



What is Epson's 5760 optimized dpi with Resolution Performance Management?

Resolution Performance Management™ (RPM™) is Epson's technology for optimizing the placement of up to eight ink droplet sizes (six for four-color printers) on a grid up to 5760 dpi to deliver superior photo quality.

Did You Know?

Resolution, which is generally measured in dots per inch (DPI), is an important factor in achieving print quality. Epson printers are unique in combining very small, variable-size ink droplets with high resolutions to precisely print crisp details in photos and laser sharp text. Also, Epson's variable ink droplet sizes and high resolutions combine to improve color range and accuracy because Epson printers can use halftone algorithms with more color combinations and smoother color gradations.

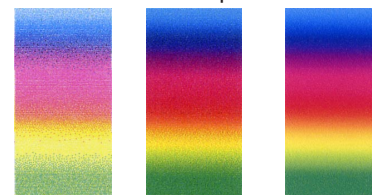
Many of Epson's newest generation of printers have print resolutions of 5760 x 1440 (or 5760 x 720) optimized dpi using RPM. These printers have printer drivers and print heads that can place drops on a grid up to 5760 dpi. Rather than oversaturating images by placing dots in every possible location, the printer optimizes the sizes and number of dots for optimum print quality. The halftoning algorithms in the printer driver direct the print head to place ink droplets precisely where dots are needed to assure natural color gradations and rich details, even in areas where details are usually difficult to perceive, such as in shadows, the darker areas of images, and reflections.

Many competitive printers offer optimized print resolutions up to 4800 dpi. Epson's advantage is it keeps input files to a manageable size. Epson printers typically need a file input size between 240 and 300 pixels per inch (ppi) to achieve maximum print quality. The size of an 8 x 10-inch photo at 240 ppi is approximately 13MB, a manageable file size for most users. With some competitive printers, when printing at the printer's highest resolution mode, the spool file produced by the printer driver can be up to 300MB in size, which may slow system performance and cause instability.

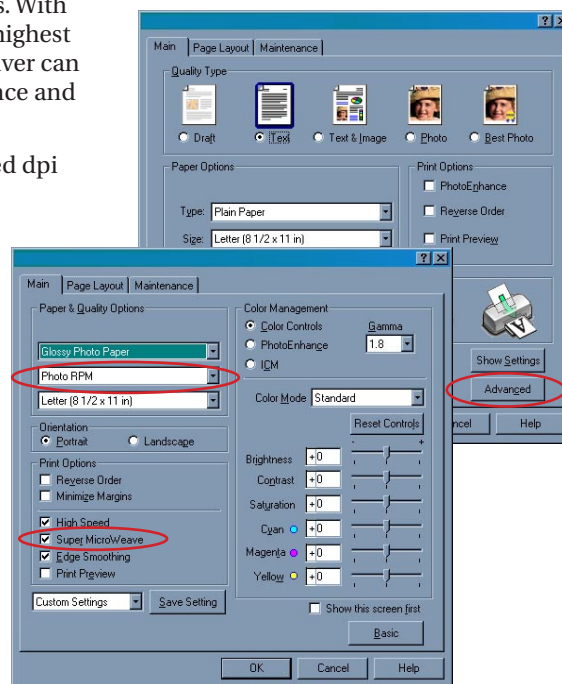
Use these guidelines for selecting and using 5760 optimized dpi with RPM:

- ▼ For most photos and other print tasks, Epson recommends using the default print settings for the paper types selected. By using the default settings, users achieve both excellent image quality and faster print speeds. The printer driver is designed to produce the optimum print quality depending on the task and paper type selected.
- ▼ When exceptional print tasks arise where image quality is the primary consideration, use PhotoRPM mode. To enable PhotoRPM, select the Advanced button on the Main tab of the printer driver. In the Paper and Quality Options section, select PhotoRPM, but first be sure to select one of the paper types that support PhotoRPM mode¹. For printers that support 5760 x 1440 optimized dpi, select Super Microweave to achieve the highest print quality.

Effects of Print Resolution and Small, Variable-Size Ink Droplets



Gradations and blends become smoother as resolution and droplet control are increased.



¹ Paper support varies by specific printer model. EPSON papers supporting PhotoRPM mode include: EPSON Matte Paper Heavyweight, EPSON Enhanced Matte Paper, EPSON Glossy Photo Paper, EPSON Premium Glossy Photo Paper, and EPSON Premium Semigloss Photo Paper.

Notable Quotes

"Having sufficient printer resolution to support the line screen with which you intend to print is paramount to producing quality halftone printing." ("Resolution - does your printer have enough?," www.images-magazine.com/jeffart4.htm)