

1500 Series User's Guide



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Safety information

Use only the power supply and power supply cord provided with this product or the manufacturer's authorized replacement power supply and power supply cord.

Connect the power supply cord to an electrical outlet that is near the product and easily accessible.



CAUTION: Do not twist, bind, crush, or place heavy objects on the power cord. Do not subject the power cord to abrasion or stress. Do not pinch the power cord between objects such as furniture and walls. If the power cord is misused, a risk of fire or electrical shock results. Inspect the power cord regularly for signs of misuse. Remove the power cord from the electrical outlet before inspecting it.

Refer service or repairs, other than those described in the user documentation, to a professional service person.

This product is designed, tested, and approved to meet strict global safety standards with the use of specific Lexmark components. The safety features of some parts may not always be obvious. Lexmark is not responsible for the use of other replacement parts.



CAUTION: Do not set up this product or make any electrical or cabling connections, such as the power supply cord or telephone, during a lightning storm.

SAVE THESE INSTRUCTIONS.

Contents

Safety information	2
Introduction	9
Finding information about the printer	
Operating system notice	
Wireless network compatibility	
Setting up the printer	13
Checking the box contents	
Understanding the parts of the printer	
Installing the printer software	
Understanding the printer software	
Security Information	
Networking	
General networking	
Networking overview	
Common home network configurations	
What information do I need and where do I find it?	22
Finding the MAC address	
Printing a network setup page	
Wireless networking	
Finding IP addresses	
Assigning an IP address	
Finding the signal strength	
Tips for using network adapters	
Types of wireless networks	
Advanced wireless setup	25
Creating an ad hoc wireless network using Windows	
Adding a printer to an existing ad hoc wireless network using Windows	27
Loading paper and original documents	28
Loading paper	28
Loading envelopes	28
Loading labels	29
Loading greeting cards, index cards, photo cards, and postcards	29
Loading transparencies	30
Loading iron-on transfers	30
Loading custom-size paper	

Loading banner paper	31
Printing	32
Printing basic documents	32
Printing a document	
Printing a Web page	
Printing photos or images from a Web page	33
Printing multiple copies of a document	33
Collating copies	34
Printing the last page first (reverse page order)	34
Printing multiple pages on one sheet (N-Up)	34
Printing documents or photos from a removable storage device	35
Pausing print jobs	35
Canceling print jobs	35
Printing specialty documents	35
Choosing compatible specialty paper types	35
Printing envelopes	36
Printing greeting cards, index cards, photo cards, and postcards	36
Printing a document as a poster	36
Printing an image as a poster	37
Printing a booklet	
Assembling a booklet	
Printing on custom-size paper	
Printing iron-on transfers	
Printing transparencies	
Printing a banner	
Changing printer settings	
Saving and deleting print settings	
Resetting the printer to factory default settings	
Printing on both sides of the paper (duplexing)	40
Understanding the two-sided printing (duplexing) function	
Printing on both sides of the paper (duplexing) automatically	41
Printing on both sides of the paper (duplexing) manually	41
Working with photos	43
Retrieving and managing photos	
Inserting a memory card	
Inserting a flash drive	
Connecting a PictBridge-enabled digital camera	
Transferring all photos from a memory card using the computer	
Transferring selected photos from a memory card using the computer	
Transferring all photos from a CD or flash drive using the computer	
Transferring selected photos from a CD or flash drive using the computer	46
Changing the Productivity Studio temporary files preferences	47
Changing the Productivity Studio searched folders preferences	
Changing the Productivity Studio library preferences	47

Changing the Productivity Studio transfer settings	48
Editing photos	48
Cropping a photo	48
Rotating a photo	48
Changing the Resolution / Size of a photo	48
Applying One-Click Auto Fixes to a photo	49
Reducing the red-eye effect in a photo	
Blurring/Sharpening a photo	
Enhancing a photo	
Changing the Hue / Saturation of a photo	
Changing the Gamma Value of a photo or image	
Despeckling a photo	
Applying a color effect to a photo	
Printing photos	
Printing photos from a CD or removable storage device using the compute	
Viewing / Printing photos from the Productivity Studio	
Printing Photo Packages	
Creating Photo Greeting Cards	
Printing all photos from a memory device	53
Using a PictBridge-enabled digital camera to control printing photos	54
Printing photos from a digital camera using DPOF	55
Creating and viewing a slideshow	55
Maintaining the printer	56
Installing print cartridges	
Removing a used print cartridge	
Using genuine Lexmark print cartridges	58
Refilling print cartridges	58
Aligning the print cartridges	59
Cleaning the print cartridge nozzles	59
Wiping the print cartridge nozzles and contacts	
Cleaning the exterior of the printer	
Preserving the print cartridges	
Ordering supplies	
Ordering print cartridges	
Ordering paper and other supplies	
Cracing paper and calci cappines	
Troubleshooting	63
Setup Troubleshooting	63
Power button is not lit	
Power light is blinking	
Duplex light is blinking	64
Power light and duplex light are blinking alternately	

	Software does not install	66
	Page does not print	67
	Solving printer communication problems	68
	Understanding Warning levels	68
	Removing and reinstalling the software	68
	Enabling the USB port	69
Wi	reless troubleshooting	69
	How do I find out what type of security my network is using?	69
	Wi-Fi indicator light is orange	
	Wi-Fi indicator light is blinking orange during installation	
	Wi-Fi indicator light is not lit	
	Check your security keys	74
	Printer is configured correctly, but cannot be found on the network	
	Wireless network printer does not print	75
	Wireless printer is no longer working	76
	Changing wireless settings after installation	77
	Resetting an internal wireless print server to factory default settings	77
	Network printer does not show up in the printer selection list during installation	78
	Wireless Setup Utility cannot communicate with the printer during installation (Windows users	
	only)	
	Checking your network name (Windows users only)	
	Ping the access point	
	Ping the printer	
	Run the Wireless Setup Utility (Windows users only)	
	Changing wireless settings after installation (Windows users only)	
	Check printer ports (Windows users only)	81
Pr	nt troubleshooting	81
	Partial document or photo prints	81
	Improving print quality	81
	Poor text and graphic quality	82
	Poor quality at the edges of the page	83
	Print speed is slow	83
	Skewed print	84
	Photo smudges	84
	Checking the print cartridges	84
	Ink levels seem incorrect	84
	Ink levels seem to go down too quickly	
	A blank or incorrect page prints	85
	Characters on printout are missing or unexpected	85
	Colors on printout are faded or differ from colors on the screen	86
	Glossy photo paper or transparencies stick together	86
	Page prints with different fonts	
	Print is too dark or smudged	
	Printed characters are improperly formed or are not aligned correctly	
	Printouts have alternating bands of light and dark print	
	Transparencies or photos contain white lines	88
	Vertical straight lines are not smooth	88

White lines appear in graphics or solid black areas	88
Checking the printer status	89
Checking printer readiness	89
Checking the Spool Settings for banner printing	90
Resolving font problems	90
Printer is busy printing another job	91
Ready or Busy Printing is listed as the status	91
Printing a test page	91
Test page does not print	92
Cable is not connected, is loose, or is damaged	92
Printer is plugged in but does not print	93
Printer is trying to print to File	93
Printer cannot communicate with computers over peer-to-peer network	93
Printer is not able to communicate with the computer	95
Wrong printer is attached	95
Printer is out of paper	95
Updating the printer software	95
Bidirectional communication is not established	95
Experiencing poor quality or incorrect output	96
Cannot print from a memory card or flash drive	96
Cannot print from digital camera using PictBridge	96
Partial photo prints when using a PictBridge-enabled digital camera	97
Jams and misfeeds troubleshooting	97
Paper jam in the printer	97
Paper jam in the paper support	97
Paper jam in the duplex unit	98
Paper or specialty media misfeeds	99
Printer does not feed paper, envelopes, or specialty media	99
Banner paper jams	100
Paper continues to jam	100
Duplex unit does not operate correctly	
Cartridge carrier jam	101
Memory card troubleshooting	102
Memory card cannot be inserted	102
Nothing happens when memory card is inserted	102
Photos do not transfer from a memory card across a wireless network	103
Error messages on the computer screen	104
Clearing error messages	104
Left/Right Cartridge Missing	104
Communication not available	104
General Printing Problem	105
Ink Low	105
Out of Memory	105
Out of Paper	105
Fixing a printing failure	105
Print File Error	106

Unsupported file types found on memory card	106
Paper Jam	106
Multiple All-In-Ones found	106
Notices	107
Product information	107
Edition notice	107
European EC directives conformity statement for radio products	109
Power consumption	112
Networking glossary	117
Index	119

Introduction

Finding information about the printer

Quick Setup sheet

Description	Where to find
The <i>Quick Setup</i> sheet gives you instructions for setting up hardware and software.	You can find this document in the printer box or on the Lexmark Web site at www.lexmark.com.

User's Guide

Description	Where to find
The <i>User's Guide</i> gives you instructions for setting up hardware and software (on Windows operating systems) and some basic instructions for using the printer.	You can find this document in the printer box or on the Lexmark Web site at www.lexmark.com.
Note: If your printer supports Macintosh operating systems, see the Mac Help:	
From the Finder desktop, double-click the Lexmark 1500 Series folder.	
2 Double-click the printer Help icon.	

User's Guide: Comprehensive Version

Description	Where to find
The <i>User's Guide: Comprehensive Version</i> gives you instructions for using the printer and other information such as:	When you install the printer software, the <i>User's Guide:</i> Comprehensive Version will be installed. 1 Do one of the following:
 Using the software (on Windows operating systems) Loading paper Printing 	In Windows Vista, click
Working with photos	2 Click Programs or All Programs → Lexmark 1500 Series.
 Scanning (if supported by your printer) Making copies (if supported by your printer) Faxing (if supported by your printer) 	3 Click User's Guide. If the link to the User's Guide is not on your desktop, follow these instructions:
 Maintaining the printer Connecting the printer to a network (if supported by 	Insert the CD. The installation screen appears.
your printer) Troubleshooting problems with printing, copying, scanning, faxing, paper jams, and misfeeds	Note: If necessary, click →All Programs → Run. In Windows XP and earlier versions, click Start → Run, and then type D:\setup, where D is
Note: If your printer supports Macintosh operating systems, see the Mac Help:	the letter of your CD-ROM drive. 2 Click Documentation .
1 From the Finder desktop, double-click the Lexmark 1500 Series folder.	3 Click View User's Guide (including Setup Troubleshooting).
2 Double-click the printer Help icon.	4 Click Yes.
	An icon of the <i>User's Guide</i> appears on your desktop, and the <i>User's Guide: Comprehensive Version</i> appears on the screen.
	You can also find this document on the Lexmark Web site at www.lexmark.com.

Lexmark Solution Center

Description	Where to find
The Lexmark Solution Center software is included on your CD. It installs with the other software, if your printer connects to a computer.	To access the Lexmark Solution Center: 1 Do one of the following: • In Windows Vista, click . • In Windows XP and earlier, click Start. 2 Click Programs or All Programs → Lexmark 1500 Series. 3 Select Lexmark Solution Center.

Customer support

Description	Where to find (North America)	Where to find (rest of world)
Telephone support	Call us at US: 1-800-332-4120 Monday–Friday (8:00 AM–11:00 PM ET) Saturday (Noon–6:00 PM ET) Canada: 1-800-539-6275 English Monday–Friday (8:00 AM–11:00 PM ET) Saturday (Noon–6:00 PM ET) French Monday–Friday (9:00 AM–7:00 PM ET) Mexico: 01-800-253-9627 Monday–Friday (8:00 AM–8:00 PM ET) Note: Support numbers and times may change without notice. For the most recent phone numbers available, see the printed warranty statement that shipped with your printer.	Telephone numbers and support hours vary by country or region. Visit our Web site at www.lexmark.com. Select a country or region, and then select the Customer Support link. Note: For additional information about contacting Lexmark, see the printed warranty that shipped with your printer.
E-mail support	For e-mail support, visit our Web site: www.lexmark.com. 1 Click CUSTOMER SUPPORT. 2 Click Technical Support. 3 Select your printer family. 4 Select your printer model. 5 From the Support Tools section, click e-Mail Support. 6 Complete the form, and then click Submit Request.	E-mail support varies by country or region, and may not be available in some instances. Visit our Web site at www.lexmark.com. Select a country or region, and then select the Customer Support link. Note: For additional information about contacting Lexmark, see the printed warranty that shipped with your printer.

Limited Warranty

Description	Where to find (US)	Where to find (rest of world)
Limited Warranty Information Lexmark International, Inc. furnishes a limited warranty that this printer will be free of defects in materials and workmanship for a period of 12 months after the original date of purchase.	To view the limitations and conditions of this limited warranty, see the Statement of Limited Warranty included with this printer, or set forth at www.lexmark.com. 1 Click CUSTOMER SUPPORT. 2 Click Warranty Information.	Warranty information varies by country or region. See the printed warranty that shipped with your printer.
	3 From the Statement of Limited Warranty section, click Inkjet & All-In-One Printers.	
	4 Scroll through the Web page to view the warranty.	

Record the following information (located on the store receipt and the back of the printer), and have it ready when you contact us so that we may serve you faster:

- Machine Type number
- Serial number
- · Date purchased
- · Store where purchased

Operating system notice

All features and functions are operating system-dependent. For complete descriptions:

- Windows users—See the User's Guide.
- Macintosh users—If your product supports Macintosh, see the Mac Help installed with the printer software.

Wireless network compatibility

Your printer contains an IEEE 802.11g wireless print server. Your printer is compatible with IEEE 802.11 b/g/n routers that are Wi-Fi certified. If you are having issues with an N router, verify with your router manufacturer that the current mode setting is compatible with G devices, as this setting varies depending on the router brand/model.

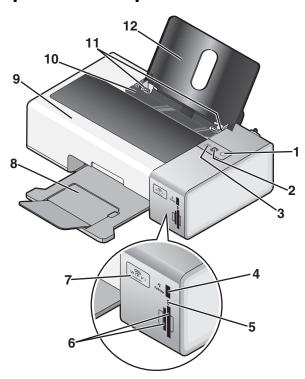
Setting up the printer

Checking the box contents



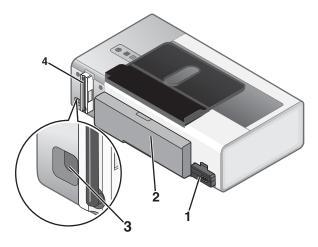
	Name	Description	
1	Power supply cord	Fits into the power supply attached to the back of the printer	
2	Installation software CD	 Installation software for the printer Mac Help User's Guide: Comprehensive Version in electronic format 	
3	Installation cable	Connects the printer to the computer temporarily during some methods of installation	
4	User's Guide	Printed booklet that serves as a guide Note: Complete user information (<i>Mac Help</i> or <i>User's Guide: Comprehensive Version</i>) can be found on the installation software CD	
5	Quick Setup sheet	Initial setup instructions	
6	Color print cartridge	Cartridge to be installed in the right cartridge carrier	
7	Black print cartridge	Cartridge to be installed in the left cartridge carrier	

Understanding the parts of the printer



	Use the	То
1	ტ	 Turn the printer on and off. — If the printer is inactive for 30 minutes, the printer reverts to sleep mode to conserve energy. Press or start a print job to turn the printer back on. — When the printer is in sleep mode, pressing and holding of for two seconds will turn off the printer. Cancel a print job. Press of in the middle of a print job. Be alerted for errors. For more information, see "Power light is blinking" on page 64.
2	□ ↓	 Load or eject paper. Cancel a print job. Press in the middle of a print job.
3		 Print on both sides of the paper (duplex). A green backlight comes on when the duplex function is activated. Note: This button is not functional with a Macintosh operating system. You can print two-sided documents with a Macintosh operating system by using the settings in the Two-Sided menu of the Print dialog. Be alerted for errors. For more information, see "Duplex light is blinking" on page 64 and "Power light and duplex light are blinking alternately" on page 64.
4	PictBridge port	Connect a PictBridge-enabled digital camera or a flash drive to the printer.
5	Card reader light	Check card reader status. The light blinks to indicate a memory card is being accessed.
6	Memory card slots	Insert a memory card. For more information on what types of memory cards can be inserted into each slot, see "Inserting a memory card" on page 43.

	Use the	То	
7	Wi-Fi indicator	Check wireless status:	
		Off indicates that the printer is not turned on or that no wireless option is installed.	
		Orange	
		– indicates that the printer is ready to be configured for wireless printing	
		- indicates that the printer is connected for USB printing	
		Orange blinking indicates that the printer is configured but is unable to communicate with the wireless network.	
		Green indicates that the printer is connected to a wireless network.	
8	Paper exit tray	Stack paper as it exits.	
9	Access cover	Install or change the print cartridges.	
		Clear paper jams.	
10	Paper feed guard	Prevent items from falling into the paper slot.	
11	Paper guides	Keep paper straight when feeding.	
12	Paper support	Load paper.	



	Use the	То	
1	Power supply	Connect the printer to a power source using the power cord. 1 Plug the power cord all the way into the power supply on the printer. 2 Plug the power cord into an electrical outlet that other electrical devices have been using.	
		3 If the ⊕ light is not on, press ⊕.	
2	Duplex unit	 Print on both sides of the paper. Remove paper jams. For more information, see "Paper jam in the duplex unit" on page 98. 	
3	USB port	Connect the printer to a computer using an installation cable.	
		Warning: Do not touch the USB port except when plugging in or removing a USB cable or installation cable.	
4	Internal wireless print server	Connect to a wireless network.	

Installing the printer software

Using the installation software CD (Windows users only)

Using the CD that came with the printer:

- 1 Start Windows.
- $\boldsymbol{2}\;$ When the desktop appears, insert the software CD.

The software installation screen appears.

