

White Paper:

Reasons for Slow Printing on Color Laser Printers CS82x, CX82x, CX860, C6160, XC6152, XC81xx

Overview:

Printers have several settings/factors that can affect the output speed of the printer resulting in what the customer may claim to be “Slow Printing”. Slow Printing can be defined as, but not limited to, the following:

- The printer is not running at the rated speed.
- Print job takes longer to finish than previously.
- Multipage print job slows down or changes print speeds at some point during the job.
- The print job takes too long before it starts printing after pressing print or releasing print job via panel.
- The printer pauses or stops during print job.
- The printer changes print speeds during print job.

The settings/factors can range from the following:

- Complexity and content of the page
- Certain options added to or selected with the printer
- Available memory in the printer
- Media size, media type, and tray source
- Print Resolution
- Printer Usage setting
- Environment
- Thermal Conditions inside the printer
- Improper clearances and ventilation around the printer

Printer Settings

Check the following printer and driver settings to improve print speed:

- **Print Resolution:** “1200 dpi” will slow the printer down.
- **Quiet Mode:** “On” will slow the printer down to half speed.
- **Media Type:** Cardstock, Transparency, Labels, Vinyl Labels, and Envelopes will run at a slower rated speed than normal media.
- **Media size:** Throughput is reduced for narrow media to protect the printer from thermal damage. The printer can change to slower speed points multiple times depending on the number of pages of narrow media being printed in one or more print jobs.
- **Media/Tray source:** MPF, Tray 2, etc. have a longer paper path than Tray 1, leading to slight reductions in final print output speeds.
- **Media Weight:** “Heavy” setting may run printer at a slower rated speed (on page 1 or some number pages into print job) than normal media weight.
- **Printer Usage:** “Max Yield” will insert gaps as the printer switches from color only to black only modes depending on content.
- **Finishing Options:** Duplex, stapled, hole punched, as well as output location can affect the total path the media has to be transported through resulting in slower printer output.
- **Eco Mode:** Minimizes the use of energy, paper, or specialty media. Setting Eco Mode to “Energy” or “Paper” may slow the printer output speed.

Printer Environment

The environment the printer is located in can affect the printer performance and speed. The following factors can affect print speed:

- Improper clearances and ventilation around the printer
- Elevated Ambient Environmental Temperature
- Network bandwidth. Printers that are network connected can be affected by the network speed and cause delays.

Job Types

Certain print job can affect the printer speed and performance such as:

- Long Print Jobs
- Complex Jobs
- Continuous Heavy Coverage Printing

Recommendations

For the optimal print speed, use the following printer and driver settings:

- **Print Resolution:** 4800 CQ
- **Quiet Mode:** Off
- **Media Type:** Plain Paper
- **Media size:** Letter/A4
- **Media/Tray source:** Tray 1
- **Media Weight:** Normal
- **Finishing Options:** Simplex, No hole punch or staple option, Std. Output Bin
- **Eco Mode:** Off

The following clearances must be maintained for proper ventilation of the CS820/CS827/CX820/CX825/CX860/C6160/XC6152/XC8160:

Minimum Clearance Requirements		
	CS820/CS827 C6160	CX820/CX825/CX860 XC6152/XC8155/XC8160
Top	305mm	330mm
Left Side	457mm	457mm
Right Side	152mm	152mm
Rear	203mm	203mm
Front	381mm	381mm