

***Chapter 7.5***

***Glossary***



## 7.5 Glossary

### A

#### **additive primaries**

Red, green, and blue light that produce white light when added together.

#### **ASCII**

(American Standard Code for Information Interchange) A standard format for representing data or text in 8-bit chunks.

### B

#### **bit**

(binary digit) The basic unit of information used by computers. It has two states: on or off.

#### **bitmap**

An image made up of a matrix of dots, or pixels.

#### **byte**

A unit of information equal to eight bits.

### C

#### **calibration**

The process of setting equipment to a standard measure.

#### **CCD**

(Charge-Coupled Device) A light sensitive electronic chip used by scanners to measure light.

#### **channel**

One greyscale scan or one of the three RGB components making up a colour scan.

#### **CLUT**

(Colour Look-Up Table) A collection of most-often-used colours stored in a file or the System.

**CMYK**

(cyan, magenta, yellow, black) The subtractive primaries, also known as the process colours, used for colour printing.

**Colour separation**

Dividing a colour image into its four CMYK components for printing. (Also refers to the C, M, Y or K film negative from which printing plates are made.)

**comp**

(comprehensive) A test print used to evaluate layout and design.

**compression**

The process of decreasing a file size.

**contrast**

The range between the darkest and lightest areas in an image.

**D****daisy-chain**

link together sequentially as in linking multiple drives on the SCSI bus.

**DCS**

(Desktop Colour Separation) A format that contains five Post-Script files for each colour image.

**densitometer**

A hardware device to measure the amount of light transmitted through film to check the quality of imagesetter output. Also a software feature for measuring the grey and RGB levels of an on-screen image.

**dithering**

A halftoning process that uses clusters of dots rather than evenly spaced halftone cells.

**dot gain**

A printing defect in which halftone dots print larger than intended.

**dpi**

(dots per inch) The unit of measure for a printer's output resolution. Also used for scanner resolution although ppi or spi is more accurate.

**dropout colour**

A colour that you set the scanner not to recognise.

## E

**EPS**

(Encapsulated PostScript) A file format that can contain both scanned images and PostScript images along with printer information.

**gamma**

A measure of contrast that affects the midtones of an image.

**gamma correction**

Application of an algorithm to correct images for the fact that machines and people perceive tonal gradations differently.

## G

**GCR**

GCR (Grey Component Replacement) A technique for reducing the amount of cyan, magenta, and yellow ink in an area and replacing them with black ink.

**Greyscale**

An image type made up of black, white, and grey pixels. Also, the range of greys in such an image measured in either percent black (0% is white and 100% is black) or grey levels (0 is black and 255 is white).

## H

### **halftone**

An image that uses different sized dots to represent light and dark areas.

### **highlights**

The white and nearly white parts of an image.

### **histogram**

A bar graph of the number of pixels for each grey or RGB value in an image. The histogram helps you evaluate the tones in an image.

### **HSB**

(Hue, Saturation, Brightness) A colour model that defines a colour by specifying its hue, saturation, and brightness.

## I

### **imagesetter**

A printer that prints computer files at high resolution on photographic paper or film.

### **interpolation**

Mathematical calculation the scanner performs to increase resolution.

## J

### **JPEG**

(Joint Photographic Expert Group) A compression algorithm for image files.

## **K**

### **kilobyte**

A unit of memory equal to 1024 bytes.

## **L**

### **Line art**

An image type made up of black and white pixels only.

### **lpi**

(lines per inch) The unit of measure for halftone line screen frequency, or how many halftone cells occur in an inch.

### **LUT**

(Look-Up Table) The table of colours a computer can display at a given time.

## **M**

### **megabyte**

A unit of memory equal to 1024 kilobytes.

### **memory**

Computer hardware that can store information for later retrieval. This term can mean either hard disk memory or RAM memory. See also RAM.

### **midtones**

The range of tones between the shadows and highlights of an image.

### **moire**

Undesirable banding when scanning a halftone image due to the halftone screen interacting with the scanning grid.

## O

### **overprinting**

Printing over areas already printed, as opposed to using a knockout.

## P

### **PICT**

The native Macintosh file format for images.

### **pixel**

(Picture Element) The smallest point in a scanned image. Line art pixels are black or white, greyscale pixels can be from grey level 0 to 255, and colour pixels can be from 0 to 255 for each RGB channel.

### **Plug-in module**

Software that runs from within another application.

### **posterisation**

Visible tonal banding in an image.

### **ppi**

(pixels per inch) The unit of measure for a pixel based image, such as an image displayed on a monitor. Also used for scanner resolution.

### **prepress**

The industry that prepares the film from which printing plates are made.

### **preview**

A low-resolution version of an image that appears in the *Silverfast®Ai* Preview window to help you set the scan area and scanner controls.

### **proof**

A representation of what a final printed piece will look like so that it can be evaluated before the expense of printing.

## R

### **RAM**

(Random Access Memory) The short term chip-based memory in a computer that applications load into to run.

### **RGB**

(Red, Green, Blue) The additive primary colours used to display images on a monitor.

## S

### **scan head**

The part of the scanner containing fluorescent lamps that passes across an image.

### **screen frequency**

See lpi.

### **SCSI**

An acronym for Small Computer System Interface. An industry standard interface that provides high-speed access to peripheral devices.

### **SCSI chain**

A group of SCSI devices linked to each other through SCSI peripheral interface cables and linked to the SCSI port on the computer through a SCSI system cable.

### **SCSI ID number**

A number assigned to each SCSI device connected to a computer. The Macintosh itself is assigned ID 7. Other devices may use IDs 6 through 0, with 6 indicating the highest priority for communications and 0 the lowest priority.

### **service bureau**

A business that specialises in printing computer files on an imagesetter.

### **shadows**

The black and nearly black tones in an image.

**stripping**

The traditional process of assembling colour separations and typeset text by hand prior to making printing press plates.

**subtractive primaries**

The ink colours cyan, magenta, and yellow that add together to make black.

**T****terminator**

A device used in an SCSI chain to maintain the integrity of the signals passing along the SCSI chain. An SCSI chain should have one terminator at the start and end of the SCSI chain.

**TIFF**

(Tagged Image File Format) A file format for exchanging files between applications and computers.

**trapping**

A technique of overlapping abutting colours to compensate for printing press misregistration

**U****UCR**

(Undercolour Removal) A technique for reducing the amount of magenta, Yellow, and cyan ink in neutral areas of an image and replacing them with an appropriate amount of black ink.

## V

### **virtual memory**

A feature of some applications (and System 7) that lets you use hard disk space as RAM.









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