3 Click Install.

Using the installation software CD (Macintosh users only)

- 1 Close all open software applications.
- 2 Insert the software CD.
- **3** From the Finder desktop, double-click the printer CD icon that automatically appears.
- 4 Double-click the Install icon.
- **5** Follow the instructions on the computer screen.

Using the World Wide Web

- 1 Go to the Lexmark Web site at www.lexmark.com.
- 2 From the home page, navigate through the menu selection, and then click **Drivers & Downloads**.
- **3** Choose the printer and the printer driver for your operating system.
- **4** Follow the instructions on the computer screen to download the driver and install the printer software.

Understanding the printer software

Using the software that installed with your printer, you can edit photos, maintain your printer, and do many other tasks. The following is an overview of features of the Productivity Studio and the Solution Center.

To open the Productivity Studio Welcome Screen, use one of these methods:

Method 1	Method 2
From the desktop, double-click the Productivity Studio icon.	 Do one of the following: In Windows Vista, click

Click the **Productivity Studio** icon for the task you want to complete. Depending on the printer you have, some of the features of this software may not be applicable.

Click	То	Details
•••	Transfer Photos	Download photos from a memory card, flash drive, CD, or digital camera to the Library.
	Photo Greeting Cards	Make quality greeting cards from your photos.

Click	То	Details
E E E	Photo Packages	Print multiple photos in various sizes.
Wonlque!	Poster	Print a photo as a multiple-page poster.

At the bottom left corner of the Welcome Screen, there are two Settings choices:

Click	То
Printer Status and Maintenance	 Check ink levels. Order print cartridges. Find maintenance information. Select other Solution Center tabs for more information, including how to change printer settings and troubleshooting.

The Solution Center is a complete guide to such printing features as printing photos, troubleshooting printing problems, and installing print cartridges and performing maintenance tasks. To open the Solution Center, use one of the following methods.

Method 1	Method 2	
 From the desktop, double-click on the Solution Center icon. Click Setup and diagnose printer. The Solution Center appears with the Maintenance tab open. 	 Do one of the following: In Windows Vista, click	

From here	You can:
How To	 Learn how to: Use basic features. Print projects such as photos, envelopes, cards, banners, iron-on transfers, and transparencies. Find the electronic <i>User's Guide: Comprehensive Version</i> for more information. View ink levels and order new print cartridges.
Troubleshooting	 Learn tips about the current status. Solve printer problems. View ink levels and order new print cartridges.

From here	You can:
Advanced	 Change the appearance of the Printing Status window. Turn printing voice notification on or off. Change network printing settings. Share information with us regarding how you use the printer. Obtain software version information. View ink levels and order new print cartridges.
Maintenance	 Install a new print cartridge. Order new print cartridges. Print a test page. Clean print cartridges to fix horizontal streaks. Align print cartridges to fix blurry edges. View ink levels. Troubleshoot other ink problems.

Security Information

Third-party applications, including anti-virus, security, and firewall programs may alert you about the printer software being installed. For your printer to work properly, allow the printer software to run on your computer.

Networking

General networking

Networking overview

A *network* is a collection of devices such as computers, printers, Ethernet hubs, wireless access points, and routers connected together for communication through cables or through a wireless connection. A network can be either wired, wireless, or designed to have both wired and wireless devices.

Devices on a wired network use cables to communicate with each other.

Devices on a wireless network use radio waves instead of cables to communicate with each other. For a device to be able to communicate wirelessly, it must have a wireless print server attached or installed that enables it to receive and transmit radio waves.

Common home network configurations

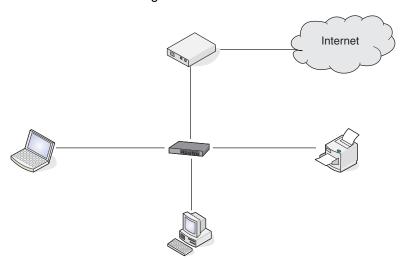
For desktop computers, laptops, and printers to communicate with each other over a network, they must be connected by cables and/or have wireless network adapters built in or installed in them.

There are different ways a network can be set up. Five common examples appear below.

Note: The printers in the following diagrams represent Lexmark printers with Lexmark internal print servers built in or installed in them so that they can communicate over a network. Lexmark internal print servers are devices made by Lexmark to enable Lexmark printers to be connected to wired or wireless networks.

Wired network example

- A computer, a laptop, and a printer are connected by Ethernet cables to a hub, router, or switch.
- The network is connected to the Internet through a DSL or a cable modem.



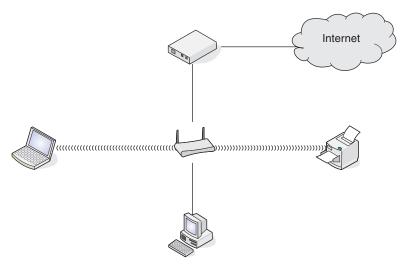
Wireless network examples

Four common wireless networks appear below:

- Scenario 1: Laptop and printer connected wirelessly with Internet
- Scenario 2: Computer, laptop, and printer connected wirelessly with Internet
- Scenario 3: Computer, laptop, and printer connected wirelessly without Internet
- Scenario 4: Laptop connected wirelessly to printer without Internet

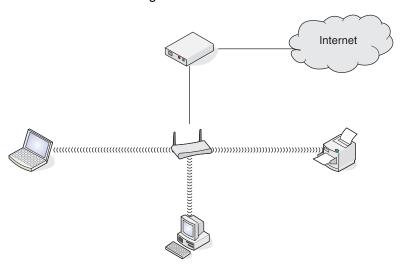
Scenario 1: Laptop and printer connected wirelessly with Internet

- A computer is connected to a wireless router by an Ethernet cable.
- A laptop and a printer are connected wirelessly to the router.
- The network is connected to the Internet through a DSL or a cable modem.



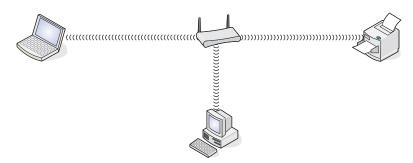
Scenario 2: Computer, laptop, and printer connected wirelessly with Internet

- A computer, a laptop, and a printer are connected wirelessly to a wireless router.
- The network is connected to the Internet through a DSL or a cable modem.



Scenario 3: Computer, laptop, and printer connected wirelessly without Internet

- · A computer, a laptop, and a printer are connected wirelessly to a wireless access point.
- The network has no connection to the Internet.



Scenario 4: Laptop connected wirelessly to printer without Internet

- A laptop is directly connected wirelessly to a printer without going through a wireless router.
- The network has no connection to the Internet.



What information do I need and where do I find it?

This printer may contain an internal wireless print server, which allows the printer to be used on a wireless network. You need the following settings from your existing wireless network:

- The network name, also known as the SSID
- The wireless mode (the type of wireless network you are using, either infrastructure or ad hoc)
- The type of security used on the network (WEP, WPA, or WPA2)
- Any applicable security keys or passwords used with the network security encryption type

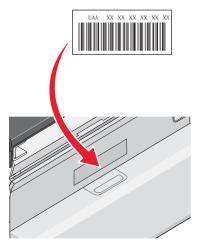
Note: You must know this information in order to properly set up the printer for use on the wireless network. To obtain these settings, see the documentation that came with your wireless router or consult the person who set up your wireless network.

Finding the MAC address

Most network equipment has a unique hardware identification number to distinguish it from other devices on the network. This is called the *Media Access Control (MAC)* address.

If your printer has a factory installed internal wireless print server, the MAC address is a series of letters and numbers located on the back of your printer.

If you purchased the internal wireless print server separately, the MAC address appears on an adhesive label that came with the wireless print server. Attach the adhesive label to your printer so you will be able to find the MAC address when you need it.



Note: A list of MAC addresses can be set on a router so that only devices with matching MAC addresses can be allowed to operate on the network. This is called *MAC filtering*. If MAC filtering is enabled in your router and you want to add a printer to your network, the MAC address of the printer must be included in the MAC filter list.

Printing a network setup page

A network setup page lists your printer's configuration settings, including the IP address and MAC address of the printer.

- **1** Make sure the printer is turned on.
- 2 Press ().

The U light pulses.

- 3 Press and hold .
- **4** While holding □, press ७.
- **5** When the \circlearrowleft light becomes steady, release riangle.

The network setup page prints.

Wireless networking

Finding IP addresses

An IP address is a unique number used by devices on an IP network to locate and communicate with each other. Devices on an IP network can only communicate with each other if they have unique and valid IP addresses. A unique IP address means no two devices on the same network have the same IP address.

How to locate a printer IP address

You can locate the printer IP address by printing out the printer network setup page. For more information, see "Printing a network setup page" on page 23.

How to locate a computer IP address

- 1 Do one of the following:

 - In Windows XP, click Start → Programs or All Programs → Accessories → Command Prompt.
- 2 Type ipconfig.
- 3 Press Enter.

The IP address appears as four sets of numbers separated by periods, such as 192.168.0.100.

Assigning an IP address

An IP address may be assigned by the network using DHCP. The print object, created at the end of the installation, sends all print jobs across the network to the printer using this address.

Many networks have the ability to automatically assign an IP address. Auto-IP is the ability for individual devices to assign themselves a unique IP address. Most networks use DHCP to assign addresses.

During the Direct IP printing installation of printer software, the IP address is visible in the printer list only as it is being assigned. The print object that is created in the Printers folder of the operating system will reference the MAC address of the printer in the port name.

If the IP address is not automatically assigned, you can try manually entering an address after selecting your printer from the available list.

Configure IP address

If you have lost communication with the printer over a network, select **Use DHCP** to reestablish communication with the printer.

You must assign an IP address in any of the following situations:

- You manually assigned IP addresses for the other network devices.
- You want to assign a specific IP address.
- You move the printer to a remote subnet.
- The printer is listed as Unconfigured in the Configuration Utility.

Contact your system support person for more information.

Finding the signal strength

Wireless devices have built-in antennas that transmit and receive radio signals. The signal strength listed on the printer network setup page indicates how strongly a transmitted signal is being received. Many factors can affect the signal strength. One factor is interference from other wireless devices or even other devices such as microwave ovens. Another factor is distance. The farther two wireless devices are from each other, the more likely it is that the communication signal will be weaker.

Tips for using network adapters

- Make sure the adapter connections are secure.
- Make sure the computer is turned on.
- · Make sure you entered the correct IP address.

Types of wireless networks

Networks can operate in one of two modes: infrastructure or ad hoc. Lexmark recommends setting up a network in infrastructure mode using the installation CD that came with the printer.

A wireless network where each device communicates with others through a wireless access point (wireless router) is set up in infrastructure mode. All devices must have valid IP addresses and share the same SSID and channel. In addition, they must share the same SSID and channel as the wireless access point (wireless router).

A simple type of wireless network is one where a PC with a wireless adapter communicates directly with a printer equipped for wireless networking. This mode of communication is called *ad hoc*. A device in this type of network must have a valid IP address and be set to ad hoc mode. The wireless print server must also be configured with the same SSID and channel.

	Infrastructure	Ad hoc
Characteristics		
Communication	Through wireless access point (wireless router)	Directly between devices
Security	More security options	
Range	Determined by range and number of access points	Restricted to range of individual devices on network
Speed	Usually faster	Usually slower
Requirements for all devices on the network		
Unique IP address for each device	Yes	Yes
Mode set to	Infrastructure mode	Ad hoc mode
Same SSID	Yes, including the wireless access point (wireless router)	Yes
Same channel	Yes, including the wireless access point (wireless router)	Yes

Infrastructure mode is the recommended setup method because it has:

- · Increased network security
- Increased reliability
- Faster performance
- Easier setup

Advanced wireless setup

Creating an ad hoc wireless network using Windows

The recommended way to set up your wireless network is to use a wireless access point (wireless router). A network set up this way is called an *infrastructure network*. If you have an infrastructure network in your home, you should configure your printer for use on that network.

If you don't have a wireless access point (wireless router) or would like to set up a standalone network between your printer and a computer with a wireless network adapter, you can set up an *ad hoc network*.

For Windows Vista users

- 1 Click → Control Panel → Network and Internet.
- 2 Under Network and Sharing Center, click Connect to a Network.

- 3 In the Connect to a Network dialog, click **Set up a wireless ad-hoc (computer-to-computer) network**, and then click **Next**.
- 4 Follow the instructions in the "Set up a wireless ad hoc network" wizard. As part of the setup:
 - **a** Create a network name or SSID for the network between the computer and your printer.
 - **b** Write the name of your network in the space provided. Be sure to use the exact spelling and capitalization.
 - **c** Go to the Security Type drop-down, choose WEP, and create a security key (or password).
 - Note: WEP passwords must be either 5 or 13 characters.
 - **d** Write the password for your network in the space provided. Be sure to use the exact spelling and capitalization.

Windows Vista will enable the ad hoc network for you. It will appear in the "Connect to a network" dialog under available networks, indicating that the computer is configured for the ad hoc network.

- **5** Close the Control Panel and any remaining windows.
- 6 Insert the printer CD into the computer and follow the direction for wireless installation.
- 7 When the available networks are displayed, provide the network name and the security information you created in step 4. The installer will configure the printer for use with the computer.
- 8 Store a copy of your network name and security information in a safe place for future reference.

For Windows XP users

- 1 Click Start → Settings → Control Panel → Network Connections.
- 2 Right-click Wireless Network Connections.
- 3 If **Enable** appears in the pop-up menu, click it.

Note: If Enable does not appear, your wireless connection is already enabled.

- 4 Right-click the Wireless Network Connection icon.
- 5 Click Properties.
- 6 Click the Wireless Networks tab.

Note: If the Wireless Networks tab does not appear, your computer has third-party software that controls your wireless settings. You must use that software to set up the ad hoc wireless network. For more information, see the documentation for that software to learn how to create an ad hoc network.

- 7 Select the Use Windows to configure my wireless network settings check box.
- **8** Under Preferred Networks, delete any existing networks.
 - a Click the network to be removed.
 - **b** Click the **Remove** button.
- 9 Click Add to create an ad hoc network.
- 10 In the Network Name (SSID) box, type the name you want to give your wireless network.
- 11 Write down the network name you chose so you can refer to it when running the wireless setup. Make sure you copy it down exactly, including capital letters.
- **12** If **Network Authentication** appears in the list, select **Open**.
- 13 In the Data encryption list, select WEP.

- 14 If necessary, deselect the The key is provided for me automatically check box.
- 15 In the **Network Key** box, type in a security code.
- **16** Write down the security code you chose so you can refer to it when running the wireless setup. Make sure you copy it down exactly, including any capital letters.

Note: For more information about passwords (security keys), see "Check your security keys" in the "Wireless troubleshooting" section of the "Troubleshooting" chapter.

- 17 Type the same security code in the Confirm network key box.
- 18 Select the This is a computer-to-computer (ad hoc) network; wireless access points are not used. check box.
- 19 Click **OK** twice to close the two open windows.
- **20** It may take a few minutes for your computer to recognize the new settings. To check on the status of your network:
 - a Right-click the Wireless Network Connections icon.
 - **b** Select View Available Wireless Networks.
 - If the network is listed but the computer is not connected, select the ad hoc network and then click the **Connect** button.
 - If the network does not appear, wait a minute and then click the Refresh network list button.
- 21 Click Programs or All Programs → Lexmark 1500 Series.
- 22 Click Wireless Setup Utility.

Note: You may be prompted to connect the printer to the computer again using the installation cable as part of the setup process.

- 23 Follow the prompts on the computer screen.
- 24 Store your network name and security code in a safe place for future reference.

Adding a printer to an existing ad hoc wireless network using Windows

- 1 Click Programs or All Programs → Lexmark 1500 Series.
- 2 Click Wireless Setup.
- **3** Follow the instructions on the computer screen.

Loading paper and original documents

Loading paper

- 1 Make sure:
 - You use paper designed for inkjet printers.
 - If you are using photo, glossy, or heavyweight matte paper, you load it with the glossy or printable side facing you. (If you are not sure which side is the printable side, see the instructions that came with the paper.)
 - The paper is not used or damaged.
 - If you are using specialty paper, you follow the instructions that came with it.
 - · You do not force paper into the printer.
- 2 Before loading paper the first time, slide the paper guides out toward the edges of the paper support. You can load up to:
 - 100 sheets of plain paper
 - · 25 sheets of heavyweight matte paper
 - · 25 sheets of photo paper
 - 25 sheets of glossy paper

Note: Photos require more drying time. Remove each photo as it exits, and allow it to dry to avoid ink smudging.

3 Load the paper vertically in the center of the paper support, and adjust the paper guides to rest against the edges of the paper.



Note: To avoid paper jams, make sure the paper does not buckle when you adjust the paper guides.

Loading envelopes

You can load up to 10 envelopes at a time.

Warning: Do not use envelopes that have metal clasps, string ties, or metal folding bars.

- 1 Load envelopes in the center of the paper support with the stamp location in the upper left corner.
- 2 Make sure:
 - The print side of the envelopes faces you.
 - The envelopes are designed for use with inkjet printers.

• The paper guides rest against the edges of the envelopes.



Notes:

- Do not load envelopes with holes, perforations, cutouts, or deep embossing.
- Do not use envelopes that have exposed flap adhesive.
- Envelopes require more drying time. Remove each envelope as it exits, and allow it to dry to avoid ink smudging.

Loading labels

You can load up to 25 sheets of labels at a time.

- 1 Load labels with the print side facing you and the top of the sheet fed into the printer first.
- 2 Make sure:
 - The print side of the labels faces you.
 - The top of the labels feeds into the printer first.
 - The adhesive on the labels does not extend to within 1 mm of the edge of the labels.
 - You use full label sheets. Partial sheets (with areas exposed by missing labels) may cause labels to peel off during printing, resulting in a paper jam.
 - The labels are loaded in the center of the paper support.
 - The paper guides rest against the edges of the labels.

Note: Labels require more drying time. Remove each sheet of labels as it exits, and allow it to dry to avoid ink smudging.

