Universal Print Driver

Technical White Paper Revision 1b for Mac

Contents

Change history

Lexmark Universal Print Driver version 1.1

- Added support for the following printer models:

  ### Color laser multifunction products
  – MC3400 Series (MC3426i)
  – XC2300 Series (XC2326)

  ### Monochrome laser multifunction products
  – MB3400 Series (MB3442i)
  – XM1300 Series (XM1342)

  ### Color laser printer
  C2300 Series (C2326)

  ### Monochrome laser printer
  M1300 Series (M1342)

- Added support for the following operating systems:
  – macOS 12
  – macOS 11

  Note: For a list of supported operating systems, see .

Lexmark Universal Print Driver version 1.0

- Added support for the following printer models:

  ### Color laser multifunction products
  – XC4100 Series (XC4143, XC4153)
  – XC6100 Series (XC6153, XC6153de)
  – XC8100 Series (XC8163)

Overview

The Lexmark™ UPD for Mac provides a standardized one-driver solution for your printing needs. It supports both color and monochrome printers.

The UPD package is distributed as two separate packages, one for color and the other for monochrome printers. We recommend using the specific driver packages depending on whether you have a color or a monochrome printer. If you have a fleet of both color and monochrome printers, then we recommend installing both print drivers.

The UPD installs Print, including PostScript Printer Description (PPD) and Print Dialog Extension (PDE), on Mac™ OS X™ computers running on Mac OS 10.6.8 or later.

Note: If you are using Lexmark Print Management Client (LPMC), we recommend using the UPD for Mac that is bundled with the LPMC package.

This document provides instructions on how to install and use the UPD.

Note: For more information on the print driver version numbering format, see .

Before you begin

Supported operating systems

- macOS 12
- macOS 11
- macOS 10.15
- macOS 10.14
- macOS 10.13
- macOS 10.12
- Mac OS X 10.11
- Mac OS X 10.10
- Mac OS X 10.9
- Mac OS X 10.8
- Mac OS X 10.7
- Mac OS X 10.6

Supported printers

Printer model	PostScript® emulation driver
Color laser multifunction products	
CX310	✓
CX410	✓
CX421	✓
CX431	✓
CX510	✓
CX522	✓
CX622	✓
CX625	✓
CX725	✓
CX820	✓
CX825	✓
CX860	✓
CX920 Series (CX921, CX922, CX923, CX924, CX927)	✓
MC2325	✓

Printer model	PostScript® emulation driver
MC2425	✓
MC2535	✓
MC2640	✓
MC3400 Series (MC3426, MC3426i)	✓
XC2100 Series (XC2130, XC2132)	✓
XC2200 Series (XC2235, XC2240)	✓
XC2300 Series (XC2326)	✓
XC4100 Series (XC4140, XC4143, XC4150, XC4153)	✓
XC4240	✓
XC6100 Series (XC6152, XC6153, XC6153de)	✓
XC8100 Series (XC8155, XC8160, XC8163)	✓
XC9235	✓
XC9245	✓
XC9255	✓
XC9265	✓
Mono laser multifunction products	
MB2338	✓
MB2443	✓
MB2546	✓
MB2650	✓
MB2770	✓
MB3400 Series (MB3442, MB3442i)	✓
MX310	✓
MX321	✓
MX331	✓
MX410	✓
MX421	✓
MX431	✓

Printer model	PostScript® emulation driver
MX510 Series (MX510, MX511)	✓
MX520 Series (MX521, MX522)	✓
MX610 Series (MX610, MX611)	✓
MX622	✓
MX6500	✓
MX710 Series (MX710, MX711)	✓
MX720 Series (MX721, MX722)	✓
MX725	✓
MX810 Series (MX810, MX811, MX812)	✓
MX820 Series (MX822, MX826)	✓
MX910 Series (MX910, MX911, MX912)	✓
XM1100 Series (XM1135, XM1140, XM1145)	✓
XM1200 Series (XM1242, XM1246)	✓
XM1300 Series (XM1342)	✓
XM3150	✓
XM3250	✓
XM5100 Series (XM5163, XM5170)	✓
XM5300 Series (XM5365, XM5370)	✓
XM7100 Series (XM7155, XM7163, XM7170)	✓
XM7300 Series (XM7355, XM7370)	✓
XM9100 Series (XM9145, XM9155, XM9165)	✓
Color laser printers	
C2132	✓
C2240	✓
C2300 Series (C2326)	✓
C2425	✓
C2535	✓
C3426	✓

