

LYONS' SURVIVAL GUIDE TO PRINTING & GRAPHICS TERMINOLOGY

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If you haven't discovered it yet, printers and graphic designers speak their own language. Unfortunately, if you want to communicate effectively with these professionals, you will have to learn their language. As a business person who deals with printing purchases, failure to learn this language will eventually cost you time and money.

The easiest way to avoid problems, would probably be to hire a graphic designer or an advertising agency to handle these issues for you, but my experience tells me that at some time or other, clients will want to handle a job on their own. In that spirit, I have assembled this printing survival guide. Learn the information. Use it. Pay for the printing that you wanted, not whatever gets handed to you.

An early version of this guide has now been downloaded over 800 times from America Online. We have also been getting nearly 200 hits a day on the Web. I'd like to thank everyone for their kind words and suggestions as well as all the people who have added links to this page. If you don't find a term that you need to understand, let me know. I'll update the list. If this all looks too confusing, and you decide that you'd rather use a graphic designer,

I certainly won't turn away a new client. Our office can be reached through LDMedia@aol.com or by phone at 800.886.3858 toll free or 904.942.9442 in Florida or U.S. mail at:

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Also if there are any printers or prepress houses who would like to distribute a printed copy of this document, as a promotional item, let me know. Reprint rights are available and you can put your name on the cover. I have the negs on file.

I look forward to hearing from you. Let me know if you found this guide useful. If you haven't discovered it yet, printers and graphic designers speak their own language. Unfortunately, if you want to communicate effectively with these professionals, you will have to learn their language. As a business person who deals with printing purchases, failure to learn this language will eventually cost you time and money.



AA

Authors Alterations, changes other than corrections, made by a client after the proofing process has begun. AAs are usually charged to a client as billable time.

Art Director

The individual responsible for overseeing the creative and production process and managing other creative individuals.

Binding

The process of attaching loose sheets of paper into a book or other multi-page document.

Blueline

A printer's proof, actually blue on white paper. All AAs and corrections should have been made prior to seeing a blueline.

BMP

A computer graphics format not generally used in professional printing.

Burn

To expose photo sensitive media to light. i.e. Burning a negative or Burning a printing plate.

Camera Ready

Type and/or artwork that has been pasted into position to be photographed for plate ready film.

Choke (Choking)

When trapping color – closing the open spaces in a graphic to be filled with another color.

Chromalin®

A color proofing system by DuPont. All AAs and corrections should have been made prior to seeing a Chromalin.

CMYK

The acronym for the four process color inks: Cyan, Magenta, Yellow and Black.

Color Key

A printer's proof, actually four sheets of colored acetate, for examining the quality of process color separations. This process is normally used when printing on a press capable of fewer than four colors at once. All AAs and corrections should have been made prior to seeing a color key.



Color Separation

Literally separating the areas of a piece to be printed into its component spot and process ink colors. Each color to be printed must have its own printing plate.

Composite Image

A photograph or other graphic image, that is made of a combination of multiple images.

Conversion

The process of creating a three dimensional (3-D) item from a flat sheet of paper. i.e. envelope conversion / box conversion

Copy

The prose or other text used in advertising and printed material.

Copyright (©)

A group of legal rights granted to the author or creator of written or visual work. All work appearing with the © symbol or the word “copyright” is protected by its creator or his heirs. For more information, contact your attorney.

Copy Writer

The individual who writes the prose or “copy” for an advertisement or brochure.

Desktop Publishing

A process for creating camera ready and plate ready artwork on a personal computer.

Digital Imaging

The process of creating a digital copy of an illustrated or photographic image.

Digital Photography

The process of recording images using a digital camera or a conventional camera with a digital adapter.

Digital Printing

A system of printing, which involves linking state of the art printing presses and computers, bypassing the traditional route of making printing plates.

Dot Gain

A phenomenon, which occurs when wet ink comes in contact with paper. As the halftone dots are applied to the paper, the wet ink spreads, causing the dots to increase in size and halftones to appear darker. A number of factors affect dot gain.



Electronic Publishing

A new process by which information is distributed in electronic or magnetic formats. (i.e. articles available on computer services or books on CD ROM.)

Em Space

A lateral space equal to the width of the lower case letter “m”.

Emboss

A mechanical process for raising an area of paper to create letterforms, shapes and textures.

Emulsion

The chemically treated side of photographic film. (The dull side not the shiney side.) Depending on the printing process involved, film will be requested as “right reading” emulsion up or emulsion down.

En Space

A lateral space equal to half an em space, roughly the width of the lower case letter “n”.

Engraved Printing

Raised printing produced by a cutaway plate. A similar effect can be achieved with thermography.

EPS (EPSF)

Encapsulated Postscript File. A vector based, computer graphics file format developed by Adobe Systems. EPS is the preferred format for many computer illustrations, because of its efficient use of memory and fine color control.

Focaltone

A proprietary color matching system for process color.

Foil Stamping

A mechanical process that results in the bonding of colored foil to paper.

GIF

An eight bit (256 colors or shades of grey) or less computer file format. Though commonly used to post photographic images to computer bulletin boards, GIF files are almost never used for professional printing.

Graphic

A non text item (Illustration or photograph) to be printed.



Graphic Design

A process of problem solving, using visual elements (pictures and type) usually to communicate a concept or idea.

Graphic Designer

An individual who solves communication problems, using visual elements (pictures & type) to convey an idea or concept.

Greek

Usually nonsense words and letterforms used in a design to approximate the flow of written language. Used primarily before final text is available.

Halftone

A reproduction of a continuous tone image (i.e. a photograph or painting) using fine dots of varying size and spacing to reproduce the shades and textures of the original.