Loading greeting cards, index cards, photo cards, and postcards

You can load up to 25 greeting cards, index cards, photo cards, or postcards at a time.

- 1 Load cards with the print side facing you.
- 2 Make sure:
 - The cards are loaded in the center of the paper support.
 - The paper guides rest against the edges of the cards.



Note: Photo cards require more drying time. Remove each photo card as it exits, and allow it to dry to avoid ink smudging.

Loading transparencies

You can load up to 50 transparencies at a time.

- 1 Load transparencies with the rough side facing you. If the transparencies have a removable strip, each strip should face away from you and down toward the printer.
- 2 Make sure:
 - The transparencies are loaded in the center of the paper support.
 - The paper guides rest against the edges of the transparencies.

Notes:

- · Transparencies with paper backing sheets are not recommended.
- Transparencies require more drying time. Remove each transparency as it exits, and allow it to dry to avoid ink smudging.

Loading iron-on transfers

You can load up to 10 iron-on transfers at once, but you will achieve best results loading them one at a time.

- 1 Load iron-on transfers with the print side of the transfer facing you.
- 2 Make sure:
 - You follow the loading instructions that came with the iron-on transfers.
 - The transfers are loaded in the center of the paper support.
 - The paper guides rest against the edges of the transfers.

Loading custom-size paper

You can load up to 100 sheets of custom-size paper at a time.

- 1 Load paper with the print side facing you.
- 2 Make sure:
 - The paper size fits within these dimensions:

Width:

- 76.0-216.0 mm
- 3.0-8.5 inches

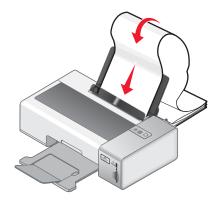
Length:

- 127.0-432.0 mm
- 5.0-17.0 inches
- The stack height does not exceed 10 mm.
- The paper is loaded in the center of the paper support.
- The paper guides rest against the edges of the paper.

Loading banner paper

You can load up to 20 sheets of banner paper at a time.

- 1 Remove all paper from the paper support before loading the banner paper.
- **2** Tear off only the number of pages needed to print the banner.
- **3** Place the required stack of banner paper on a flat surface behind the printer.
- 4 Feed the leading edge of the banner paper into the printer first.



5 Make sure:

- The paper is loaded in the center of the paper support.
- The paper guides rest against the edges of the paper.

Printing

Printing basic documents

Printing a document

- 1 Load paper.
- 2 With a document open, click File → Print.
- 3 Click Properties, Preferences, Options, or Setup.
- 4 Adjust the settings.
- 5 Click OK.
- 6 Click OK or Print.

Printing a Web page

You can use the Toolbar to create a printer-friendly version of any Web page.



- **1** Load paper.
- 2 Open a Web page using Microsoft Internet Explorer 5.5 or later.
- **3** If you want to check or change your print settings:
 - a From the Toolbar, click Lexmark → Page Setup.
 - **b** Adjust the print settings.
 - c Click OK.
- 4 If you want to view the Web page before printing:
 - a Click Preview.
 - **b** Use the Toolbar options to scroll between pages, zoom in or out, or select whether to print text and images or text only.
 - c Click:
 - Print in the Print Preview window, then click Print in the Print dialog that opens
 or
 - Close, and continue to the next step.
- **5** If needed, select a print option from the Toolbar:
 - Normal
 - Quick
 - · Black and White
 - Text Only

Printing photos or images from a Web page

- 1 Load paper. For best results, use photo or heavyweight matte paper, with the glossy or printable side facing you. (If you are not sure which side is the printable side, see the instructions that came with the paper.)
- 2 Open a Web page with Microsoft Internet Explorer 5.5 or later.

On the Toolbar, the number of photos valid for printing appears next to Photos.



- 3 If no number appears next to Photos:
 - **a** From the Lexmark logo drop-down menu, select **Options**.
 - **b** Select the **Advanced** tab.
 - c Select a lower minimum photo size.
 - d Click OK.

The number of photos valid for printing appears next to Photos.

4 Click Photos.

The Fast Pics dialog appears.

- **5** If you want to print all the photos or images using the same settings, select the size you want, the blank paper size in the printer, and the number of copies.
- **6** If you want to print one photo or image at a time:
 - **a** Click the photos or images you do *not* want to print to deselect them.
 - **b** To make common editing changes:
 - 1 Right-click the photo or image.
 - 2 Click Edit.
 - **3** Make your selections.
 - 4 Follow the instructions on the screen.
 - 5 When you are finished making changes, click **Done**.
 - **6** Select the size you want, the blank paper size in the printer, and the number of copies.
- 7 Click Print Now.

Printing multiple copies of a document

- 1 With a document open, click File → Print or Printer Setup.
- 2 From the Print Setup dialog box, click **Properties**, **Preferences**, **Options**, or **Setup**.
- 3 In the Copies section of the Quality/Copies tab, enter the number of copies you want to print.

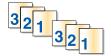
Note: If you print multiple copies of a multiple-page document and want them collated, click Collate Copies.

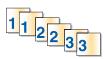
- 4 Click **OK** to close any printer software dialog boxes that are open.
- 5 Print the document.

Collating copies

If you print multiple copies of a document, you can choose to print each copy as a set (collated) or to print the copies as groups of pages (not collated).

Collated Not collated





- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click the Quality/Copies tab.
- 4 From the Multiple Copies section, click Collate Copies.
- 5 Click **OK** to close any printer software dialog boxes that are open.
- 6 Print the document.

Notes:

- This option is available only when you are printing multiple copies.
- If printing photos, to prevent smudging, remove each photo as it exits the printer, and let it dry before stacking.

Printing the last page first (reverse page order)

- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 From the Quality/Copies tab, select Print Last Page First.
- 4 Click OK.
- 5 Click OK or Print.

Printing multiple pages on one sheet (N-Up)

- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 From the Print Layout tab, select N-up.
- **4** Select the number of pages to print on each page.
- 5 If you want each page image to be surrounded by a border, select **Print Page Borders**.
- 6 Click OK.
- 7 Click OK or Print.

Printing documents or photos from a removable storage device

- 1 Insert a memory card into a card slot, or insert a flash drive into the PictBridge port on the front of the printer.

 If there are documents or photos stored on the memory card or flash drive, a dialog appears on the computer screen giving you the option to save the files or photos to the computer or to select files or photos to print.
- 2 Click Select files to print or Select photos to print.
- **3** Select the document or photo you want to print.

Notes:

- For documents, the appropriate program opens. You can print your document directly from the program.
- For photos, the Productivity Studio opens. You can edit and print your photo directly from this program.
- 4 Print the document or photo.

Pausing print jobs

- 1 For Windows Vista, click → Control Panel → Printer.
 For Windows XP, click Start → Settings → Printers and Faxes.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Select Pause.

Canceling print jobs

- 1 In Windows Vista, click → Control Panel → Printer.
 In Windows XP, click Start → Settings → Printers and Faxes.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Select Open.
- 4 Right-click the document name.
- 5 Select Cancel.

Printing specialty documents

Choosing compatible specialty paper types

- Heavyweight matte paper—A photo paper with a matte finish used for printing high-quality graphics.
- Lexmark PerfectFinishTM Photo paper—A high-quality photo paper specifically designed for Lexmark inkjet printers, but compatible with all inkjet printers. It is used specifically for printing professional quality photos with a glossy finish. It is best when used with genuine Lexmark evercolorTM 2 ink, providing photos that are fade- and water-resistant.
- Lexmark Photo Paper—An outstanding "everyday" heavyweight inkjet photo paper designed for use with Lexmark printers, but compatible with all brands of inkjet printers. Although inexpensive, it offers excellent image quality and outstanding value.
- Transparency—A clear, plastic media primarily used for overhead projectors.
- Card stock—A very thick paper used for printing sturdier items, such as greeting cards.
- Iron-On transfer—A type of media that has a reverse image printed on it that can be ironed onto fabric.

Printing envelopes

- 1 Load envelopes.
- 2 With a document open, click File → Print.
- 3 Click Properties, Preferences, Options, or Setup.
- 4 From the "I Want To" menu, select Print on an envelope.
- 5 From the Envelope Size list, select the envelope size loaded.
- 6 Select Portrait or Landscape orientation.

Notes:

- Most envelopes use landscape orientation.
- Make sure the same orientation is also selected in the software application.
- 7 Click **OK** to close any printer software dialogs that are open.
- 8 Click OK or Print.

Printing greeting cards, index cards, photo cards, and postcards

- **1** Load greeting cards, index cards, photo cards, or postcards.
- 2 With a document open, click File → Print.
- 3 Click Properties, Preferences, Options, or Setup.
- 4 Select a Quality/Speed setting.

Select **Photo** for photos and greeting cards, and select **Normal** for other types of cards.

- 5 Click the Paper Setup tab.
- 6 Select Paper.
- 7 From the Paper Size list, select a card size.
- 8 Click OK.
- 9 Click OK or Print.

Notes:

- To avoid paper jams, do not force the cards into the printer.
- To prevent smudging, remove each card as it exits, and let it dry before stacking.

Printing a document as a poster

- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click the Print Layout tab.
- 4 From the Layout list, select Poster.
- 5 Select the poster size you want to print. The number you select represents the number of pages that make up the height and width of the poster.

- 6 Select Print Crop Marks if you want each page of the poster to show crop marks.
- 7 Click **Select Pages To Print** to reprint any damaged poster pages without having to print all of the poster pages. Click pages to select or cancel them.
- **8** Click **OK** to close any printer software dialogs that are open.
- 9 Print the document.

Note: Certain programs may cause text to be clipped or to disappear when using extra-large or extra-small fonts. If this occurs, try decreasing or increasing the font size.

Printing an image as a poster

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 From the "Projects and Tools" area of the Welcome screen, click Poster.
- **3** Open the folder that contains your photo.
- 4 Drag the photo to the Print a Multi-Page Poster preview area of the screen.
- 5 Click **Next Step** at the bottom of the left pane.
- **6** From the "Paper size to print poster on" drop-down list, select a paper size.
- **7** From the "Print Quality for poster" drop-down list, select a print quality.
- 8 From the Poster Size drop-down list, select the poster size.
- 9 If you want to rotate the poster so that it fits better on the printed pages, click Rotate 90 degrees.
- **10** Click **Print Now** in the bottom right corner of the screen.

Printing a booklet

- 1 Before you change any Print Properties settings, you must select the correct paper size from the program. You can print booklets using these paper sizes:
 - Letter
 - A4
- 2 Load the paper.
- 3 With a document open, click File → Print.
- 4 Click Properties, Preferences, Options, or Setup.
- 5 Click the Print Layout tab, and then click Booklet.
- 6 If you are printing a large booklet, select a number of **Printed sheets per bundle**.
 - a Click Options → Layout Options.
 - **b** From the **Printed sheets per bundle** drop-down menu, select a number of printed sheets per bundle.

Note: A bundle is a set number of sheets of paper folded together. The printed bundles are stacked, one on top of the other, keeping the correct page order. The stacked bundles can be bound to make a booklet. When printing with a heavier paper stock, select a smaller number of **Printed sheets per bundle**.

- 7 Click **OK** to close any printer software dialog boxes that are open.
- 8 Print the document.

Assembling a booklet

- 1 Flip the printed stack of papers over in the paper exit tray.
- 2 Take the first bundle from the stack, fold it in half, and then set it aside with the front page down.
- 3 Take the next bundle from the stack, fold it in half, and then stack it with the front page down on top of the first bundle.



- 4 Stack the rest of the bundles with the front page down, one on top of the other, until the booklet is complete.
- **5** Bind the bundles together to complete the booklet.



Printing on custom-size paper

- 1 Load up to 100 sheets of custom-size paper.
- 2 With a document open, click File → Print.
- **3** From the Quality/Copies tab, select a Quality/Speed setting.
- 4 Click the Paper Setup tab.
- 5 From the Paper Size section, select **Paper** and then select **Custom Size**.
- **6** Select the measurement units to use.
- **7** Use the sliders, or type the size of the paper loaded into the printer.
- **8** Click **OK** to close any printer software dialogs that are open.
- 9 Print the document.

Note: Do not force paper into the printer.

Printing iron-on transfers

- 1 Load up to 10 iron-on transfers.
- 2 With an image open, click File → Print.
- 3 Click Properties, Preferences, Options, or Setup.
- **4** From the Print Layout tab, select **Mirror** if you want the printer software to flip the image. Select **Normal** if you have a program that automatically flips the image.
- **5** Click **OK** to close any printer software dialogs that are open.
- 6 Print the iron-on transfers.

Note: Do not force iron-on transfers into the printer.

Printing transparencies

- 1 Load up to 50 transparencies.
- 2 With a document open, click File → Print.
- 3 Click OK or Print.

Note: To prevent smudging, remove each transparency as it exits, and let it dry before stacking. Transparencies may require up to 15 minutes to dry.

Printing a banner

- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 From the Print Layout tab, select Banner.

Note: After you print a banner, return the setting to **Normal**.

- 4 To keep banner paper from jamming, select Letter Banner or A4 Banner from the Banner Paper Size dialog.
- **5** From the Paper Setup tab, select **Landscape** orientation.
- 6 Click OK.
- 7 Click OK or Print.

Changing printer settings

Saving and deleting print settings

- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click the Quality/Copies tab.
- **4** Make necessary adjustments to any of the settings in the Quality/Speed, Paper Type, and Multiple Copies sections.
- 5 From the Save Settings drop-down menu, select Save your current settings.
- **6** Click a radio button next to the number of the location where you want to save your settings, and then type a name for your settings in the selected box.

Note: The first location contains factory default settings, which cannot be changed or deleted.

7 Click Save.

Notes:

- To retrieve your print settings, click the **Save Settings** drop-down menu, and then select them from the list.
- To delete settings, choose **Delete a setting** from the Save Settings drop-down menu. Select the radio button next to the setting you want to delete, and then click **Delete**.

Resetting the printer to factory default settings

- 1 Make sure the printer is turned off.
- 2 Open the access cover and leave it open.
- 3 Press and hold □.
- **4** While holding □, press ७.
- **5** When the \bigcirc light blinks, release \bigcirc .
- 6 Close the access cover.
- 7 Wait for the \circlearrowleft light to stop blinking.

The printer is reset to factory default settings.

Printing on both sides of the paper (duplexing)

Understanding the two-sided printing (duplexing) function

The printer has a built-in duplex unit that lets you print on both sides of the paper automatically. This function is also known as two-sided printing or duplexing.

Note: Automatic two-sided printing (duplexing) works only with plain paper in letter and A4 sizes. If you want to print two-sided documents on another size or type of paper, use the manual duplexing method.

To print a two-sided copy, the light must be on. The button works in tandem with the Duplexing settings in the printer software. To access the Duplexing settings:

- 1 With a document open, click File →Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click the Print Layout tab.

The Duplexing area is on the lower portion of the dialog.

The options under the Duplexing drop-down box are "Use Printer Settings," "On," "Off," and "Manual."

Select	То	
Use Printer Settings	 Control two-sided printing using the button. Press to turn the light on or off. When the light is on, your documents are printed on both sides of the paper (duplexed). When the light is off, your documents are <i>not</i> printed on both sides of the paper. Note: Use Printer Settings is the factory default setting. 	
On	Turn on the button so that <i>all</i> documents are printed on both sides of the paper. Note: The bight stays on until you select a different option.	
Off	Turn off the button so that all documents are printed on one side of the paper. Note: The light stays off until you select a different option.	

Select	То	
Manual	Duplex a print job manually. You must select this option when printing two-sided jobs that will be printed on a size or type of paper other than letter- or A4-size plain paper (such as greeting cards).	
	Note: You can select to print the two-sided pages so they turn like the pages of a magazin (Side-Flip) or like the pages of a legal pad (Top-Flip). Side-Flip is the factory default setting.	

For more information, see "Printing on both sides of the paper (duplexing) automatically" on page 41 and "Printing on both sides of the paper (duplexing) manually" on page 41.

Printing on both sides of the paper (duplexing) automatically

The printer has a built-in duplex unit that lets you print on both sides of the paper automatically.

Note: Automatic two-sided printing (duplexing) works only with plain paper in letter and A4 sizes. If you want to print two-sided documents on another size or type of paper, use the manual duplexing method.

- 1 Press .
- 2 With a document open, click File → Print.
- 3 Click Properties, Preferences, Options, or Setup.
- 4 From the Duplexing area, select **Use Printer Settings** from the drop-down menu.
- 5 Make sure the light is on.
- 6 Click **OK** to close any printer software dialogs that are open.

Note: To return to single-sided printing, make sure the light is not on.

Printing on both sides of the paper (duplexing) manually

If you want to print a two-sided (duplex) job on a size or type of paper other than letter- or A4-size plain paper, you must use the manual duplex method. This method involves printing the odd-numbered pages, then flipping and reloading the stack of paper to print the even-numbered pages on the other side of the sheets.

- 1 With a document open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click the Print Layout tab.
- **4** From the Duplexing area, select **Manual** from the drop-down box.
- 5 Select the Print manual duplex instructions check box.
- **6** The printer will print the odd-numbered pages and the instruction sheet, which describes how to flip and reload the paper.

- 7 Following the instruction sheet, flip and reload the paper print side down.
- **8** The printer will then print the even-numbered pages on the reverse sides of the odd-numbered pages, completing the two-sided copies.

Note: To activate the button so that you can control two-sided printing using this button, return to the Duplexing drop-down box, and reset to the default setting, "Use Printer Settings."

Working with photos

Retrieving and managing photos

Inserting a memory card

- 1 Insert a memory card.
 - Insert the card with the brand name label facing to the left.
 - If there is an arrow on the card, make sure it points toward the printer.
 - Make sure you connect the memory card to the adapter that came with it before inserting it into the slot.



