

## Colour PDF Creation

Adobe Distiller is basically a simulated printer. It offers the best control over how Adobe PDF files are created and is recommended for jobs that require high image quality.

Other pathways for generating Adobe PDF files may not be as robust or have the control over how the files are generated.

Create PostScript from the source application to generate Adobe PDF documents. In the Print command, use either the printer specific or Distiller PPD. Use Binary data format and All for the font inclusion. Save As a file with the .ps or .prn suffix. This file can then be opened with Distiller or dropped on top of the Distiller application icon or window to generate the Adobe PDF. Make sure the Job Options settings for Distiller are correct before making the Adobe PDF file.

We are able to provide you with our own Job options if required.

The following contains descriptions of all the Acrobat Distiller settings so the Designer or Prepress operator can make the best workflow choices when creating colour Adobe PDF files.

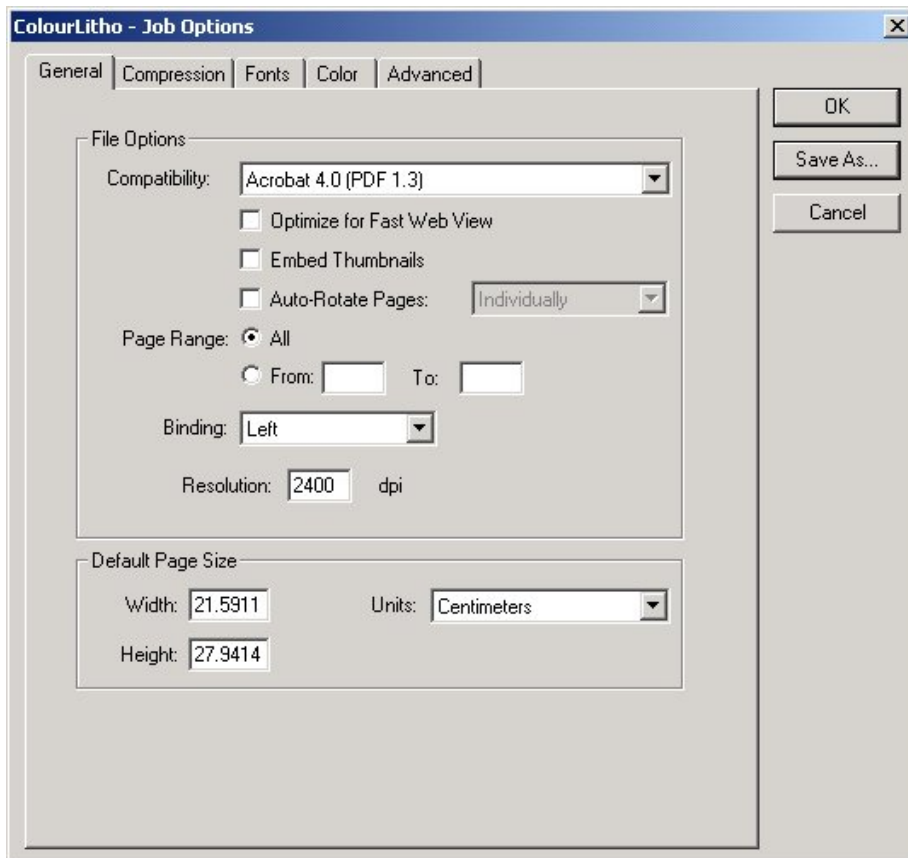
Note:

When creating postscript for CMYK use the composite mode from your application.

When creating postscript for Pantone colours, Special colours or CMYK + Special colours use the separated mode from your application.

Any questions please contact: [support@mfk.co.uk](mailto:support@mfk.co.uk)

The following settings are for colour litho printers;



Compatibility: **Acrobat 4.0**

Most users will be using either version 4 or 5. Saving files in Acrobat 4 format will ensure compatibility across various destinations, we are currently testing version 6 and will accept files made through this version.

Optimize for Fast Web View: **Off**

This feature will reduce the file size of a Adobe PDF by compressing text and line art and restructures the file for page-at-a time downloading. This selection also changes the Adobe PDF file so that images used multiple times in a document are only stored once and then referenced throughout the rest of the document.

Embed Thumbnails: **Off**

Thumbnails are small previews of the pages in the Adobe PDF documents and increase the size of the file by a small amount. They are generated on the fly when using Acrobat 5.