Hexachrome

A proprietary color separation process, developed by Pantone, that uses six (6) instead of four process colors.

Illustrator

An individual who draws or paints original artistic images for use in commercial art.

Imagesetter

A high resolution device that prints directly to plate ready film.

Imposition

The process of positioning multiple pages on a flat sheet of paper to be printed at one time.

Inch

A unit of measurement equal to six (6) picas or seventy two (72) points. Normally used by design clients and printers.

JPEG

Joint Photographic Electronic Group. A common standard for compressing image data. JPEG is not commonly used in printing because of data loss.

Kern

To adjust the lateral space between individual letters.



Leading

The space, measured in points, between consecutive lines of type. (From the strips of lead placed between lines of hot type.)

Lupe

A magnifying glass used by photographers, printers, and designers to examine details in printed materials.

Match Print®

A color proofing system developed by 3M. All AAs and corrections should have been made prior to seeing a Match Print.

Offset Printing (Offset lithography)

Currently the most common commercial printing method, in which ink is offset from the printing plate to to a rubber roller then to paper.

PDF

Portable Document file. A proprietary format developed by Adobe Systems for the transfer of designs across multiple computer platforms.

Perfect Binding

A book binding process where pages are glued together and directly to the cover of the book.

PMS color (Pantone® Matching System)

A proprietary color system for choosing and matching specific spot and process colors.

Photo CD

A proprietary format developed by Eastman Kodak for storing photographic images on a compact disc. Images can be easily accessed for use in professional printing.

Photo Copy

A mechanical printing process that uses a light sensitive printing element, electrostatic toner and a heating element to fuse the toner to the paper.

Photo Illustration

An image, primarily consisting of a photograph or composite image containing a photograph.

Photo Plate

A light sensitive printing plate. The plate is developed like film, then used on a printing press.

Photograph

An image or picture made by exposing light sensitive film with a camera.



Pica

A unit of measurement equal to twelve (12) points or one sixth (1/6) of an inch. Used by designers and other graphics professional for its precision.

Pixel Depth

The amount of data used to describe each colored dot on the computer screen. i.e. Monochrome is 1 bit deep. Greyscale is 8 bits deep. RGB is 24 bits deep. Images to be printed as CMYK separation should be 32 bits deep.

Plate Ready Film

Final photographic film used to “burn” printing plates.

Point

A unit of measurement equal to 1/12th of a pica or 1/72nd of an inch. Normally used to measure type size or fractions of a pica for the design process.

Pre-Press

The various printing related services, performed before ink is actually put on the printing press. (i.e. stripping, scanning, color separating, etc. . .)

Press Proof

A sheet of paper used as reference while printing.

Printing

The process of applying ink to paper.

Process Color

The mechanical process of reproducing a full color image with the three primary subtractive color inks (CMYK/ Cyan, Magenta, Yellow and Black) and black. When viewed under a lupe, the individual color halftone dots can be seen in a process color image.

Production Artist (Paste-up Artist)

A skilled laborer who produces finished camera ready or plate ready artwork from the visual elements and instructions provided by the designer or client.

Registration

The quality of alignment of the different colored inks as they are applied to paper. (i.e. If the inks can be seen to overlap improperly or to leave white gaps on the page, the printing is said to be “out of registration” or “poorly registered”.)



RGB

Red Green Blue, the colors used by a computer monitor to create color images on the screen.

Saddle Stitch

A book binding process where pages are stapled together through the spine of the book.

Traditionally performed on V shaped saddle.

Sans Serif

A type face that has no tails or curled points (serifs) at the ends.

Score

To imprint a crease. It is preferable to score heavy paper before folding it, in order to avoid cracking.

Script

A type face that mimics the appearance of hand written text.

Serif

The curls and points that appear as adornments on some type faces.

Service Bureau

The facility that provides professional services to graphics and printing professionals. (i.e. plate ready film, matchprints, colorkeys, etc...)

Spot Color

Single colors applied to printing when process color is not necessary (i.e. one, two and three color printing), or when process colors need to be augmented (i.e. a florescent pink headline or a metallic tint).

Spread

1) A design that encompasses two or more facing pages (i.e. the center spread in the morning newspaper)

Spread

2) Literally, spreading the ink around a colored object so that there is no gap between it and the next colored object. (i.e. yellow text on a blue background.)

Style Sheet

A page or group of pages designating the type faces to be used in a design. i.e. Headlines, captions and body text.

Thermography

A printing process that results in raised type similar to engraved printing.



TIFF

Tagged Image File Format, a bitmapped file format used for the reproduction of continuous tone images such as photographs and illustrations.

Trapping

The process of closing gaps between different color inks as they appear on the printed page. Trapping color is achieved by use of chokes and spreads.

Web Press

A high speed printing press that prints on both sides of a continuous roll of paper. Web presses are used for high volume printing such as newspapers and magazines.

Calculating the scanned file size of a known graphic

$$\text{dpi} = \text{lpi} \times 2$$

i.e. for a 150 lpi halftone screen, scan at a resolution of 300 dpi)

$$\text{file size} = \text{dpi}^2 \times \text{height} \times \text{width} \times \text{bit depth}$$

i.e. for a process color graphic that will print: 2"x3" with a 150 lpi halftone screen:

$$\text{file size} = 300^2 \times 2 \times 3 \times 32$$

or

$$\text{file size} = 17,280,000 \text{ bits}$$

or divide by 8

$$\text{file size} = 2,160,000 \text{ Bytes}$$

or divide by 1024

$$\text{file size} = 2,109.375 \text{ Kilobytes}$$

or finally divide by 1024 again

$$\text{file size} = 2.06 \text{ Megabytes}$$