Slots	Memory card			
1	xD-Picture Card			
	Secure Digital			
	Mini Secure Digital (with adapter)			
	Micro Secure Digital (with adapter)			
	MultiMedia Card			
	Reduced Size MultiMedia Card (with adapter)			
	Memory Stick			
	Memory Stick PRO			
	Memory Stick Duo (with adapter) or Memory Stick PRO Duo (with adapter)			
	MultiMedia Card mobile (with adapter)			
2	Compact Flash Type I and Type II			
	Microdrive			

2 Wait for the light located above the memory card slots on the printer to come on. The light blinks to indicate the memory card is being read or is transmitting data.

Warning: Do not touch cables, any network adapter, the memory card, or the printer in the area shown while actively printing, reading, or writing from a memory card. A loss of data can occur. Also, do not remove a memory card while actively printing, reading, or writing from a memory card.



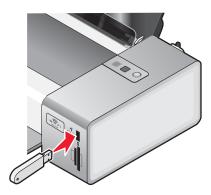
3 When the computer recognizes that a memory card is installed, the message New photos have been found. What do you want to do? appears.

If the printer does not read the memory card, remove and reinsert it. For more information, see "Memory card troubleshooting" on page 102.

Note: The computer recognizes one active memory card at a time from your printer. If you insert more than one memory card, a message appears on the display prompting you to remove the memory card that is not in use.

Inserting a flash drive

1 Insert the flash drive into the PictBridge port on the front of the printer.



Note: An adapter may be necessary if your flash drive does not fit directly into the port.

2 Wait for the computer to recognize that a flash drive is installed. When the flash drive is recognized, the message New photos have been found. What do you want to do? appears.

If the printer does not read the flash drive, remove and reinsert it.

Warning: Do not touch cables, any network adapter, the flash drive, or the printer in the area shown while actively printing, reading, or writing from the flash drive. A loss of data can occur. Also, do not remove the flash drive while actively printing, reading, or writing from the flash drive.



Note: The computer recognizes one active media device at a time from your printer. If you insert a memory card and a flash drive, a message appears on the display prompting you to designate the device you want the printer to recognize.

Connecting a PictBridge-enabled digital camera

PictBridge is a technology available in most digital cameras that lets you print directly from your digital camera without using a computer. You can connect a PictBridge-enabled digital camera to the printer, and use the buttons on the camera to control and print photos.

1 Insert one end of the USB cable into the camera.

Note: Use only the USB cable that came with your camera.

2 Insert the other end of the cable into the PictBridge port on the front of the printer.

Notes:

- Make sure the PictBridge-enabled digital camera is set to the correct USB mode. For more information, see the documentation that came with your camera.
- The printer recognizes one active media device at a time. Remove any memory cards from the printer when
 you connect the camera.



3 If the PictBridge connection is successful, the camera automatically switches to print mode, the **PictBridge** PictBridge symbol appears on the camera display, or a message recognizing the connection appears on the camera display, depending on your camera.

For more information, see the documentation that came with your camera.

Transferring all photos from a memory card using the computer

1 Insert a memory card into the printer with the label facing the printer control panel. If the computer is connected to a wireless network, you will need to select the printer.

Note: For a network connection, you must manually open the application and select the printer you want to use. The Productivity Studio software launches automatically on your computer.

- 2 Click Automatically save all photos to "My Pictures".
- **3** If you want to erase the photos from the memory card, click **Yes**.

Note: Make sure all the photos have been copied before you click Yes to erase.

4 Click **Done**. Remove the memory card to view your transferred photos in the Library.

Transferring selected photos from a memory card using the computer

1 Insert a memory card into the printer with the label facing the printer control panel.

The Productivity Studio software launches automatically on your computer.

Note: For a wireless network connection, you must first open the application and then select the printer you want to use.

- 2 Click Select photos to save.
- 3 Click Deselect All.
- **4** Click to select the photo(s) you want to transfer.
- 5 Click Next.
- **6** If you want to save the photos to the default folder, click **Next**.
- 7 If you want to save the photos in a folder other than the default folder:
 - a Click Browse.
 - **b** Select the folder you want.
 - c Click OK.
- **8** If you want to assign a prefix to all of the photos you just transferred, click the check box and enter a name.
- 9 Click Next.
- 10 If you want to erase the photos from the memory card, click Yes.

Note: Make sure all the photos have been copied before you select **Yes** to erase.

11 Click **Done**. Remove the memory card to view your transferred photos in the Photo Library.

Transferring all photos from a CD or flash drive using the computer

- **1** Insert a CD or a flash drive into the computer.
- 2 If you are using Windows Vista, an AutoPlay screen appears.

Click Transfer photos to your computer.

3 If you are using Windows XP, a "What do you want Windows to do?" screen appears.

Click Copy pictures to a folder on my computer using Microsoft Scanner and Camera Wizard.

- 4 If you are using Windows 2000:
 - a From the desktop, double-click the **Productivity Studio** icon.
 - **b** Click Transfer Photos.
- 5 Click Automatically save all photos to "My Pictures".
- 6 Remove the flash drive or CD to view your transferred photos in the Library.

Transferring selected photos from a CD or flash drive using the computer

- 1 Insert a CD or a flash drive into the computer.
- 2 If you are using Windows Vista, an "AutoPlay" screen appears.

Click Transfer Photos to your computer using the Productivity Studio.

3 If you are using Windows XP, a "What do you want Windows to do?" screen appears.

Click Transfer Photos to your computer using the Productivity Studio.

If you are using Windows 2000:

- a From the desktop, double-click the **Productivity Studio** icon.
- **b** Click **Transfer Photos**.
- 4 Click Select photos to save.
- 5 Click Deselect All.
- **6** Click to select the photo(s) you want to transfer.
- 7 If you want to save the photos to the default folder, click Next.
- 8 If you want to save the photos in a folder other than the default folder:
 - a Click Browse.
 - **b** Select the folder you want.
 - c Click OK.
- 9 If you want to assign a prefix to all of the photos you just transferred, select the check box and enter a name.
- 10 Click Next.
- **11** Remove the CD or flash drive to view your transferred photos in the Library.

Changing the Productivity Studio temporary files preferences

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 From the Tools menu, click **Preferences**.
- 3 Click Temporary Files.
 - **a** Use the slider to set the maximum disk space you want to allocate for temporary files created by the Productivity Studio.
 - **b** Click **Browse** to choose a different folder for saving the temporary files.
- 4 Click OK.

Changing the Productivity Studio searched folders preferences

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 From the Tools menu, click Preferences.
- 3 Click Searched Folders.
- 4 If you want to exclude system folders when looking for photos, select **Ignore system folders**.
- 5 Click OK.

Changing the Productivity Studio library preferences

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 From the Tools menu, click Preferences.

3 Click Library.

From here, you can choose how you want to sort photos. You can also set the minimum file size for the photo to appear in the library.

4 Click OK.

Changing the Productivity Studio transfer settings

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 From the Tools menu, click Preferences.
- 3 Click Transfer Settings.
 - **a** Select "**Skip Save option and go automatically to**", and choose to Automatically Save, Manually Save, or Print your photos from the photo storage device connected to your computer.
 - **b** Click **Browse** to choose a different folder to transfer your photos to.
 - c Select "Always erase photos from my media after transferring" to automatically delete photos from your photo storage device after transferring them to your computer.
- 4 Click OK.

Editing photos

Cropping a photo

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click Crop Photo on the Quick Fixes tab.
- **3** Click and drag with your mouse to select the section of the image that you want to crop. You can adjust the cropped area by using your mouse and dragging the lines to increase or decrease the cropped area.
- 4 Click Crop Now.
- 5 The cropped portion of the original image displays in the Preview pane. You can save the cropped image.

Rotating a photo

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click the Quick Fixes tab.
- 3 Click Rotate Left or Rotate Right to rotate the image 90 degrees in either direction.

The thumbnail of the photo is updated.

Changing the Resolution / Size of a photo

Resolution refers to dpi (dots per inch).

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click Advanced.
- 3 Click Image Resolution / Size.

4 Select **Photo Size** to select from a list of defined photo sizes, or click **Custom Size** to enter a different photo size.

Note: If you selected Photo Size, you can click Rotate to rotate your photo 90 degrees clockwise.

5 If you selected **Custom Size**, enter the width and height for your custom-size photo.

Note: Maintain Aspect Ratio is selected by default. This ensures that your image will remain proportional.

Applying One-Click Auto Fixes to a photo

From the Productivity Studio Welcome Screen, click the Quick Fixes tab to access all three One-Click Auto Fixes.

- 1 Click File → Open to select the image you want to edit.
- With an image open, click One-Click Auto Fix to let the software automatically adjust the brightness and contrast of your image.
- 3 Click Automatic Brightness to adjust only the brightness of your image.
- 4 Click Automatic Red-Eye Reduction to let the software automatically reduce the appearance of red-eye in your image.

Note: Click **Undo** at the top of the window if you are not satisfied with the results after applying any of the One-Click Auto Fixes.

Reducing the red-eye effect in a photo

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click the Quick Fixes tab.
- 3 Click **Automatic Red-Eye Reduction** to let the software reduce the red-eye effect automatically. If you are not satisfied with the results, continue with the following steps.
- 4 Click Manual Red-Eye Reduction.
- **5** Move the cursor across the photo, and place it over an affected eye.
- 6 Click to reduce the red-eye effect.

Blurring/Sharpening a photo

Increasing the amount of blur will soften your image. Increasing the sharpness will make your image seem more focused.

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click the Enhancements tab.
- 3 Click Blur / Sharpen.
- **4** Use the slider to blur or sharpen the image. You can preview the changes to the image by comparing the **Before** and **After** preview panes at the top of the window.
- 5 Click **OK** to accept your changes, or click **Cancel** to reject them.

Enhancing a photo

The Enhance feature lets you make subtle adjustments to the brightness, contrast, and sharpness of an image.

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- **2** With an image open, click the **Enhancements** tab.
- 3 Click Enhance.
- 4 Use the slider to adjust the Enhance setting. You can preview the changes to your image by comparing the **Before** and **After** preview panes at the top of the window.

Note: Click **Automatic** to let the software automatically enhance your photo.

5 Click **OK** to accept your changes, or click **Cancel** to reject them.

Changing the Hue / Saturation of a photo

Adjusting hue lets you control the color of an image. Adjusting its saturation lets you control the intensity of the color.

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- **2** With an image open, click the **Enhancements** tab.
- 3 Click Hue / Saturation.
- **4** Use the slider to adjust the hue or saturation of your photo. You can preview the changes to the image by comparing the **Before** and **After** preview panes at the top of the window.
- 5 Click **OK** to accept your changes, or click **Cancel** to reject them.

Changing the Gamma Value of a photo or image

Adjusting the gamma value helps you to control the overall brightness of an image—particularly those intended to be viewed on a computer monitor. When images are not properly gamma-corrected, they will look either too light or too dark.

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click Advanced.
- 3 Type a value in the text box, or use the up or down arrows to select a higher or lower gamma value.

Note: You can enter gamma values from -10–10. If you are not satisfied with your changes, return the gamma value back to 0.

4 Click Save to keep your changes.

Despeckling a photo

Despeckling lets you remove specks that appear in your photo.

- 1 From the Productivity Studio Welcome Screen, click **File → Open** to select the image you want to edit.
- 2 With an image open, click Enhancements.
- 3 Click Despeckle.
- 4 Using the slider, adjust the Despeckle setting. You can preview the changes to your image by comparing the **Before** and **After** preview panes at the top of the window.
- 5 Click **OK**. The thumbnail is updated.

Changing the Brightness / Contrast settings of a photo

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click Enhancements.
- 3 Click Brightness / Contrast.
- **4** Adjust the brightness and contrast settings. You can preview the changes to the image by comparing the **Before** and **After** preview panes at the top of the window.
- 5 Click **OK** to accept your changes, or click **Cancel** to reject them.

Note: You can let the software automatically adjust only the brightness of the image by clicking **Automatic Brightness** on the Quick Fixes tab.

Applying a color effect to a photo

- 1 From the Productivity Studio Welcome Screen, click File → Open to select the image you want to edit.
- 2 With an image open, click Enhancements.
- 3 Click Color Effects.
- 4 Apply a color effect.

You can select sepia, antique brown, black and white, or antique grey.

5 Click OK.

Printing photos

Printing photos from a CD or removable storage device using the computer

- 1 Load photo paper with the glossy or printable side facing you. (If you are not sure which side is the printable side, see the instructions that came with the paper.)
- 2 Insert a CD or any removable storage device (such as a flash drive, memory card, or digital camera) into the computer.
 - If you are using Windows Vista, an "AutoPlay" screen appears. Click Transfer Photos to your computer using the Productivity Studio.
 - If you are using Windows XP, a "What do you want Windows to do?" screen appears. Click **Transfer Photos** to your computer using the Productivity Studio.
 - If you are using Windows 2000:
 - a From the desktop, double-click the Productivity Studio icon.
 - **b** Click Transfer Photos.
- 3 Click Select photos to print.
- 4 To print all photos, click **Print**.
- 5 To print selected photos, click **Deselect All** and select only the photo(s) you want to print.
- 6 Click Print.
- 7 From the Quality drop-down list, select a print quality.
- 8 From the Paper Size in Printer drop-down list, select the paper size.

- **9** To select multiple prints of a photo, or to select photo sizes other than 10 x 15 cm (4 x 6 in.), select the options you want in the table. Use the drop-down list in the last column to view and select other sizes.
 - **Note:** If you want to edit your photo(s) before printing, click **Edit Photo** above the Print Preview pane. Select **One-Click Auto Fix**, **Automatic Red-Eye Reduction**, or **Automatic Brightness Fix** to let the software edit your photo(s) automatically. Click **More Retouch Tools** to go to the photo-editing window. When you've completed your edit(s), click **Return with edits** in the bottom right corner to return to the print window.
- 10 Click Print Now in the bottom right corner of the window.
- 11 Remove the CD or storage device.

Viewing / Printing photos from the Productivity Studio

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 Click Work with Documents and Photos.
- **3** Click to select the photo(s) you want to print.
- 4 From the Productivity Studio taskbar located at the bottom of the screen, click Photo Prints.
- **5** From the Quality drop-down list, select a copy quality.
- **6** From the Paper Size in Printer drop-down list, select the paper size.
- 7 From the Paper Type in Printer drop-down list, select the paper type
- **8** To select multiple prints of a photo, or to select photo sizes other than 10 x 15 cm (4 x 6 in.), select the options you want in the table. Use the drop-down list in the last column to view and select other sizes.
- **9** Click **Print Now** in the bottom right corner of the screen.

Printing Photo Packages

- 1 From the desktop, double-click the **Productivity Studio** icon.
- 2 Click Photo Packages.
- 3 Click to select the photos you want to include in your photo package.
- 4 Click Next.
- **5** From the Quality drop-down list, select a copy quality.
- **6** From the Paper Size in Printer drop-down list, select the paper size.
- 7 To select multiple prints of a photo, or to select photo sizes other than 4 x 6 in. (10 x 15 cm), select the options you want in the table. Use the drop-down list in the last column to view and select other sizes.
- **8** Click **Print Now** in the bottom right corner of the screen.

Creating Photo Greeting Cards

- **1** From the desktop, double-click the **Productivity Studio** icon.
- 2 Click Photo Greeting Cards.
- **3** From the Style tab, click to select a style for your greeting card.
- 4 From the Photo tab, select and drag a photo into the preview pane on the right side of the screen.
- **5** Click the text area to be able to add text to your photo greeting card.

- 6 When you have finished editing your text, click OK.
- 7 If you want to create another photo greeting card using a different style and/or photo, click **Add New Card**, and repeat step 3 on page 52 through step 6 on page 53.
- 8 If you want to print your photo greeting card, select Print your Photo Greeting Card from the Share tab.
- **9** Select the number of copies from the Copies drop-down list.
- 10 Select the copy quality from the Quality drop-down list.
- 11 Select the paper size from the Paper Size in Printer drop-down list.

Paper sizes supported	Dimensions
A4	210 x 297 millimeters
Letter	8.5 x 11 inches
Greeting cards	4 x 8 inches (10.16 x 20.32 centimeters)

- 12 Click Print Now.
- 13 If you want to e-mail your photo greeting card, click E-mail your Photo Greeting Card from the Share tab.
- 14 From the Send Quality and Speed area of the screen, select the image size.
- 15 Click Create E-mail to create an e-mail message with your photo greeting card(s) attached.

Printing all photos from a memory device

- 1 Load photo paper with the glossy or printable side facing you. (If you are not sure which side is the printable side, see the instructions that came with the paper.)
- 2 Insert a memory card or flash drive that contains the images you want to print.

The "Photos have been found. What do you want to do?" screen appears.

3 Click Select photos to print.

The "Please select photos to print" screen appears.

4 Select any or all photos you want to print, and then click **Print**.

The Productivity Studio software opens on your computer.

5 Change the print settings as necessary.

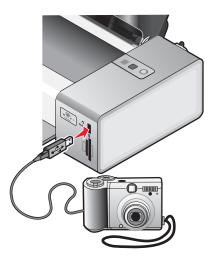
You can select a print quality, the paper size in the printer, the paper type in the printer, and a print size for your photos.

6 Click Print Now.

Using a PictBridge-enabled digital camera to control printing photos

You can connect a PictBridge-enabled digital camera to the printer, and use the buttons on the camera to control and print photos.

- 1 Insert one end of the USB cable into the camera.
- 2 Insert the other end of the cable into the PictBridge port on the front of the printer.



Warning: Do not touch the USB cable, any network adapter, or the printer in the area shown while actively printing from a PictBridge-enabled digital camera. A loss of data can occur. Also, do not remove the USB cable or network adapter while actively printing from a PictBridge-enabled digital camera.



