



Tech Info Library

Apple Printers: lpi for QuickDraw Printers (7/96)

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TOPIC -----

PostScript LaserWriter printers have lpi (lines per inch) values. However, I would like this information for the Color StyleWriter printers, and non-PostScript LaserWriter printers. In particular, I would like to get the Color StyleWriter 2400 lpi value.

DISCUSSION -----

The lpi for the Color StyleWriter 2400 in Pattern mode is 64 lpi, and allows for approximately 160 levels of gray/colors. The best output from that printer can actually be obtained from using the Scatter mode as a different rendering technique is used (instead of a line screen) that allows for the highest resolution of the image to be utilized -- up to 360 dpi.

Q&A for lpi using QuickDraw Printers =====

Question: Is lpi a valid measurement/specification for Ink Jet printers?

Answer: Yes it is. Inkjet printer drivers also use halftoning.

Question: How does lpi specifications differ from a laser printer?

Answer: The halftoning concept is the same, however, it generally is not "adjustable" on the fly like PostScript laser printers. To adjust lpi on a PostScript laser printer, all you do is to change the parameters provided with the halftone PostScript commands. For QuickDraw printers, the lpi is a set value determined by the driver engineer. Although the lpi value can be changed, this requires recompilation of the driver source code.

Question: Is there a comprehensive list of all Apple printers and related specifications such as lpi, shades of gray, and number of colors?

Answer: There is not a comprehensive list available, and creating one is not possible since some of these printers are quite old and the original engineers and/or documentation is not available. Here is some information on some Apple Printers, which should help you.

Begin_Table

| Printer | Technique | lpi | Levels of Gray/Color | Notes |
|--------------------------|-----------|-----|----------------------|-------|
| StyleWriter I | Pattern | 64 | approx 160 | 1 |
| StyleWriter II | Pattern | 64 | approx 160 | 1 |
| StyleWriter 1200 | Pattern | 64 | approx 160 | |
| | Scatter | * | * | 2 |
| StyleWriter 1500 | Pattern | 64 | approx 160 | |
| | Scatter | * | * | 2 |
| Apple Color Printer | Pattern | 64 | approx 160 | 1 |
| Color StyleWriter Pro | Pattern | 64 | approx 160 | |
| | Scatter | * | * | 2 |
| Color StyleWriter 2200 | Pattern | 64 | approx 160 | |
| | Scatter | * | * | 2 |
| Color StyleWriter 2400 | Pattern | 64 | approx 160 | |
| | Scatter | * | * | 2 |
| Color StyleWriter 2500 | Pattern | 64 | approx 160 | |
| | Scatter | * | * | 2 |
| Personal LaserWriter LS | Pattern | 64 | approx 160 | 1 |
| LaserWriter Select 300 | Pattern | 64 | approx 160 | 1 |
| Personal LaserWriter 300 | Pattern | 64 | approx 160 | 1 |

| Notes | |
|-------|--|
| 1 | Use a different pattern technique than the current implementation used in the Color StyleWriter Printers such as the Color StyleWriter 1200 and the Color StyleWriter 1500 Printers. |
| 2 | The Scatter technique (recommended for best output) does not use halftoning techniques and allows for use of the highest resolution of an image, up to the 360 dpi of the printer. |

End_Table

Article Change History:

23 Jul 1996 - Changed distribution status.

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