Auto-Rotate Pages: **Off**

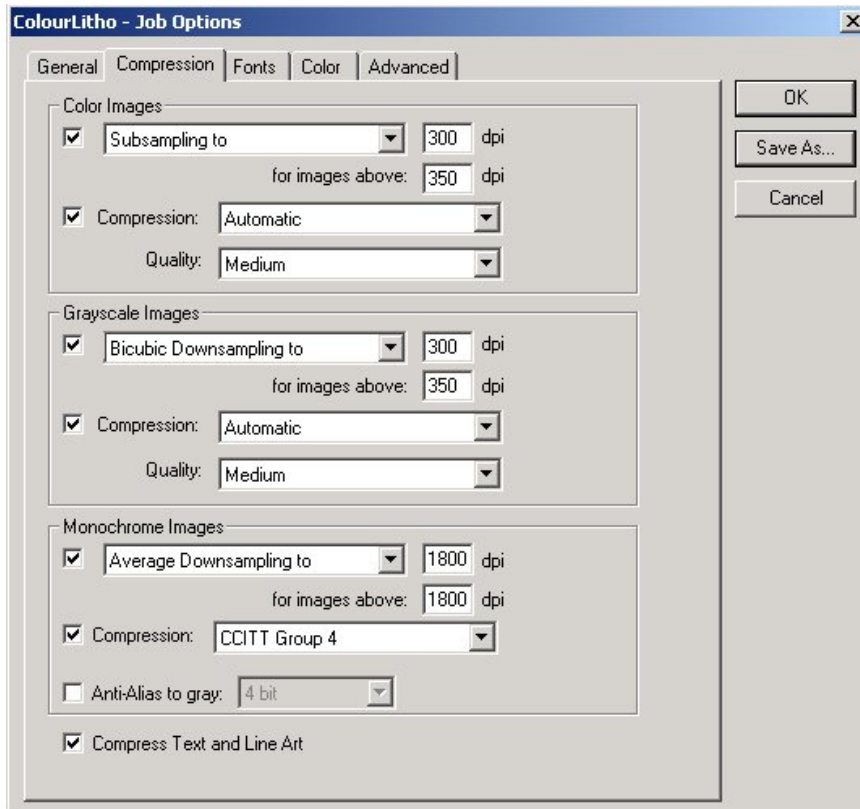
Pages are rotated to the orientation of text and DSC comments.

Binding: **Left**

Determines how to display the Facing Page, continuous layouts and thumbnails. Will not affect the printed job.

Resolution: **2400**

The default resolution should be set to the file's final destination output device.



For Color Images and Grayscale Images:

- Sampling: **On**
- Compression: **On**

Color and grayscale bitmap images are made of pixels.

- To preserve images, do not use compression or sampling.
- If images are not correctly sized, use Bicubic Down sampling at **[300]** dpi.
- If compression is also needed, use **Automatic**.

For Monochrome Images:

- Sampling: **On**
- Compression: **On**

Monochrome bitmap images are black and white images with a bit depth of 1.

- To preserve images, do not use compression or sampling.
- If images are not correctly sized, use Bicubic Down sampling at **[600]** dpi.
- If compression is also needed, use CCITT Group 4 compression.
- Anti-Alias to gray: This will smooth jagged edges by using various levels of gray. It may, however, cause small text or lines to blur.

Compress Text and Line Art: Vector objects created in drawing programs (such as Freehand or Illustrator) are described by mathematical equations (not pixels). To preserve them, do not use compression or sampling. If checked on, zip lossless compression will be used (although it should not create a loss detail or quality).

## More about sampling

Whatever value is entered using down sampling, Distiller will only down sample the image if it exceeds one-and-a half times the value specified. For example, if the sampling setting is set to 300 dpi, only images that are greater than 450 dpi will be down sampled (which is adequate for printing with a halftone screen of 150 or 175 lpi). Most image experts recommend a sampling of one and- a-half to two-times the frequency of the halftone screen (e.g. 300 dpi image to be printed at 150 lpi).

**Sub sampling** changes an entire area of pixels to the color of the center pixel. While it takes the least amount of time to distill, it can create contouring in images.