Notes:

- Make sure the PictBridge-enabled digital camera is set to the correct USB mode. For more information, see the documentation that came with your camera.
- The printer recognizes one active media device at a time. If you have a memory card already inserted when you connect a PictBridge-enabled digital camera, the 🖒 light and the 🖹 light blink alternately until the memory card is removed or the camera is unplugged.



- **3** If the PictBridge connection is successful, the camera automatically switches to print mode, the **PictBridge** PictBridge symbol appears on the camera display, or a message recognizing the connection appears on the camera display, depending on your camera.
 - For more information, see the documentation that came with your camera.
- 4 Follow the instructions in the documentation that came with your camera to select and print photos.

Printing photos from a digital camera using DPOF

If your camera supports Digital Print Order Format (DPOF), you can use the camera to specify which photos to print and how many of each. The printer recognizes these settings when you connect the camera to the printer or insert the memory card of the camera into the printer.

Note: If you specified a photo size in the camera, make sure the size of the paper loaded in the printer is not smaller than the size you specified in the DPOF selection.

- 1 Load photo paper with the glossy or printable side facing you. (If you are not sure which side is the printable side, see the instructions that came with the paper.)
- 2 Insert one end of the USB cable into the camera.
- 3 Insert the other end of the cable into the PictBridge port on the front of the printer.

Notes:

- Make sure the PictBridge-enabled digital camera is set to the correct USB mode. For more information, see the documentation that came with your camera.
- The printer recognizes one active media device at a time. Make sure there is no memory card in the card slots.



4 If the PictBridge connection is successful, the camera automatically switches to print mode, the **PictBridge** PictBridge symbol appears on the camera display, or a message recognizing the connection appears on the camera display.

For more information, see the documentation that came with your camera.

5 Follow the instructions in the documentation that came with your camera to select and print photos.

Note: If no DPOF selections were specified in your camera beforehand, you can make the selections while the camera is connected to the printer. For more information, see the documentation that came with your camera.

Creating and viewing a slideshow

- 1 From the Productivity Studio Welcome Screen, click Work with Documents and Photos.
- 2 Select the folder that contains the photos you want to include in the slideshow. Thumbnails of the photos in the folder will appear in a preview pane.
- 3 Click to select the photos you want to include in the slideshow, and then select Slideshow.
 - If you want additional photos to appear in specific order, click the photos in the order you want them to appear, and then drag them into the "Photos in Your Slideshow" area.
- 4 Click the **Slideshow Settings** tab to adjust the amount of time between each photo in the slideshow. You can also modify the setting that lets the slideshow replay automatically (loop).
- **5** Click the **Share** tab to save or print your slideshow.
- 6 Click View Show in the lower-right corner of the window to start the slideshow.

Note: You can exit the slideshow any time by moving your cursor to the bottom center of the screen and clicking **Exit Slideshow**.

Maintaining the printer

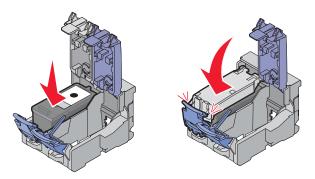
Installing print cartridges

- 1 Open the printer.
- 2 Remove the used print cartridge or cartridges.
- **3** If you are installing new print cartridges, remove the tape from the back and bottom of the black cartridge, and insert the cartridge in the left carrier.

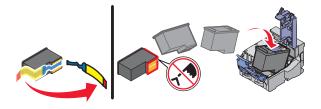


Warning: Do not touch the gold contact area on the back or the metal nozzles on the bottom of the cartridge.

4 Close the black cartridge carrier lid.

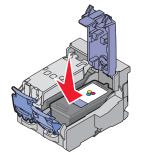


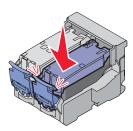
5 Remove the tape from the back and bottom of the color cartridge, and insert the cartridge in the right carrier.



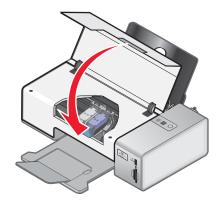
Warning: Do *not* touch the gold contact area on the back or the metal nozzles on the bottom of the cartridge.

6 Close the color cartridge carrier lid.





7 Close the printer.



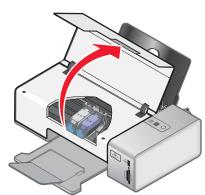
Note: The printer must be closed to start a new print job.

8 Press 🕒 ₊.

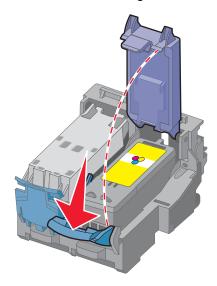
Removing a used print cartridge

- 1 Make sure the printer is on.
- **2** Lift the access cover.

The print cartridge carrier moves and stops at the loading position, unless the printer is busy.



3 Press down on the cartridge carrier latch to raise the cartridge carrier lid.



4 Remove the used print cartridge.

Note: If you are removing both cartridges, repeat step 3 and step 4 for the second cartridge.

Using genuine Lexmark print cartridges

Lexmark printers, print cartridges, and photo paper are designed to perform together for superior print quality.

If you receive an Out of Original Lexmark Ink message, the original Lexmark ink in the indicated cartridge (s) has been depleted.

If you believe you purchased a new, genuine Lexmark print cartridge, but the Out of Original Lexmark Ink message appears:

- 1 Click Learn More on the message.
- 2 Click Report a non-Lexmark print cartridge.

To prevent the message from appearing again for the indicated cartridge(s):

- Replace your cartridge(s) with new Lexmark print cartridge(s).
- If you are printing from a computer, click Learn more on the message, select the check box, and click Close.
- If you are using the printer without a computer, press **Cancel**.

Lexmark's warranty does not cover damage caused by non-Lexmark ink or print cartridges.

Refilling print cartridges

The warranty does not cover repair of failures or damage caused by a refilled cartridge. Lexmark does not recommend use of a refilled cartridge. Refilling a cartridge can affect print quality and may cause damage to the printer. For best results, use Lexmark supplies.

Aligning the print cartridges

- 1 Load plain paper.
- **2** Do one of the following:
 - In Windows Vista, click
 - In Windows XP and earlier, click Start.
- 3 Click Programs or All Programs → Lexmark 1500 Series.
- 4 Click Lexmark Solution Center.
- 5 From the Maintenance tab, click Align to fix blurry edges.
- 6 Follow the instructions on the computer screen.

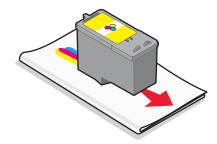
If you aligned the cartridges to improve print quality, print your document again. If print quality has not improved, clean the print cartridge nozzles.

Cleaning the print cartridge nozzles

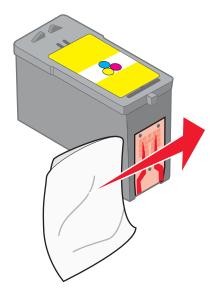
- 1 Load plain paper.
- 2 Do one of the following:
 - In Windows Vista, click
 - In Windows XP and earlier, click Start.
- 3 Click Programs or All Programs → Lexmark 1500 Series.
- 4 Click Solution Center.
- 5 From the Maintenance tab, click Clean Print Nozzles.
 A page prints, forcing ink through the print cartridge nozzles to clean them.
- **6** To verify that the print quality has improved, print the document again.
- 7 If print quality has not improved, try cleaning the nozzles up to two more times.

Wiping the print cartridge nozzles and contacts

- 1 Remove the print cartridges.
- 2 Dampen a clean, lint-free cloth with water, and place the cloth on a flat surface.
- **3** Gently hold the nozzles against the cloth for about three seconds, and then wipe in the direction shown.



4 Using another clean section of the cloth, gently hold the cloth against the contacts for about three seconds, and then wipe in the direction shown.



- **5** With another clean section of the cloth, repeat step 3 and step 4.
- 6 Let the nozzles and contacts dry completely.
- 7 Reinsert the print cartridges.
- 8 Print the document again.
- **9** If the print quality does not improve, clean the print nozzles. For more information, see "Cleaning the print cartridge nozzles" on page 59.
- 10 Repeat step 9 up to two more times.
- 11 If print quality is still not satisfactory, replace the print cartridges.

Cleaning the exterior of the printer

1 Make sure that the printer is turned off and unplugged from the wall outlet.



CAUTION: To avoid the risk of electric shock, unplug the power cord from the wall outlet and disconnect all cables to the printer before proceeding.

- 2 Remove paper from the paper support and paper exit tray.
- 3 Dampen a clean, lint-free cloth with water.

Warning: Do not use household cleaners or detergents, as they may damage the finish of the printer.

4 Wipe only the outside of the printer, making sure to remove any ink residue that has accumulated on the paper exit tray.

Warning: Using a damp cloth to clean the interior may cause damage to your printer.

5 Make sure the paper support and paper exit tray are dry before beginning a new print job.

Preserving the print cartridges

- Keep new cartridges in their packaging until you are ready to install them.
- Do not remove a cartridge from the printer except to replace, clean, or store it in an airtight container. The cartridges do not print correctly if left exposed for an extended period of time.

Ordering supplies

Ordering print cartridges

Lexmark 1500 Series models

Item	Part number	Average cartridge standard page yield is up to ¹	
Black cartridge	42A	220	
Black cartridge ²	42	220	
High yield black cartridge	44	500	
Color cartridge	41A	210	
Color cartridge ²	41	210	
High yield color cartridge	43	350	
Photo cartridge	40	Not applicable	
1 Values abtained by continuous printing. Declared visited value in accordance with ICO/IEC 04711			

¹ Values obtained by continuous printing. Declared yield value in accordance with ISO/IEC 24711.

Ordering paper and other supplies

To order supplies or to locate a dealer near you, visit our Web site at www.lexmark.com.

Notes:

- For best results, use only Lexmark print cartridges.
- For best results when printing photos or other high-quality images, use Lexmark Photo Paper or Lexmark PerfectfinishTM Photo Paper. Do *not* use Lexmark Premium Photo Paper. Your print cartridges are not compatible with this type of paper.
- To prevent smudging or scratching, avoid touching the printed surface with your fingers or sharp objects. For best results, remove each printed sheet individually from the paper exit tray, and allow the sheets to dry at least 24 hours before stacking, displaying, or storing.

Item	Part Number
USB cable	1021294
For more information, go to www.lexmark.com.	

² Licensed Return Program Cartridge

Paper	Paper size	
Lexmark Photo Paper	LetterA4	
	• 4 x 6 in.	
	• 10 x 15 cm	
Lexmark PerfectFinish Photo Paper	Letter	
	• A4	
	• 4 x 6 in.	
	• 10 x 15 cm	
	• L	
Note: Availability may vary by country or region.		

For information on how to purchase Lexmark Photo Paper or Lexmark PerfectFinish Photo Paper in your country or region, go to **www.lexmark.com**.

Troubleshooting

If you set up your printer on a wireless network, make sure:

- The wireless network is working properly.
- The computer and printer are both connected to the same wireless network.
- The printer is within the range of the wireless network. The effective range for optimal performance is generally 100–150 feet.
- The printer is located away from other electronic devices that may interfere with the wireless signal.
- The power supply is connected to the printer, and \odot is lit.
- The Wi-Fi indicator light is green.
- The printer driver is installed on the computer from which you are performing a task.
- The correct printer port is selected.

Setup Troubleshooting

Power button is not lit

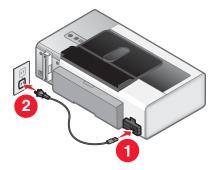
These are possible solutions. Try one or more of the following:

Press power button

Make sure the printer is on by pressing 0.

Disconnect and reconnect the power cord

- 1 Disconnect the power cord from the wall outlet, and then from the printer.
- 2 Plug the cord all the way into the power supply on the printer.



- 3 Plug the cord into an electrical outlet that other electrical devices have been using.
- **4** If the \bigcirc light is not on, press \bigcirc .

Power light is blinking

The power light blinks when it detects errors in the printer.

Note: If the \circlearrowleft light and the light blink alternately, see "Power light and duplex light are blinking alternately" on page 64.

These are possible solutions. Try one or more of the following:

Check print cartridges

Make sure there is a cartridge installed in the printer. If you are using a photo cartridge, make sure there is also a color cartridge installed.

If a cartridge is missing, install the missing cartridge.

Check the ink level of the color print cartridge

The color cartridge may be low on ink or out of ink. Check the ink level of the color cartridge. For more information, see "Checking the print cartridges" on page 84.

If the color ink level is low, replace the color cartridge with a new one. To order a new cartridge, see "Ordering print cartridges" on page 61.

Load paper

The printer is out of paper. Load more paper to continue printing. For more information, see "Loading paper" on page 28.

Clear the paper jam

Check to see if the paper jam is in the paper support or in the duplex unit, and then remove the paper jam. For more information, see "Jams and misfeeds troubleshooting" on page 97.

Duplex light is blinking

Note: If the \circlearrowleft light and the light blink alternately, see "Power light and duplex light are blinking alternately" on page 64.

The black cartridge may be low on ink or out of ink. Check the ink level of the black cartridge. For more information, see "Checking the print cartridges" on page 84.

If the black ink level is low, replace the black cartridge with a new one. To order a new cartridge, see "Ordering print cartridges" on page 61.

Power light and duplex light are blinking alternately

The \circlearrowleft light and the $\stackrel{ ext{light}}{=}$ light blink alternately when the printer detects errors in the memory card slots or in the PictBridge port.

These are possible solutions. Try one or more of the following:

Remove extra memory devices

The printer recognizes one active media device at a time. Do not insert two memory cards at one time, a flash drive and a memory card at one time, or a PictBridge-enabled digital camera and a memory card at one time.

Make sure your camera is a PictBridge-enabled digital camera

Check to see if your camera is a PictBridge-enabled digital camera. For more information, see the documentation that came with your camera.

Enable PictBridge printing from the camera

Enable PictBridge printing on the camera by selecting the correct USB mode. If the camera USB selection is incorrect, the camera is detected as a USB storage device, or the \circlearrowleft light and \trianglerighteq light blink alternately. For more information, see the documentation that came with your camera.

Make sure you inserted a valid device into the PictBridge port

Only the following devices are recognized by the PictBridge port:

- PictBridge-enabled digital camera
- Flash drive

Any other USB devices are not recognized.

Make sure the paper size setting on the camera is supported by the printer

Use only the following paper sizes when printing photos from your camera:

- 3.5 x 5 inches
- 4 x 6 inches
- 4 x 8 inches
- 5 x 7 inches
- 10 x 20 inches
- Letter (8.5 x 11 inches)
- A6 (105 x 148 mm)
- A5 (148 x 210 mm)
- A4 (210 x 297 mm)
- L (89 x 127 mm)
- 2L (127 x 178 mm)
- Hagaki card (100 x 148 mm)
- 10 x 15 cm
- 13 x 18 cm

To view or change the print size settings on your camera, see the documentation that came with your camera.

Make sure the printer is properly communicating with the camera



If the PictBridge connection is successful, the camera automatically switches to print mode, the **PictBridge** PictBridge symbol appears on the camera display, or a message recognizing the connection appears on the camera display, depending on your camera.

If the PictBridge connection is unsuccessful, try one or more of the following:

- Make sure you are using the USB cable that came with your camera.
- Make sure the USB cable that you are using is not damaged.

If the error occurs after the printer has successfully connected with the camera, try one or more of the following:

- Disconnect the camera, and then connect it again.
- If the lights keep on blinking, check for error messages on the camera display, and then see the documentation that came with your camera.

Software does not install

These are possible solutions. Try one or more of the following:

Check your operating system

The following operating systems are supported: Windows Vista, Windows XP, Windows 2000 with Service Pack 3 or later, and Mac OS X.

Check your system requirements

Check that your computer meets the minimum system requirements listed on the printer box.

Check USB connection

If the printer is connected to the computer through a USB cable:

- 1 Check the USB cable for any obvious damage.
- 2 Firmly plug the square end of the USB cable into the back of the printer.
- 3 Firmly plug the rectangular end of the USB cable into the USB port of the computer.

The USB port is marked with the USB symbol.

Check wireless connection

If the printer supports networking, and you are using the printer on a wireless network, check to see if the Wi-Fi indicator light is on.

Reconnect power supply

- 1 Press \odot to turn the printer off.
- 2 Disconnect the power cord from the wall outlet.
- **3** Gently remove the power supply from the printer.
- **4** Reconnect the power supply to the printer.
- 5 Plug the power cord into the wall outlet.
- 6 Press \odot to turn the printer on.

Disable anti-virus programs (for Windows users only)

- 1 Close all open software applications.
- 2 Disable any anti-virus programs.
- 3 Double-click the My Computer icon.

In Windows XP, click Start to access the My Computer icon.

- 4 Double-click the CD-ROM drive icon.
- **5** If necessary, double-click **setup.exe**.
- **6** Follow the instructions on the computer screen to install the software.

Note: You may enable the anti-virus programs again after the software is successfully installed.

Uninstall and reinstall software

Uninstall the printer software, and then reinstall it.

Page does not print

These are possible solutions. Try one or more of the following:

Check messages

If an error message is displayed, see "Error messages on the computer screen" on page 104.

Check power

If the \bigcirc light is not on, see "Power button is not lit" on page 63.

Reload paper

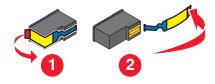
Remove and then load paper.

Check ink

Check the ink levels, and install new print cartridges if necessary.

Check cartridges

- 1 Remove the print cartridges.
- 2 Make sure the sticker and tape have been removed.



3 Reinsert the cartridges.

Check printer default and pause settings

- 1 Click:

 - In Windows XP: Start → Printers and Faxes.
 - In Windows 2000: Start → Settings → Printers.
- 2 Double-click the printer queue device.
- 3 Click Printer.
 - Make sure no check mark appears next to Pause Printing.
 - If a check mark does not appear next to Set As Default Printer, you must select the print queue device for each file you want to print.