Printer model	PostScript® emulation driver
C4510	✓
C6160	✓
C9235	✓
CS310	✓
CS400 Series (CS410, CS421, CS431)	✓
CS500 Series (CS510, CS521)	✓
CS622	✓
CS700 Series (CS720, CS725)	✓
CS820	✓
CS900 Series (CS921, CS923, CS927)	✓
Mono laser printers	
B2865	✓
B3340	✓
B3442	✓
M1100 Series (M1140 Plus, M1145)	✓
M1200 Series (M1242, M1246	✓
M1300 Series (M1342)	✓
M3150 Series	✓
M3250	✓
M5200 Series (M5255, M5270)	✓
MS310 Series (MS310d, MS312dn, MS315)	✓
MS321	✓
MS331	✓
MS410 Series (MS410, MS415)	✓
MS421	✓
MS431	✓
MS510	✓
MS521	✓

Printer model	PostScript® emulation driver
MS610 Series (MS610de, MS610dn)	✓
MS620 Series (MS621, MS622)	✓
MS710 Series (MS710, MS711)	✓
MS725	✓
MS810 Series (MS810, MS810de, MS811, MS812, MS812de)	✓
MS820 Series (MS821, MS822, MS823, MS825, MS826)	✓
MS911	✓

Installing the Universal Print Driver

Installing the Universal Print Driver

1 From your computer, go to **www.lexmark.com**.

2 Click **Customer Support** > **Universal Print Driver**.

3 Depending on the operating system of your computer, download the appropriate print driver.

> **Notes:**
>
> - We recommend using the specific driver packages depending on whether you have a color or a monochrome printer. If you have a fleet of both color and monochrome printers, then we recommend installing both print drivers.
> - For Windows computers, if you download the emulation-specific UPD, then download the Phone Book and Travel Print applications separately. Both applications install with the administrator package automatically.
> - For more information on the full list of packages for Windows computers, see the Universal Print Driver White Paper section.

4 Follow the instructions on your computer screen.

Creating a print queue

1 From your Mac computer, open the System Preferences window, and then click **Printers & Scanners**.

2 Click ➕.

3 Click **IP**, and then enter the printer or print server IP address.

4 Select the protocol.

5 In the Queue field, enter the printer share name.

6 In the Name field, enter the print queue name.

7 In the Use menu, select **Select Software**, and then select either of the following:

- **Lexmark Universal Color**
- **Lexmark Universal Mono**

Note: The UPD packages are distributed as two separate packages, one for color and the other for monochrome printers. We recommend using the specific driver packages depending on whether you have a color or a monochrome printer. If you have a fleet of both color and monochrome printers, then we recommend installing both print drivers.

8 Click **Add**.

Understanding the Universal Print Driver

To see the UPD settings, from your Mac computer, open the System Preferences window, and then click **Printers & Scanners**.

Understanding the general settings

Setting	Description
Copies	The number of copies.
Two-Sided	The printer prints on both sides of the paper.
Pages	The configured settings are applied to all or specific pages.
Paper Size	The size of the paper used.
Orientation	The following settings determine the alignment of the paper or form when it is printed: • **Portrait**—The orientation is vertical, where the page is taller than it is wide. • **Landscape**—The orientation is horizontal, where the page is wider than it is tall.
Scale	The page image is scaled to match a specific paper size.

Understanding the Paper settings

The following settings determine how paper is handled:

- **Paper type**
- **Print Blank Pages**

Understanding the Job Accounting settings

If this setting is enabled, then the following settings determine how job accounting is used:

Note: This feature is available only in some printer models.

- **User Name/ID**—The user name or user ID that is associated with the print job.
- **Account Code**—The account code that is associated with the print job.
- **Department Code**—The department code that is associated with the print job.

Understanding the Print and Hold settings

The Print and Hold settings provide more settings for how and when a job is printed. When you use this feature, the printer holds the print job until the user releases it from the printer control panel. The Print and Hold settings provide multiple levels of security for held jobs.

Notes:

- This feature is available only in some printer models.
- For more information on releasing held jobs from the printer control panel, see the printer *User's Guide*.

Setting	Description
Print and Hold	The following settings determine how the job is printed: • **Off** • **Confidential Print**—Confidential print jobs are secured with a four-digit personal identification number (PIN). For more information on the allowed digits for the PIN, see your printer *User's Guide*. • **Reserve Print**—The print job is stored in the printer memory for printing later. • **Verify Print**—The first copy of a multiple-copy print job is printed for inspection. The subsequent copies are held until they are canceled or released for printing. • **Repeat Print**—The print job is released, and then a copy is stored in the printer memory for printing again later. • **Use Logged-In User Name**—The computer operating system for a user ID is queried, and then submitted as the default user name that is associated with the held print job.
PIN	The specified four-digit PIN is required when releasing a print job. **Note:** A confidential print job does not print until the PIN is entered and a user name is selected on the printer control panel.

Understanding the Color settings

The Color settings determine the print and image quality settings of a print job.

Setting	Description

Color	• Color Mode—The print job is printed either in color or in black and white.
	• ColorSaver[1]—The following settings determine whether the amount of toner that the printer uses is reduced when printing color images:
	  – **Use Printer Setting**
	  – **On**
	  – **Off**—Text is printed using the default amount of toner.