**Average Down sampling** changes an entire area of pixels to the average color of those pixels.

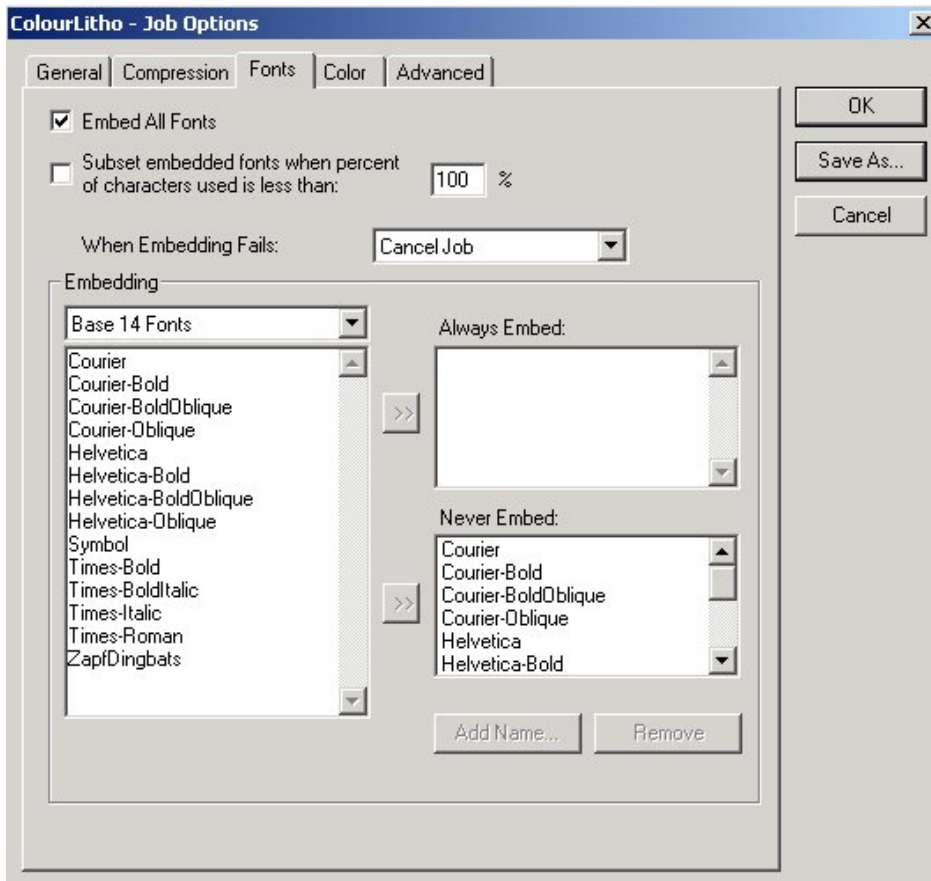
**Bicubic Down sampling** takes longer to distill files but creates the smoothest tonal gradations. It works by taking a weighted average to determine pixel color. This is the best choice for images.

## More about compression

**ZIP** compression is best for images with large area tints or solids, or repeating patterns such as screen shots and artwork created with paint programs. Use 8 bit with 8 or 4 bit images, but only use 4 bit with 4 bit images to preserve lossless.

**JPEG** compression is lossy, but works well with continuous tone color and grayscale images. JPEG eliminates pixel information so the file size can be reduced significantly if desired. The greater the compression, the greater the chances for image artifacts, such as contouring.

**CCITT** is a lossless compression that is ideal for 1 bit black and white images generated by paint programs. Group 4 works well with most types of monochrome images while Group 3 is used mainly by fax machines, which compress image data one row at a time.



Embed All Fonts: **On**

This ensures that the original font data is included in the Adobe PDF file for printing. To guarantee the font information is successfully included in the Adobe PDF file, the required fonts must reside either in the system folder of the computer, or in the PostScript file.