Reconnect power supply

- 1 Press \odot to turn the printer off.
- 2 Disconnect the power cord from the wall outlet.
- **3** Gently remove the power supply from the printer.

- **4** Reconnect the power supply to the printer.
- **5** Plug the power cord into the wall outlet.
- 6 Press \odot to turn the printer on.

Removing and reinstalling the software

Uninstall the printer software, and then reinstall it. For more information, see "Removing and reinstalling the software" on page 68.

Solving printer communication problems

The printer and the computer cannot exchange data.

These are possible solutions. Try one or more of the following:

Establish bidirectional communication between the printer and the computer

For more information, see "Bidirectional communication is not established" on page 95.

Make sure the printer is not in sleep mode

If the power light is blinking on and off slowly, the printer is in sleep mode.

- **1** Unplug the power cable from the wall outlet.
- 2 Wait ten seconds, and then insert the power cable into the wall outlet.
- **3** Press 1 to turn the printer on.

Understanding Warning levels

- A green check indicates system requirements were met.
- A yellow question mark indicates system requirements were not met. Most major functions will work, but you
 may experience some performance impact.
- A red question mark indicates system requirements were not met. Most major functions may not work.
- A red X indicates system requirements were not met. Installation will not continue.

For proper installation, make sure the computer supports all system requirements. System requirements are located on the printer box.

Removing and reinstalling the software

If the printer is not functioning properly, or if a communications error message appears when you try to use the printer, you may need to remove and reinstall the printer software.

- 1 In Windows Vista, click . In Windows XP or earlier, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Select Uninstall.
- 4 Follow the instructions on the computer screen to remove the printer software.
- **5** Restart the computer before reinstalling the printer software.

- 6 Click Cancel on all New Hardware Found screens.
- 7 Insert the CD, and then follow the instructions on the computer screen to reinstall the software.

Note: If the install screen does not appear automatically after you restart your computer, click Start → Run, and then type **D:\setup**, where **D** is the letter of your CD-ROM drive.

If the software still does not install correctly, visit our Web site at www.lexmark.com to check for the latest software.

- 1 In all countries or regions except the United States, select your country or region.
- 2 Click the links for drivers or downloads.
- **3** Select your printer family.
- 4 Select your printer model.
- **5** Select your operating system.
- **6** Select the file you want to download, and then follow the directions on the computer screen.

Enabling the USB port

To confirm that the USB port is enabled on the computer:

In Windows XP, click Start → Control Panel.

In Windows 2000, click Start → Settings → Control Panel.

2 If you are using Windows Vista, click the System and Maintenance icon, and then click Device Manager.

If you are using Windows XP or Windows 2000:

- a Click **Performance and Maintenance**, and then click the **System** icon.
- **b** Click the **Hardware** tab.
- c Click Device Manager.
- 3 Click the plus sign (+) beside Universal Serial Bus Controller.

If USB Host Controller and USB Root Hub are listed, the USB port is enabled.

Did you find the problem?

Yes No

If USB Host Controller and USB Root Hub are not listed, Contact the Customer Support Center. the USB port is *not* enabled. For more information, see the computer documentation.

- 1 Click Programs or All Programs → Lexmark 1500 Series.
- 2 Click Solution Center.
- 3 Click the Contact Information tab.

Wireless troubleshooting

How do I find out what type of security my network is using?

You must know the security key and security mode in order to properly set up the printer for use on the wireless network. To obtain this information, see the documentation that came with your wireless router, see the Web page associated with the router, or consult the person who set up your wireless network.

Wi-Fi indicator light is orange

These are possible solutions. Try one or more of the following:

Check cable

Make sure the installation cable is not connected to the printer.

Configure the optional internal wireless print server

Note: This solution does not apply to printers that have a pre-installed internal wireless print server.

If you purchased the optional internal wireless print server after your printer was already set up, see "Configuring the optional internal wireless print server" in the "Setting up the printer" chapter.

Check network name

Make sure your network does not have the same name as another network near you. For example, if you and your neighbor both use a manufacturer's default network name, your printer could be connecting to your neighbor's network.

If you are not using a unique network name, consult the documentation for your wireless access point (wireless router) to learn how to set a network name.

If you set a new network name, you must reset the printer and computer SSID to the same network name.

For more information, see "Checking your network name" in the "Wireless troubleshooting" section.

Check security keys

Make sure security keys are correct. For more information, see "Check your security keys" on page 74.

Move your computer and/or printer

Move the computer and/or printer closer to the wireless access point (wireless router). Although the possible distance between devices in 802.11b or 802.11g networks is 300 feet, the effective range for optimal performance is generally 100–150 feet.

You can find the signal strength of the network on the network setup page. For information on how to print a setup page, see "Printing a network setup page" on page 23.

Check MAC address

If your network uses MAC address filtering, provide the MAC address for the printer to your network. If you need help finding the MAC address, see "Finding the MAC address" on page 22.

Wi-Fi indicator light is blinking orange during installation

When the Wi-Fi indicator light is blinking orange, it indicates that the printer has been set up for wireless networking but cannot connect to the network for which it has been configured. The printer may be unable to join the network because of interference or its distance from the wireless access point (wireless router), or until its settings are changed.

These are possible solutions. Try one or more of the following:

Make sure the access point is on

Check the access point and, if necessary, turn it on.

Move your wireless access point (wireless router) to minimize interference

There may be temporary interference from other devices such as microwave ovens or other appliances, cordless phones, baby monitors, and security system cameras. Make sure your wireless access point (wireless router) is not positioned too closely to these devices.

Try adjusting external antennas

Generally, antennas work best if they are pointing straight up. You may find, however, that reception improves if you experiment with different angles for your printer and/or wireless access point (wireless router) antennas.

Move your computer and/or printer

Move the computer and/or printer closer to the wireless access point (wireless router). Although the possible distance between devices in 802.11b or 802.11g networks is 300 feet, the effective range for optimal performance is generally 100–150 feet.

You can find the signal strength of the network on the network setup page. For information on how to print a setup page, see "Printing a network setup page" on page 23.

Check security keys

Make sure security keys are correct. For more information, see "Check your security keys" on page 74.

Check MAC address

If your network uses MAC address filtering, provide the MAC address for the printer to your network. If you need help finding the MAC address, see "Finding the MAC address" on page 22.

Ping the wireless access point (wireless router) to make sure the network is working

- 1 If you do not already know it, find the IP address of the access point.
 - a Click:

 - In Windows XP and earlier: Start → Programs or All Programs → Accessories → Command Prompt.
 - **b** Type ipconfig.
 - c Press Enter.
 - The "Default Gateway" entry is typically the wireless access point (wireless router).
 - The IP address appears as four sets of numbers separated by periods, such as 192.168.0.100. Your IP
 address might also start with the numbers 10 or 169. This is determined by your operating system or
 wireless network software.
- 2 Ping the wireless access point (wireless router).
 - a Click:

 - In Windows XP and earlier: Start → Programs or All Programs → Accessories → Command Prompt.
 - **b** Type **ping** followed by a space and the IP address of the wireless access point (wireless router). For example:

```
ping 192.168.0.100
```

c Press Enter.

- **3** If the wireless access point (wireless router) responds, you will see several lines appear that start with "Reply from". Turn off and restart the printer.
- **4** If the wireless access point (wireless router) does not respond, it will take several seconds and then you will see "Request timed out."

Try the following:

- a Click:

 - In Windows XP and earlier: Start → Settings or Control Panel → Network Connection
- **b** Select the appropriate connection from the ones shown.

Note: If the computer is connected to the access point (router) by an Ethernet cable, the connection may not include the word "wireless" in its name.

c Right-click the connection, and then click **Repair**.

Run the wireless setup again

If your wireless settings have changed, you must run the printer wireless setup again. Some reasons your settings may have changed include your having manually changed your WEP or WPA keys, channel, or other network settings; or the wireless access point (wireless router) having been reset to factory defaults.

Notes:

- If you change network settings, change them on all the network devices before changing them for the wireless access point (wireless router).
- If you have already changed the wireless network settings on your wireless access point (wireless router), you must change the settings on all the other network devices before you can see them on the network.
- 1 Click:
 - In Windows Vista:
 - In Windows XP and earlier: Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Wireless Setup.

Note: You may be prompted to connect the printer to the computer again using the installation cable as part of the setup process.

4 Follow the instructions on the computer screen.

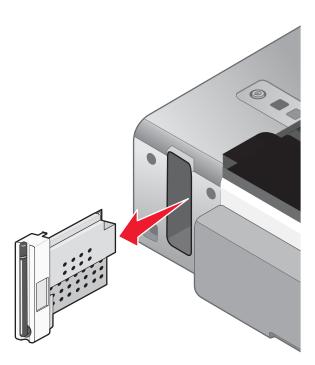
Wi-Fi indicator light is not lit

Check power

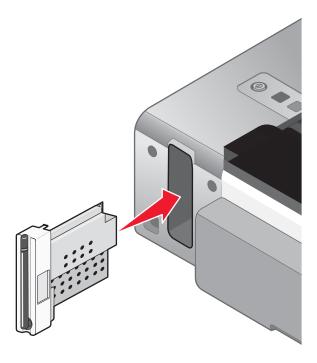
If the \circlearrowleft light is not on, see "Power button is not lit" on page 63.

Remove and reinstall the internal print server

- 1 Turn off your printer, and then unplug the power cord from the wall outlet.
 - **Warning:** Failure to unplug the printer can cause damage to your printer and to the internal wireless print server. Make sure the printer is turned off and the power cord is unplugged from the wall outlet before you proceed.
- 2 While holding the printer firmly with one hand, hold the internal print server with your other hand and then pull it away from the printer.



3 Reinstall the internal print server.



Warning: Wireless print servers are easily damaged by static electricity. Touch something metal such as the printer frame before you touch the wireless print server.

Check your security keys

A security key is like a password. All devices on the same network share the same security key.

Note: Make sure you copy down the security key exactly, including any capital letters, and store it in a safe place for future reference.

The security key must follow the following criteria.

WEP key

- Exactly 10 or 26 hexadecimal characters. Hexadecimal characters are A–F and 0–9.
- Exactly 5 or 13 ASCII characters. ASCII characters are letters, numbers, and symbols found on a keyboard.

WPA-PSK or WPA2-PSK key

- Up to 64 hexadecimal characters. Hexadecimal characters are A-F and 0-9.
- Between 8 and 64 ASCII characters. ASCII characters are letters, numbers, and symbols found on a keyboard.

Printer is configured correctly, but cannot be found on the network

Make sure:

- The printer has power and the \bigcirc light is on.
- The printer is within range of the wireless network.
- The printer is located away from other electronic devices that may interfere with the wireless signal.
- Your wireless network is using a unique network name (SSID). If not, it is possible that the printer/print server is communicating over a different, nearby network that uses the same network name.
- The printer has a valid IP address on the network.

Wireless network printer does not print

These are possible solutions. Try one or more of the following:

Check power

Make sure the \circlearrowleft light is on.

Check cable

- Make sure the power cable is connected to the printer and to the electrical outlet.
- Make sure the USB cable or the installation cable is not connected.

Check Wi-Fi indicator light

Make sure the Wi-Fi indicator light is green. If it is not green, see "Wi-Fi indicator light is orange" or "Wi-Fi indicator light is blinking orange during installation" in "Wireless troubleshooting."

Check if printer driver is installed

Make sure the printer driver is installed on the computer from which you are sending the print job.

- 1 Do one of the following:

 - In Windows XP, click:Start → Settings → Printers and Faxes.
 - In Windows 2000 and earlier, click: Start → Settings → Printers.

If you cannot find the icon for your printer, then the printer driver is not installed.

- 2 If the printer driver is not installed, insert the installation software CD into your computer.
- **3** Follow the instructions on the computer screen.

Note: You must install the printer driver on each computer that uses the network printer.

Check if printer is connected to the wireless network

- 1 Print a network setup page. For more information, see "Printing a network setup page."
- 2 Check to see if "Status: Connected" appears under Network Card.

Reboot the computer

Turn off and restart the computer.

Check printer ports

Make sure the correct printer port is selected.

- 1 Click:

 - In Windows XP: Start → Settings → Printers and Faxes.
 - In Windows 2000 and earlier: Start → Settings → Printers.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Click Properties → Ports.

4 Verify that **XXXX_Series_nnnnn_P1** is selected, where XXXX is the model series number of your printer and nnnnnn is the last six numbers of the MAC address of your printer.

Note: The MAC address is located at the back of the printer beside the serial number.

- 5 If **USB** is selected instead:
 - a Select the port name from step 4.
 - b Click Apply.
 - **c** Close the window, and try printing again.

Reinstall software

Uninstall and then reinstall the printer software.

Note: If more than one printer appears in the "Select your printer" list, pick the printer with the MAC address that matches the address on the back of your printer.

Wireless printer is no longer working

These are possible solutions. Try one or more of the following:

Check power

- Make sure the printer power light is on. For more information, see "Power button is not lit" in the "Troubleshooting" chapter.
- Make sure the wireless access point (wireless router) is on.

Move your wireless access point (wireless router) to minimize interference

There may be temporary interference from other devices such as microwaves or other appliances, cordless phones, baby monitors, and security system cameras. Make sure your wireless access point (wireless router) is not positioned too closely to these devices.

Move your computer and/or printer

Move the computer and/or printer closer to the wireless access point (wireless router). Although the possible distance between devices in 802.11b or 802.11g networks is 300 feet, the effective range for optimal performance is generally 100–150 feet.

You can find the signal strength of the network on the network setup page. For more information, see "Printing a network setup page" in the "Networking" chapter.

Try adjusting external antennas

Generally, antennas work best if they are pointing straight up. You may find, however, that reception improves if you experiment with different angles for your printer and/or wireless access point (wireless router) antennas.

Check network name

The network name, or SSID (Service Set Identifer) is a setting on a wireless device that allows devices to join the same wireless network.

For more information, see "Checking your network name" for Windows or Mac in the "Wireless troubleshooting" section.

Reboot the computer

Turn off and restart the computer.

Ping the wireless access point

Ping the wireless access point (wireless router) to make sure the network is working.

For more information, see "Ping the access point" for Windows or Mac in the "Wireless troubleshooting" section

Ping the printer

Ping the printer to make sure it is on the network.

For more information, see "Ping the printer" for Windows or Mac in the "Wireless troubleshooting" section.

Run the wireless setup again

If your wireless settings have changed, you will need to run the printer wireless setup again. Some reasons your settings may have changed include your having manually changed your WEP or WPA keys, channel, or other network settings, or the wireless access point (wireless router) having been reset to factory defaults.

Notes:

- If you change network settings, change them on all the network devices before changing them for the wireless access point (wireless router).
- If you have already changed the wireless network settings on your wireless access point (wireless router), you must change the settings on all the other network devices before you can see them on the network.

For more information, see "Run the Wireless Setup Utility" for Windows or "Run the Wireless Setup Assistant" for Mac.

Changing wireless settings after installation

To change your password, network name, or other wireless setting, rerun the wireless setup. For more information, see "Run the Wireless Setup Utility" for Windows or the "Run the Wireless Setup Assistant" for Mac.

Resetting an internal wireless print server to factory default settings

- 1 Make sure the printer is turned off.
- **2** Open the access cover and leave it open.
- **3** Press and hold .
- **4** While holding **≜**, press **७**.
- **5** Wait for the printer to turn on, and then release .
- **6** Close the access cover.
- 7 Wait for the \circlearrowleft light to stop blinking.

The internal wireless print server is reset to factory default settings. To verify, print a network setup page.

Network printer does not show up in the printer selection list during installation

Check whether the printer is on the same wireless network as the computer

The SSID of the printer must match the SSID of the wireless network.

- 1 If you do not know the SSID of the network, use the following steps to obtain it before rerunning the Wireless Setup Utility.
 - **a** Enter the IP address of your wireless access point (wireless router) into the Web address field of your browser.

If you do not know the IP address of the wireless access point (wireless router):

- **1** Do one of the following:

 - In Windows XP, click Start → Programs or All Programs → Accessories → Command Prompt.
- 2 Type ipconfig.
- 3 Press Enter.
 - The "Default Gateway" entry is typically the wireless access point (wireless router).
 - The IP address appears as four sets of numbers separated by periods, such as 192.168.0.100.
- **b** Enter your user name and password when prompted.
- c Click OK.
- **d** On the main page, click **Wireless** or any other selection where settings are stored. The SSID will be displayed.
- **e** Write down the SSID, security type, and the security keys if they are shown.

Note: Make sure you copy them down exactly, including any capital letters.

- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Wireless Setup.

Note: You may be prompted to connect the printer to the computer again using the installation cable as part of the setup process.

- **4** Follow the instructions on the computer screen, including typing in the SSID of the wireless access point (wireless router) and the security keys when prompted.
- **5** Store the SSID and the security keys in a safe place for future reference.

Wireless Setup Utility cannot communicate with the printer during installation (Windows users only)

These are possible solutions for Windows users. Try one or more of the following:

Check power

If the \bigcirc light is not on, see "Power button is not lit" on page 63.

Check the installation cable

- 1 Disconnect the installation cable and check it for any obvious damage.
- 2 Firmly plug the rectangular end of the USB cable into the USB port of the computer.

The USB port is marked with the USB symbol.

- 3 Firmly plug the square end of the USB cable into the USB port on the back of the printer.
- 4 Cancel the software installation.
- 5 Click Programs or All Programs → Lexmark 1500 Series.
- 6 Click Wireless Setup Utility.
- 7 Follow the prompts on the computer screen to reinstall the software.

Checking your network name (Windows users only)

Make sure your network does not have the same name as another network near you. For example, if you and your neighbor both use a manufacturer's default network name, your printer could be connecting to your neighbor's network.

If you are not using a unique network name, consult the documentation for your wireless access point (wireless router) to learn how to set a network name.

If you set a new network name, you must reset the printer and computer SSID to the same network name.