Gray Correction[2]	The following settings determine the brightness and contrast of the print job: • **Use Printer Setting** • **Off** • **Manual**—This setting enables the brightness and contrast sliders.
[1] This setting is available only in laser printers.	
[2] This setting is available only in monochrome printers.	
[3] This setting is available only in color laser printers.	

Setting	Description
Color Correction[3]	The following settings determine how the colors of the print job are adjusted to match the colors of other output devices or standard color systems: • **Use Printer Settings** • **Off** • **Auto**—Depending on the object type and how color is specified, a different color conversion table is applied to all objects in the print job. • **Manual**—This setting enables the RGB and CMYK Manual color correction settings.
Color Balance[3]	The following settings determine how the colors of the print job are adjusted by increasing or decreasing the amount of toner used for each color plane: • **Use Printer Setting** • **Manual**—This setting enables the color balance sliders.
RGB Correction[3]	The following settings determine the brightness, contrast, and saturation of the print job: • **Use Printer Setting** • **Manual**—This setting enables the brightness, contrast, and saturation sliders.
[1] This setting is available only in laser printers.	
[2] This setting is available only in monochrome printers.	
[3] This setting is available only in color laser printers.	

Understanding the Quality settings

The Quality settings determine the print and image quality settings of a print job.

Setting	Description
Resolution	This setting determines the resolution of the print job.
Halftone	The following settings determine how the halftone screen is used: • **Use Printer Setting** • **Normal**—A standard halftone screen is used. • **Detail**—An alternate halftone screen designed for thin color lines and text is used.

Setting	Description
Pixel Boost	The following settings determine how the pixel density of a print job is enhanced: • **Use Printer Setting** • **Off** • **Fonts**—The text in the print job is darkened. This setting affects only font data. • **Horizontally**—The horizontal lines of text and images in the print job are darkened. • **Vertically**—The vertical lines of text and images in the print job are darkened. • **Both directions**—Both horizontal and vertical lines of text and images in the print job are darkened.
Toner Darkness	The following settings determine whether the print job is either lightened or darkened: • **Use Printer Setting** • **Use toner darkness**—This setting enables the toner darkness slider.

Understanding the Finishing settings

Notes:

- The finishing feature is available only in some printer models. For more information, see the printer *User's Guide*.
- To use the finishing settings, attach a finisher to the printer.

Setting	Description
Separator Pages	The location of the separator sheets.
Separator Source	The source of the separator sheets.
Output Bin	Depending on your printer model, supported output bins may vary. For a list of available output bins, see the printer *User's Guide*.
Staple Job	The number and placement of staples in the finished print job.
Offset Pages	Print jobs are stacked in staggered sets in the output bin.
Hole Punch	The location and number of holes to be punched in the finished print job.
Fold	If this setting is enabled, then the finished print job is folded.

Understanding the Advanced Layout settings

The Advanced Layout settings determine the organizational attributes of a print job.

Note: Some settings are available only in some printer models.

Setting	Description

Layout	The following settings determine the layout of the page:
	• **Normal**—Page layout settings are not applied to the print job.
	• **Booklet**—The print job is printed as a booklet.
	   Note: If necessary, configure the booklet settings.
	• **Poster**—The print job is printed in a larger format.
	   Note: If necessary, configure the poster settings.

Document Reading Order	The reading order of the print job that you are printing. Select either of the following: • **Left to right** • **Right to left**
Sheets Per Bundle	Multiple pages are printed on all sheets of paper.
Cover Paper Type	The type of the paper cover.
Cover Paper Source	The source of the paper cover.

Note: Program settings may override the settings in the Advanced Layout settings.

Understanding the Options tab

The UPD configures itself to support your printer automatically. However, if the automatic configuration fails, then a superset of all the supported features are shown. The following is a sample list:

- Bin 1
- Bin 2
- Bin 3
- Bin 4
- Duplexer
- Envelope feeder
- Flash
- Multipurpose feeder
- Tray 2
- Tray 3
- Tray 4
- Tray 5

Frequently asked questions

What are the benefits of using the UPD?

The main benefit is the amount of time saved in deploying and administering a large fleet of printers. The UPD can be used to print to multiple devices and minimize the number of drivers in the network environment.

What is a version number?

A version number is a unique number or set of numbers assigned to a specific release of a program, file, firmware, hardware, driver, or software.

What is the UPD version numbering format?

The UPD version number is divided into sets of numbers, separated by decimal points.

Versioning schema

For example, $x.y.yy$

where:

x is the major version.

y is the minor version.

yy is the private version.

Part	Description
Major version	The primary level of the UPD release. It increments when there are major functional and architectural updates.
Minor version	The secondary level of the UPD release. It increments when there are minor functional updates.
Private version	The level of the UPD release for specific customers. **Note:** If the version value is **0**, then the UPD is released to the general public.

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