Subset Embedded Fonts: **Off**

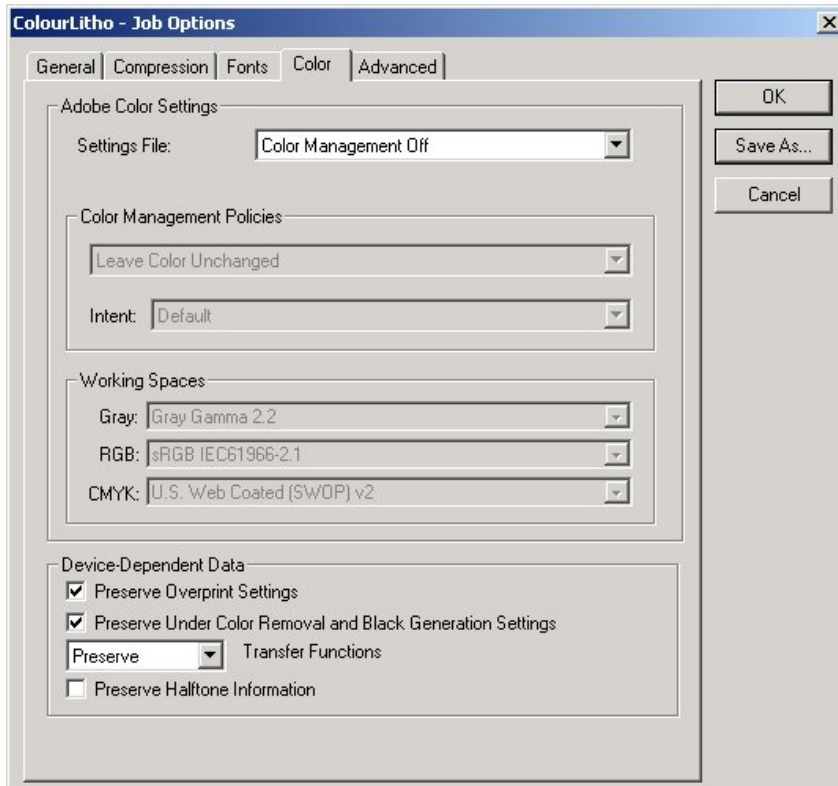
Deselecting the Subset option will preserve the full set of font characters. The percentage is the amount of font characters that are used in the job. When 100% is used, all characters of the font will be subsetted. Choosing less than 100% will generally only subset headings and not the main text fonts. The drawback when subsetting fonts is that if future editing to the text is needed, the user would be limited to only those characters embedded in that subset. If significant editing to text in the Adobe PDF is likely, subset to a lower percentage of the fonts or simply do not use. Though by a small amount, the more fonts embedded, the greater the file size.

When Embedding Fails: **Cancel Job**

Canceling the job will stop the distillation process if there are any problems or fonts missing. Usually, the user will want to ensure all fonts are included in the Adobe PDF file. To embed the fonts, however, they must be present either on the client computer or in the PostScript file itself (always include All fonts when writing PostScript files).

Embedding: **Ignore this option**

The pull down menu allows the user to select different font sets to choose (if any) which fonts should Always or Never be embedded. This feature is generally not used except by the experienced user.



Settings file: **Color Management Off**

For high quality printing always set this feature to Color Management Off to preserve colors.

- This will set the Color Management Policies to Leave Color Unchanged and the Working Spaces will be disabled as well. Using any other setting should only be done by experienced users.

Color Management Policies:

- Leave Color Unchanged
- Intent: **Default**

Working Spaces

This selection will be disabled when the Settings File is set to Color Management Off.

Device-Dependent Data:

- Preserve Overprint  
Settings: **On**

Your color server front end will likely override these settings.

- Preserve Overprint Settings: Will include any overprint settings included in the PostScript file when converted to Adobe PDF.

- Preserve Under Color Removal: **On**

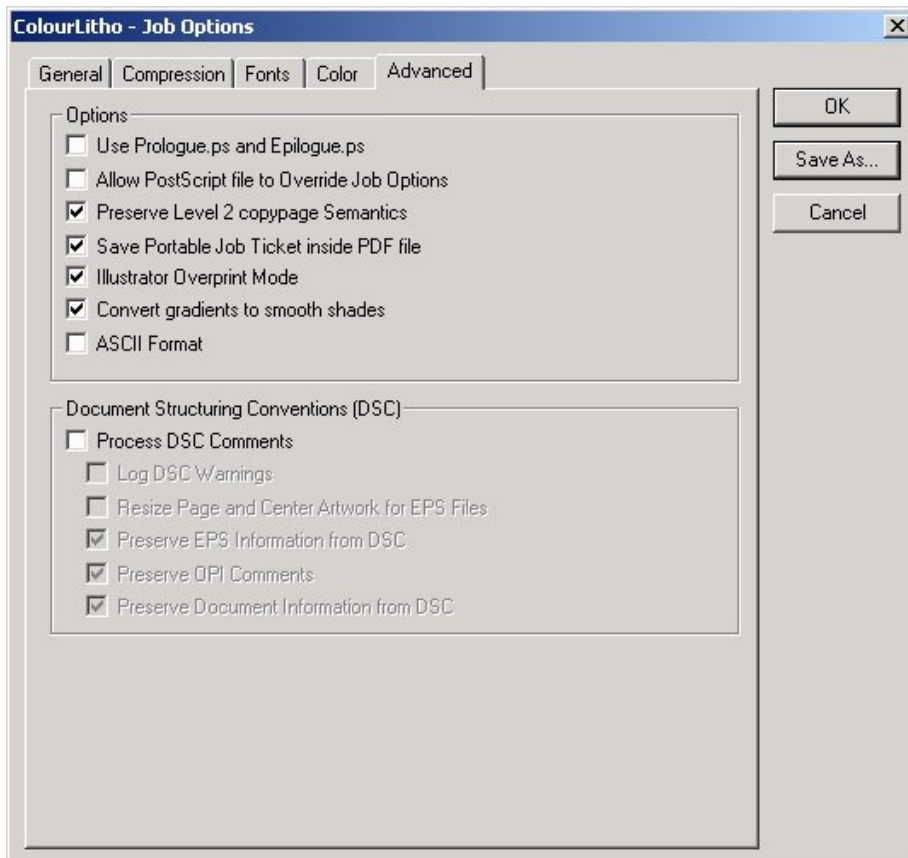
- Preserve Under Color Removal: Will include any UCR or black generation settings in the PostScript file when converted to Adobe PDF.