- To reset the computer network name, see the documentation that came with your computer.
- To reset the printer name:
 - 1 Click Programs or All Programs → Lexmark 1500 Series.
 - 2 Click Wireless Setup Utility.
 - 3 Follow the instructions on the computer screen, and enter the new network name when prompted.

Ping the access point

- 1 If you do not already know it, find the IP address of the wireless access point (wireless router).
 - **a** Do one of the following:

 - In Windows XP, click Start → Programs or All Programs → Accessories → Command Prompt.
 - **b** Type ipconfig.
 - c Press Enter.
 - The "Default Gateway" entry is typically the wireless access point (wireless router).
 - The IP address appears as four sets of numbers separated by periods, such as 192.168.0.100.
- **2** Ping the wireless access point (wireless router).
 - a Do one of the following:

 - In Windows XP, click Start → Programs or All Programs → Accessories → Command Prompt.
 - **b** Type **ping** followed by a space and the IP address of the wireless access point (wireless router). For example:

ping 192.168.0.100

c Press Enter.

- **3** If the wireless access point (wireless router) responds, you will see several lines appear that start with "Reply from". Turn off and restart the printer.
- **4** If the wireless access point (wireless router) does not respond, after several seconds you will see "Request timed out."
 - **a** Do one of the following:

 - In Windows XP, click Start → Settings or Control Panel → Network Connection.
 - **b** Select the appropriate connection from the ones shown.

Note: If the computer is connected to the access point (router) by an Ethernet cable, the connection may not include the word "wireless" in its name.

c Right-click the connection, and then click Repair.

Ping the printer

- **1** Do one of the following:

 - In Windows XP, click Start → Programs or All Programs → Accessories → Command Prompt.
- 2 Type ping followed by the IP address of the printer. For example,

```
ping 192.168.0.25
```

- 3 Press Enter.
- 4 If the printer responds, you will see several lines appear that start with "Reply from".

Turn off and restart the printer, and then try resending your print job.

- 5 If the printer does not respond, you will see "Request timed out."
 - a Check that the computer has a wireless IP address.
 - **1** Do one of the following:

 - In Windows XP, click Start → Programs or All Programs → Accessories → Command Prompt.
 - 2 Type ipconfig.
 - 3 Press Enter.
 - 4 Check the Windows IP Configuration screen that appears for the wireless IP address of the computer.

Note: Your computer may have an IP address for a wired network, a wireless network, or both.

- **5** If your computer does not have an IP address, see the documentation that came with your wireless access point (wireless router) to learn how to connect your computer to the wireless network.
- **b** The printer may need to be reconfigured for new wireless network settings. For more information, see "Run the Wireless Setup Utility".

Run the Wireless Setup Utility (Windows users only)

- 1 Click Programs or All Programs → Lexmark 1500 Series.
- 2 Click Wireless Setup Utility.

Note: You may be prompted to connect the printer to the computer again using the installation cable as part of the setup process.

3 Follow the instructions on the computer screen.

Changing wireless settings after installation (Windows users only)

To change your password, network name, or other wireless setting:

- 1 Click Programs or All Programs → Lexmark 1500 Series.
- 2 Click Wireless Setup Utility.

Note: You may be prompted to connect the printer to the computer again using the installation cable as part of the setup process.

3 Follow the prompts on the computer screen to reinstall the software, and make the changes you want.

Check printer ports (Windows users only)

Make sure the correct printer port is selected.

- 1 Click Start → Control Panel → Printers.
- 2 Right-click Lexmark XXXX, where XXXX is the model series number of your printer.
- 3 Click Properties → Ports.
- **4** Verify that **XXXX_Series_nnnnnn_P1** is selected, where XXXX is the model series number of your printer and nnnnnn is the last six numbers of the MAC address of your printer.

Note: The MAC address is located at the back of the printer beside the serial number.

- 5 If USB is selected instead:
 - a Select the port name from step 4.
 - b Click Apply.
 - **c** Close the window, and try printing again.

Print troubleshooting

Partial document or photo prints

Make sure the paper size being used matches the document or photo size you selected.

Improving print quality

These are possible solutions. Try one or more of the following:

Check paper

- Use the appropriate paper for the document. If you are printing photos or other high-quality images, for best results use Lexmark Photo Paper or Lexmark PerfectFinish Photo Paper. Do *not* use Lexmark Premium Photo Paper. Your print cartridges are not compatible with this type of paper.
- Use a paper that is a heavier weight or bright white.

Check print cartridges

If the document still does not have the print quality you want, follow these steps:

- **1** Align the print cartridges. For more information, see "Aligning the print cartridges" on page 59. If print quality has not improved, continue to step 2.
- **2** Clean the print cartridge nozzles. For more information, see "Cleaning the print cartridge nozzles" on page 59. If print quality has not improved, continue to step 3.
- **3** Remove and reinsert the print cartridges. For more information, see "Removing a used print cartridge" on page 57 and "Installing print cartridges" on page 56.
 - If print quality has not improved, continue to step 4.
- **4** Wipe the print nozzles and contacts. For more information, see "Wiping the print cartridge nozzles and contacts" on page 59.

If print quality is still not satisfactory, replace the print cartridges. For more information, see "Ordering print cartridges" on page 61.

Poor text and graphic quality

- Blank pages
- Dark print
- Faded print
- · Incorrect colors
- · Light and dark bands in print

- Skewed lines
- Smudges
- Streaks
- White lines in print

These are possible solutions. Try one or more of the following:

Check ink

Check the ink levels, and install new print cartridges if necessary.

Remove sheets as they are printed

To avoid ink smudging when you are working with the following media, remove each sheet as it exits, and allow it to dry:

- Documents with graphics or images
- Photo paper
- · Heavyweight matte or glossy paper
- Transparencies
- Labels
- Envelopes
- · Iron-on transfers

Note: Transparencies may take up to 15 minutes to dry.

Use a different brand of paper

Each paper brand accepts ink differently and prints with color variations. If you are printing photos or other high-quality images, for best results use Lexmark photo papers.

Check paper condition

Use only new, unwrinkled paper.

Removing and reinstalling the software

Software may not be installed correctly.

Poor quality at the edges of the page

These are possible solutions. Try one or more of the following:

Check minimum print settings

Unless you are using the borderless feature, use these minimum print margin settings:

- Left and right margins:
 - 6.35 mm (0.25 in.) for letter-size paper
 - 3.37 mm (0.133 in.) for all paper sizes except letter
- Top margin: 1.7 mm (0.067 in.)
- Bottom margin: 12.7 mm (0.5 in.)

Select the Borderless print feature

- 1 From the software application, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click Print Layout.
- 4 Click Borderless.

Make sure you use photo paper

Borderless printing requires photo paper. Small margins are printed when you select the Borderless feature when you are printing on plain paper.

Make sure the paper size matches the printer setting

- 1 From the software application, click **File** → **Print**.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click Paper Setup.
- 4 Check the paper size.

Print speed is slow

These are possible solutions. Try one or more of the following:

Maximize computer processing speed

- Close all applications not in use.
- Minimize the number and size of graphics and images in the document.
- Remove as many unused fonts as possible from your system.

Add memory

Consider purchasing more RAM.

Select a lower print quality

- 1 From the software application, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 Click Quality/Copies.
- 4 From the Quality/Speed area, select a lower print quality.

Remove and reinstall the software

It is sometimes helpful to remove the existing printer software and reinstall it.

Skewed print

Check the paper guides

Move the guides in the tray to the correct positions for the paper size loaded.

Check the paper

Make sure you are using paper that meets the printer specifications.

Photo smudges

To prevent smudging, avoid touching the surface of a printed photo. For best results, remove each printed sheet individually from the paper exit tray, and allow the prints to dry at least 24 hours before stacking, displaying, or storing.

Checking the print cartridges

Are the print cartridges properly installed?

For more information, see "Installing print cartridges" on page 56.

Are the sticker and tape removed from the cartridges?

Lift the access cover. Press down on the cartridge carrier latches to raise the cartridge carrier lids.

Are the cartridges low on ink?

- **1** Do one of the following:
 - In Windows Vista, click
 - · In Windows XP and earlier, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center.
- 4 If an exclamation point (!) appears on a cartridge, the ink level is low. Install a new cartridge. For more information, see "Installing print cartridges" on page 56.

For cartridge-ordering information, see "Ordering paper and other supplies" on page 61.

Ink levels seem incorrect

These are possible solutions. Try one or more of the following:

Are you printing graphics or photos?

When you print documents with a large number of graphics, or with the Photo Quality/Speed setting, the printer uses more ink. The type of documents you print and the print quality you select affect the amount of ink the printer uses.

Are you printing a large file?

The ink levels displayed in the printer software are not updated during a print job; they represent the ink level at the beginning of a print job. The ink levels may seem inconsistent in the Printing Status window when you are printing a large file.

Ink levels seem to go down too quickly

These are possible solutions. Try one or more of the following:

Are you printing photos or documents with a large number of graphics?

Because photos and graphics require more ink than text documents, ink usage increases when you print photos or graphics.

Are you printing with the Best Quality/Speed setting?

To reduce ink usage, select **Photo** only when you are printing on photo or heavyweight matte paper. All other paper types print best at a lower Quality/Speed setting. Use the Quick Print or Normal setting to print most text documents.

A blank or incorrect page prints

Remove the sticker and tape from the print cartridges

Lift the access cover, and remove the print cartridges from the print cartridge carrier. Make sure the sticker and tape are removed from the print nozzles located on the bottom of the cartridges.

Make sure the cartridges are properly installed

With the front of the printer facing you, check for proper print cartridge installation. If you are using a color cartridge, make sure it is properly installed in the right carrier. If you are using a black or photo cartridge, make sure it is properly installed in the left carrier.

Check the USB connection

- 1 Check that the USB cable is connected to the computer. The USB port on the back of the computer is marked by the USB symbol. Plug the long, flat end of the USB cable into this port.
- 2 Make sure that the smaller, more square end of the USB cable is plugged into the back of the printer.
- 3 Check that the USB cable is not damaged and that the \bigcirc light is on.

Close other open files before printing

Before sending a file to print, close all other open files in the program you are using. The printer prints a blank page when too many files are open in the same program.

Characters on printout are missing or unexpected

These are possible solutions. Try one or more of the following:

Make sure the printer is set as the default printer

For more information, see "Checking the printer status."

Make sure the fonts are applied correctly in the program

Most programs do not print a stretched or resized font.

Make sure the TrueType font is available on the computer

The font you are trying to print may not be available in the program font selection box. Not all fonts are designed to be printed; make sure the font is a TrueType font. See the program documentation for more information.

Make sure the document was formatted or created for the printer

Windows may substitute different fonts. Line and page breaks may change with the font. Use the program that created the document to fix these problems, and then save the changes for the next time you print.

Colors on printout are faded or differ from colors on the screen

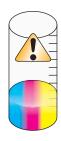
Check the following. When you think you have solved the problem, test the solution by sending a document to print.

Are the color and print speed settings correct?

You may need to adjust the color and print speed. For more information, see "Saving and deleting print settings."

Are the print cartridges low on ink?

- 1 Click Programs or All Programs → Lexmark 1500 Series.
- 2 Click Solution Center.



3 If an exclamation point (!) appears on either of the print cartridges, the ink level is low. Install a new cartridge. For more information, see "Installing print cartridges".

For cartridge ordering information, see "Ordering print cartridges."

Glossy photo paper or transparencies stick together

Do photos or transparencies dry and stick together on the paper exit tray?

Remove the photos or transparencies from the paper exit tray as they exit the printer. Allow them to dry before stacking. Because transparencies and photo papers do not absorb ink, the ink on the surface of the paper or transparency takes longer to dry than most printouts.

Are you using a transparency or photo paper designed for an inkjet printer?

For information on ordering supplies, see "Choosing compatible specialty paper types" on page 35.

Page prints with different fonts

Is the printer selected as the default printer?

For more information, see "Checking the printer status."

Are the fonts applied correctly?

The problem may be with the fonts. For more information, see "Resolving font problems."

Print is too dark or smudged

These are possible solutions. Try one or more of the following:

Make sure the ink dry before handling the paper

Remove the paper as it exits, and let the ink dry before handling.

Make sure the Quality/Speed setting is appropriate for the paper type loaded in the printer

The Photo Quality/Speed setting may cause smearing if used with plain paper. If you are using plain paper, try using the Normal setting.

Make sure the print cartridge nozzles are clean

You may need to clean the print cartridge nozzles. For more information, see "Cleaning the print cartridge nozzles."

Printed characters are improperly formed or are not aligned correctly Have you added spaces at the left margin?

If the print is not aligned correctly, make sure you have not added spaces by pressing Enter or the spacebar (hard-coded spaces).

Do you need to align the print cartridges?

The cartridges may be out of alignment.

- **1** Do one of the following:

 - In Windows XP or 2000, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center.
- 4 Click the Maintenance tab.
- 5 Click Align to fix blurry edges.

Are the print cartridges clean?

You may need to clean the print cartridge nozzles.

Printouts have alternating bands of light and dark print

If the printer pauses frequently during a print job and prints pages with alternating bands of light and dark print, it is printing data faster than the computer can send it. Banded printing occurs when the printer pauses frequently. You may need to change the printer software settings, or the problem may be that the printer and the computer are not able to communicate properly.

Are the printer and the computer able to communicate data?

Check the printer status:

- **1** Do one of the following:

 - In Windows XP or 2000, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.

- 3 Click Solution Center.
- 4 If the Printer Status is:
 - Cannot Communicate, the problem could be hardware or printer software settings.
 - Ready or Busy Printing, the problem may be with the printer software settings.

Transparencies or photos contain white lines

Do you need to adjust the Quality/Speed settings?

- 1 With a document or photo open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- **3** From the Quality/Copies tab, select:
 - Photo when printing photos
 - Normal when printing transparencies

Is the problem with program settings?

Use a different fill pattern in the program. For more information, see the program documentation.

Are the print cartridges clean?

You may need to clean the print cartridge nozzles. For more information, "Cleaning the print cartridge nozzles."

Vertical straight lines are not smooth

Adjust the Quality/Speed settings

- 1 With a document or photo open, click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- **3** From the Quality/Copies tab, select:
 - Photo when printing photos
 - Normal when printing transparencies

Align the print cartridges

- **1** Do one of the following:

 - In Windows XP or 2000, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center.
- 4 Click the Maintenance tab.
- 5 Click Align to fix blurry edges.

White lines appear in graphics or solid black areas

Adjust the Quality/Speed settings

- For excellent print quality and reduced print speed, select Best.
- For good print quality and average print speed, select **Normal**.

- For reduced print quality and faster print speed, select Quick Print.
- For the default print quality, select **Automatic**. The paper type sensor determines the print quality based on the type of paper it detects loaded in the paper support.

Adjust the application settings for the document

Use a different fill pattern in the application you are using to print the graphics. For more information, see the documentation that came with the application.

Perform maintenance on the print cartridges

You may need to clean the print cartridge nozzles.

Checking the printer status

Windows Vista users only

- 1 Click → Control Panel → Printer.
- 2 Make sure:
 - The printer icon does not say Paused. If the printer is paused, right-click the icon, and then click Resume Printing.
 - The printer icon says Ready. If it says Offline, right-click the icon, and then click Use Printer Online.
 - The printer icon has a check mark indicating that the printer is set as the default printer. If it is not, right-click the icon, and then click **Set as Default**.

Windows XP users only

- 1 Click Start → Settings → Printers and Faxes.
- 2 Make sure:
 - The printer icon does not say Paused. If the printer is paused, right-click the icon, and then click Resume Printing.
 - The printer icon says Ready. If it says Offline, right-click the icon, and then click Use Printer Online.
 - The printer icon has a check mark indicating that the printer is set as the default printer. If it is not, right-click the icon, and then click **Set as Default**.

Windows 2000 users only

- 1 Click Start → Settings → Printers.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Make sure:
 - Set as Default Printer is selected.
 - Pause Printing is not selected.
 - Use Printer Offline is not selected.

Checking printer readiness

The printer may not be ready to print. Check the following. When you think you have solved the problem, test the solution by sending a document to print.

Make sure the printer has paper and is properly loaded

Make sure you have followed the correct loading instructions for your printer.

Remove the sticker and tape from the print cartridges

- **1** Lift the access cover.
- 2 Remove the print cartridges from the print cartridge carrier.
- 3 Make sure the sticker and tape are removed from the bottom and back of the cartridges.

Do the print cartridges have ink?

- **1** Do one of the following:
 - In Windows Vista, click .
 - In Windows XP and earlier, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center.

If an exclamation point (!) appears on either of the print cartridges, the ink level is low. Install a new cartridge.

Check the USB connection

- 1 Check that the USB cable is connected to the computer. The USB port on the back of the computer is marked by the USB symbol. Plug the long, flat end of the USB cable into this port.
- 2 Make sure that the smaller, more square end of the USB cable is plugged into the back of the printer.
- **3** Check that the USB cable is not damaged and that the \bigcirc light is on.

Checking the Spool Settings for banner printing

Banner printing is not possible if certain Spool Settings are selected. Verify that you have the right settings selected.

- 1 For Windows Vista, click → Control Panel → Printer.
 For Windows XP, click Start → Settings → Printers or Printers and Faxes.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Select Properties.
- 4 Click the Advanced tab.
- **5** At the bottom of the Advanced tab, click **Print Processor**.
- **6** Verify that the Default data type is LEMF. If it is not, select **LEMF** from the available choices, and then click **OK**.

Resolving font problems

Have you applied the fonts correctly in the program?

Most programs do not print a stretched or resized font.

Is the font a TrueType font? Is it available on the computer?

The font you are trying to print may not be available in the program font selection box. Not all fonts are designed to be printed; make sure the font is a TrueType font. See the program documentation for more information.

Was the document formatted or created for the printer?

