilst for pictures in the internet a value of 72dpi (Image 16) is sufficient.

Image 15: 300dpi



Image 16: 72dpi



everything lower	bad
200 dpi	low
300 dpi	okay
450 dpi	good
600 dpi	perfect

Achromatic set up

Our recommendation for setting up levels of grey is, to use a preferably high black tone and only smaller ink-coverage of the other colours. Thereby you can reach a stable colour tone for printing.  
Images should be saved in levels of grey or contain at least as much black as the highest none black colour tone. An exception is offset print on the disc.  
It is not possible to print pure black areas in offset, as the colour density is a lot lower than with paper print. The result would be a greyer disc, the black would not be stable from first to last disc with a high risk of getting stripes. We recommend using our standard black C60, M40, Y40, K100, not suggested minimum requisition is C60, K100. We would like to inform you, that wrong black tones can cause fatal problems for printing and therefore a print order with wrong black tone can not be produced without quality loss.

Font and line thickness

For pantone print we need the following font and line thickness to guarantee the readability:  
negative (image 17): min. Font Point Size 5pt or 0,15mm  
positive (image 18): min. Font Point Size 4pt or 0,10mm  
You can find more information in our [label manual RB\\_Label.pdf](#)

image 17:

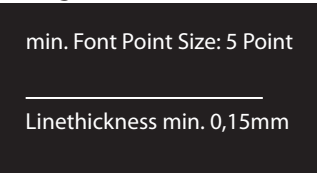
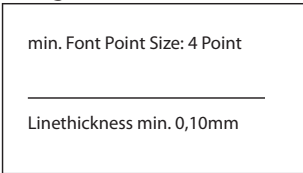


image 18:



## ICC-profiles

ICC-Profiles (colour-profiles) are standard data sets which define attributes in colour-reproduction of any input- or output device computer-display, printer, scanner etc.). Proper use of colour management gives you exact colour reproduction on all input- and output devices (image 19). The result of wrongly used colour-profiles is of rather unpredictable nature. ISO standard 12647-2:2007 with its related ICC profile "ISOcoated\_v2\_eci.icc" make up the standard in print-industry for coated and delivers best results for our products.

Any other colour-profile in will be removed by us which again may affect the colour (image 20).

image 19: picture with correct profile



image 20: picture with wrong profile after correction



## PDF creation

The PDF export from the applications should be used and is preferred by us.

Also acceptable is the set up of a PDF via PS-files. More information and help guide can be found on our homepage in our [Reference Book PDF from InDesign](#). PDF 1.4 or higher can be used.

## Fonts

When supplying source files, please add the fonts and in PDF's they need to be completely embedded. This does not mean sending the text, we need the character set, which is used for the text. On PC not available character sets are replaced by system fonts without a warning. With many graphic programs you can vectorize the fonts before output. Please neither zip Macintosh fonts nor send them unpacked – they will damage during transfer. Preferably make a .sit file with Stuffit.

## Graphic data allocation

If we receive graphic data without any notice and/or without clear identification, to which order these belong, we can not find them or can not allocate these to a relevant production. Thereby there is a risk of time loss. Please always inform your responsible Customer Service person about way of transfer, file or folder name. Also very helpful is, if you send the used template for special products like slipcase, digipak etc., or name the file with the relevant file code.