- Transfer Functions: **Preserve**

- Transfer Functions: Preserve will include the transfer function curves in the PostScript code.
- Preserve Halftone

Information: **Off**

- Preserve Halftone Information: Will include any custom halftone screens.



- Use Prologue.ps and Epilogue.ps: **Off**
- Use Prologue.ps and Epilogue.ps: These files serve many functions, including cover page information and watermarks. In order to function properly, these files must be located in the same folder as the Distiller application.
- Allow PostScript to Override Job Options: **Off**
- Allow PostScript to Override Job Options: This feature retains the original PostScript settings (such as compression, sampling and font rules) stored in the file instead of the Distiller Job Options. Do not use this feature unless the print shop instructs otherwise.
- Preserve Level 2 Copypage Semantics: **On**
- Preserve Level 2 Copypage Semantics: The Graphic state is not reinitialized on the following pages when using PostScript Level 3 (unchecked). Level 2 copypage operator copies the page while Level 3 uses the equivalent of a showpage operation.
- Save Portable Job Ticket Inside PDF file: **On**
- Save Portable Job Ticket Inside PDF File: If a production workflow uses PJT then select it to be on. This includes document specific information such as page size, trapping and resolution. Usually seen in production environments.
- Illustrator Overprint Mode: **On**
- Illustrator Overprint Mode: Used to enable CMYK overprints.
- Convert gradients to smooth shades: **On**
- Convert gradients to smooth shades: Used to convert blends to smooth shades. Will reduce file sizes and frequently improve the quality of gradients.
- ASCII Format: **Off**

ASCII Format: When on will use the ASCII format instead of Binary, which creates much larger Adobe PDF sizes, Mainly used to troubleshoot files.

- Process DSC Comments: **On**
- Process DSC Comments: Used to process DSC Comments in the selected related options.
- Log DSC Warnings: **Off**
- Log DSC Warnings: This option will display and record any warning messages in the log file.
- Resize Page and Center Artwork for EPS Files: **Off**
- Resize Page and Center Artwork for EPS Files: If this feature is used when working with EPS files, the graphic will be centered and the page will also be resized to fit the original graphic.
- Preserve EPS Information from DSC: **Off**
- Preserve EPS Information from DSC: This option will retain the native application and creation date for an EPS file.
- Preserve OPI Comments: **Off**
- Preserve OPI Comments: When used, level 1.3 and 2.0 comments direct the replacement of the low resolution images with high resolution files that are kept on an OPI server.
- Preserve Document Information from DSC: **Off**
- Preserve Document Information from DSC: When used, Distiller will save the title, date, and time when the Adobe PDF was created and will display in the Acrobat General Information dialog box when viewing the document.

NOTE: Distiller 5 does not process OPI 2.0 comments from QuarkXPress correctly. This can result in jumbled outlines for type in placed EPS files. If OPI functionality in the Adobe PDF is needed, deactivate (uncheck) and/or remove the OPI 2.0 QuarkXPress extension in QuarkXPress and use OPI 1.3 instead. As an alternative, Preserve OPI Comments can be unchecked in Distiller.