Windows may substitute different fonts. Line and page breaks may change with the font. Use the program that created the document to fix these problems, and then save the changes for the next time you print.

Printer is busy printing another job

Wait until the printer has finished printing all other print jobs before sending this job to print.

Ready or Busy Printing is listed as the status

If Ready or Busy Printing is listed as the Printer Status on the Status tab of the Solution Center while you are attempting to print, try the suggestions below. Next, test the solution by sending a document to print.

Is there a problem with the connections?

- 1 Check that the USB cable is connected to the computer. The USB port on the back of the computer is marked by the USB symbol. Plug the long, flat end of the USB cable into this port.
- 2 Make sure that the smaller, more square end of the USB cable is plugged into the back of the printer.
- **3** Check that the USB cable is not damaged and that the \bigcirc light is on.

Do you need to adjust the Quality/Speed settings?

Select **Photo** from the Quality/Copies tab in Printing Preferences.

- 1 Click File → Print.
- 2 Click Properties, Preferences, Options, or Setup.
- 3 From the Quality/Copies tab, make changes as needed.
- 4 Click **OK** to close any dialog boxes that are open.

Is the problem with the program?

Try printing a different image. If it prints correctly, the problem may be with the program you are using. For more information, see the program documentation.

Printing a test page

- **1** Do one of the following:
 - In Windows Vista, click
 - In Windows XP and earlier, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center.
- 4 From the Maintenance tab, click **Print a test page**.
- **5** Compare the printed page to the image displayed on the computer screen. If the printed image matches the image displayed on the screen, then you are finished.
- **6** If the test page did not print at all or has quality problems, attend to any error messages that appear on the screen.

Test page does not print

These are possible solutions. Try one or more of the following:

Make sure the printer is receiving power

If the \bigcirc light is not on, the printer may not be receiving power.

- Press (b.
- Plug the printer into a different electrical outlet.
- If the printer is plugged into a surge protector, unplug the printer, and plug it directly into an electrical outlet.

Check the USB connection

- 1 Check that the USB cable is connected to the computer. The USB port on the back of the computer is marked by the USB symbol. Plug the long, flat end of the USB cable into this port.
- 2 Make sure that the smaller, more square end of the USB cable is plugged into the back of the printer.
- 3 Check that the USB cable is not damaged and that the \circlearrowleft light is on.

Make sure the cartridges are properly installed

With the front of the printer facing you, check for proper print cartridge installation. If you are using a color cartridge, make sure it is properly installed in the right carrier. If you are using a black cartridge or photo cartridge, make sure it is properly installed in the left carrier.

Make sure the sticker and tape are removed from the print cartridges:

- **1** Lift the access cover.
- 2 Remove the print cartridges from the print cartridge carrier.
- 3 Make sure the sticker and tape are removed from the bottom and back of the print cartridges.

Try printing the test page again

- **1** Do one of the following:
 - In Windows Vista, click
 - In Windows XP and earlier, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center.
- 4 Click the Maintenance tab.
- 5 Click Print a test page.

Cable is not connected, is loose, or is damaged

The printer cable must be fully connected and undamaged for proper communication.

Make sure the USB cable is connected to the USB port on the back of the computer

The USB port on the back of the computer is marked by •••. Plug the long, flat end of the USB cable into this port.

Make sure the other end of the USB cable is connected to the back of the printer

Plug the smaller, more square end of the USB cable into the back of the printer.

Make sure the cable is not damaged or loose

Make sure:

- The USB cable is not damaged.
- The \bigcirc light is on.

For more information, see "Printer is plugged in but does not print."

Printer is plugged in but does not print

These are possible solutions. Try one or more of the following:

Make sure the printer is set as the default printer

Try printing a test page.

Make sure the print queue is ready to print

Make sure the printer is set as the default printer and is not being held or paused.

Printer is trying to print to File

If the computer is sending the print jobs to File rather than to the printer connected to the computer, first make sure the printer is attached with a USB cable to a USB port on the computer.

To verify the USB port:

- 1 In Windows Vista, click → Control Panel → Printers (under Hardware and Sound).
 In Windows XP, click Start → Settings → Printers and Faxes.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 From the sidebar menu, select **Properties**.
- 4 Click the Ports tab.
- 5 Make sure:
 - The port is set to a USB port.
 - File is not set as the port.

If the document still does not print, then the USB port may not be enabled in the computer. For more information, see the related topic, "Enabling the USB port."

Printer cannot communicate with computers over peer-to-peer network

These are possible solutions. Try one or more of the following:

Check the status of the host computer and printer

Make sure:

- The host computer is on and is directly connected to the printer.
- The host computer can print to the printer.
- The printer is shown as Shared in the Printers and Faxes folder (Windows XP and Windows 2000) or Printers folder (Windows Vista) on the host computer.

Check the printer status

Windows Vista users:

- 1 Click:
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Click Sharing.
- 4 Click Change Sharing Options, and confirm the Windows prompt.
- **5** Select **Share this printer**, and then give the printer a distinctive name.
- 6 Click OK.

Windows XP users:

- 1 Click Start → Settings → Printers and Faxes.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Click Sharing.
- **4** Select **Share this printer**, and then give the printer a distinctive name.
- 5 Click OK.

Windows 2000 users:

- 1 Click Start → Settings → Printers.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Click Sharing.
- **4** Select **Shared as**, and then give the printer a distinctive name.
- 5 Click OK.

Try to locate the printer from the remote computer

If the printer is shown as Shared on the host computer, but you still cannot print, try to locate the printer from the remote computer.

Windows 2000, Windows XP, or Windows Vista users:

- 1 Open the **Printers** or **Printers and Faxes** folder.
- 2 Right-click the Lexmark 1500 Series icon.
- 3 Click Properties.
- 4 Click the Ports tab, and then click the Add Port button.
- 5 Select Local Port, and then click the New Port button.
- **6** Type the Universal Naming Convention (UNC) Port name, which consists of the server name and the distinctive printer name.

The name should be in the form \\server\printer.

- 7 Click OK.
- 8 Click Close.
- 9 Make sure the new port has been selected on the Ports tab, and then click Apply.
 The new port is listed with the printer name.
- 10 Click OK.

Restart the host computer and the remote computer

Try printing again.

Printer is not able to communicate with the computer

The printer and computer are not able to exchange data. Verify that the printer is plugged in, and the 0 light is on.

Wrong printer is attached

The printer attached to the computer is not the correct printer. See the setup documentation for help attaching the printer.

Printer is out of paper

- 1 Load paper.
- 2 Press □↓.

Updating the printer software

The printer software needs to be updated to run properly.

- 1 Start Windows.
- **2** When the desktop appears, insert the software CD for Windows. The installation screen appears.
- 3 Click Install.
- 4 When the Existing Printer Driver Found dialog box appears, select **Update the existing driver software**.

Bidirectional communication is not established

The printer and computer may not be able to exchange data.

These are possible solutions. Try one or more of the following:

Make sure there is no problem with the connections

For more information, see "Cable is not connected, is loose, or is damaged" on page 92.

Make sure the printer is receiving power

If the \bigcirc button is not lit, the printer may not be receiving power.

- Plug the printer into a different outlet.
- If the printer is plugged into a surge protector, unplug the printer, and plug it directly into an electrical outlet.

Experiencing poor quality or incorrect output

See the topic that best describes the problem.

- · Print is too dark or smudged
- · Vertical straight lines are not smooth
- White lines appear in graphics or solid black areas
- Characters are missing or unexpected
- Colors on printout are faded or differ from colors on the screen
- · Printouts have alternating bands of light and dark print
- · Page prints with different fonts
- Printed characters are improperly formed or are not aligned correctly at the left margin
- Transparencies or photos contain white lines
- Glossy photo paper or transparencies stick together

Cannot print from a memory card or flash drive

These are possible solutions. Try one or more of the following:

Check the file types stored on the memory card or flash drive

Make sure the file types stored on the memory device are supported by the programs installed on your computer.

Check the memory card or flash drive

Make sure the memory card or flash drive is not corrupted. Remove memory devices properly from the printer to avoid corruption or loss of data.

Check the network connection

If the printer and computer are connected over a network, make sure that the correct host and device are communicating. Select the correct printer from the computer.

Make sure the printer is connected to the computer through a USB cable

You cannot print directly from a memory device if you are using a wireless connection. Transfer the photos from the memory device to the computer before printing the photos.

Cannot print from digital camera using PictBridge

These are possible solutions. Try one or more of the following:

Make sure the camera is a PictBridge-enabled digital camera

See the documentation that came with your camera to determine whether it is a PictBridge-enabled digital camera.

Enable PictBridge printing from the camera

Enable PictBridge printing on the camera by selecting the correct USB mode. If the camera USB selection is incorrect, the camera is detected as a USB storage device, or the \circlearrowleft light and \trianglerighteq light blink alternately. For more information, see the documentation that came with your camera.

Make sure the printer is properly communicating with the camera



If the PictBridge connection is successful, the camera automatically switches to print mode, the **PictBridge** PictBridge symbol appears on the camera display, or a message recognizing the connection appears on the camera display, depending on your camera.

If the PictBridge connection is unsuccessful, try one or more of the following:

- Make sure you are using the USB cable that came with your camera.
- Make sure the USB cable that you are using is not damaged.

If the error occurs after the printer has successfully connected with the camera, try one or more of the following:

- Disconnect the camera, and then connect it again.
- If the lights keep on blinking, check for error messages on the camera display, and then see the documentation that came with your camera.

Remove memory cards

Remove memory cards from the printer. The printer recognizes one active media device at a time.

Check error messages

If an error message appears on the camera display, see the documentation that came with your camera.

Partial photo prints when using a PictBridge-enabled digital camera Make sure photo size and paper size are set correctly

Make sure the photo paper in the paper support matches the photo size or print size selected on your digital camera. To view the print size settings on your digital camera, see the documentation that came with your camera.

Jams and misfeeds troubleshooting

Paper jam in the printer

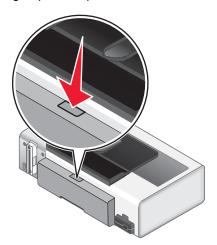
- 1 Firmly grasp the paper, and gently pull it out.
- 2 Press □.

Paper jam in the paper support

- 1 Firmly grasp the paper, and gently pull it out.
- 2 Press □.

Paper jam in the duplex unit

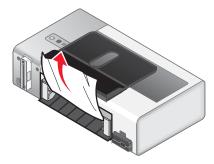
1 Push down on the duplex latch as you grasp the duplex unit.



2 Pull out the duplex unit.



3 Firmly grasp the paper, and gently pull it out.



4 Push down on the duplex latch as you reinstall the duplex unit.



5 Press □•.

6 On your computer, delete or stop the print job, and then try sending it again.

Paper or specialty media misfeeds

These are possible solutions if paper or specialty media misfeeds or skews, or if multiple sheets feed or stick together. Try one or more of the following:

Check paper condition

Use only new, unwrinkled paper.

Check paper loading

- Load a smaller amount of paper into the printer.
- Load paper with the print side facing you. (If you are not sure which side is the printable side, see the instructions that came with the paper.)

See "Loading paper" on page 28 and its related topics for information about:

- · Maximum loading amounts per paper type
- · Specific loading instructions for supported paper and specialty media

Remove each page as it is printed

Remove each page as it exits, and let it dry completely before stacking.

Adjust the paper guides

Adjust the paper guides:

- When using media less than 8.5 inches wide
- To rest against the edges of the paper or media, making sure it does not buckle



Printer does not feed paper, envelopes, or specialty media

These are possible solutions. Try one or more of the following:

Check for paper jams

Check for and clear any paper jams. For more information, see "Paper jam in the printer" on page 97 and "Paper jam in the paper support" on page 97.

Check media loading

- · Verify that the specialty media is loaded correctly. For more information, see "Loading paper" on page 28.
- Try loading one page, envelope, or sheet of specialty media at a time.

Check printer default and pause settings

- 1 Do one of the following:

 - In Windows XP, click Start → Settings → Printers and Faxes.
 - In Windows 2000, click Start → Settings → Printers.
- 2 Double-click the print queue device.
- 3 Click Printer.
 - Make sure no check mark appears next to Pause Printing.
 - If a check mark does not appear next to Set As Default Printer, you must select the print queue device for each file you want to print.

Banner paper jams

These are possible solutions. Try one or more of the following:

Clear banner paper jams

- 1 Firmly grasp the paper, and gently pull it out.
- 2 Press .

Review banner printing checklist

- Use only the number of sheets needed for the banner.
- Select the following settings to enable the printer to feed paper continuously without jamming:
 - 1 With a document open, click File → Print.
 - 2 Click Properties, Preferences, Options, or Setup.
 - 3 Click the Paper Setup tab.
 - 4 From the Paper Size area, select **Banner**.
 - 5 Select Letter Banner or A4 Banner as the paper size.
 - 6 Select Portrait or Landscape.
 - 7 Click OK.
 - 8 Click OK or Print.

Paper continues to jam

Are you using paper designed for an inkjet printer?

Check the type of paper you are using. Some low-quality papers may be too thin or too slick to be fed correctly into the printer. For more information, see "Choosing compatible specialty paper types" on page 35.

Are you loading the paper correctly?

For more information, see "Loading paper" on page 28.

Note: Do not force paper into the printer.

Duplex unit does not operate correctly

These are possible solutions. Try one or more of the following:

Check paper size and type

Check the paper size and type to make sure the paper is supported by the printer. If you are using automatic duplexing, use only letter- or A4-size plain paper.

Check for paper jams

Check for and clear any paper jams. For more information, see "Paper jam in the duplex unit" on page 98.

Make sure the duplex unit is properly installed

Remove the duplex unit and reinstall it. For more information, see "Paper jam in the duplex unit" on page 98.

Cartridge carrier jam

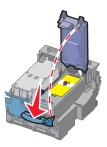
These are possible solutions. Try one or more of the following:

Remove any obstructions in the cartridge carrier

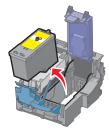
- **1** Lift the access cover.
- 2 Remove any objects blocking the path of the print cartridge carrier.
- 3 Make sure the cartridge carrier lids are closed.
- 4 Close the access cover.
- **5** Press □•.

Remove and reinstall the print cartridges

- 1 Lift the access cover.
- **2** Press down on the cartridge carrier levers to raise the cartridge carrier lids.



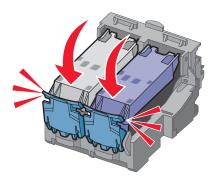
3 Remove both print cartridges.



4 Reinstall the print cartridges.



5 Snap the lids closed.



- 6 Close the access cover.
- 7 Press .

Memory card troubleshooting

Memory card cannot be inserted

There are possible solutions. Try one or more of the following:

Check memory card type

Make sure that the type of memory card you are using can be used in the printer. For more information, see "Inserting a memory card" on page 43.

Check memory card placement

Make sure you have inserted the memory card in the correct slot. For more information, see "Inserting a memory card" on page 43.

Nothing happens when memory card is inserted

These are possible solutions. Try one or more of the following:

Reinsert the memory card

The memory card may not have been inserted properly. Remove the memory card and then reinsert it.

Check memory card type

Make sure that the type of memory card you are using can be used in the printer. For more information, see "Inserting a memory card" on page 43.

Check memory card placement

Make sure you inserted the memory card into the correct slot. For more information, see "Inserting a memory card" on page 43.

Check to see if the memory card is damaged

Check to see if there is no obvious damage to the memory card. Remove memory cards properly from the printer to avoid corruption of data.

Check the file types stored on the memory card

Make sure the file types stored on the memory card are supported by the programs installed on your computer.

Make sure the USB cable is connected

- 1 Check that the USB cable is connected to the computer. The USB port on the back of the computer is marked by the USB symbol. Plug the long, flat end of the USB cable into this port.
- 2 Make sure that the smaller, more square end of the USB cable is plugged into the back of the printer.
- **3** Check that the USB cable is not damaged and that the \bigcirc light is on.

Check the network connection

If the printer and computer are connected over a network, make sure that the correct host and device are communicating. Select the correct printer from the computer.

Photos do not transfer from a memory card across a wireless network

These are possible solutions. Try one or more of the following:

Select the printer on your wireless network

If you have more than one printer and use Windows, you must select your wireless network printer.

- **1** Do one of the following:

 - In Windows XP and earlier, click Start → Settings → Printers and Faxes.
- **2** From the list shown, select the printer on your wireless network.

Note: To select the printer, right click the printer, and then select Set as Default Printer.

- 3 Insert the memory card in the printer.
- **4** Follow the instructions on the computer screen.

Check memory card placement

Make sure you inserted the memory card into the correct slot.

Check memory card type

Make sure that the type of memory card you are using can be used in the printer.

Check to see if the memory card is damaged

Check to see that there is no obvious damage to the memory card. Remove memory cards properly from the printer to avoid corruption of data.

Check to see if your printer or the computer is turned on

Make sure that your printer and your computer are turned on.

Check to see if your wireless connection is active

If your wireless connection is down:

- **1** Do one of the following:

 - In Windows XP and earlier, click Start → Settings → Printers or Printers and Faxes.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Wireless Setup Utility.

Error messages on the computer screen

Clearing error messages

- 1 Correct the error condition explained in the error message. Click **Help** on the error message dialog box for specific instructions.
- 2 After correcting the error condition, click **Continue** to resume printing.

If the error remains, but you want to clear the error message:

- 1 Click Cancel Printing. The error message closes, and the Canceling Printing dialog box appears.
- 2 Follow the instructions on the Canceling Printing dialog box.

Left/Right Cartridge Missing



You need to install a print cartridge. For more information, see the related topic below.

To order a new cartridge, see "Ordering print cartridges."

Communication not available

The printer and computer may not be able to exchange data.

Is the printer receiving power?

If \circlearrowleft is not lit, the printer may not be receiving power.

- Plug the printer into a different outlet.
- If the printer is plugged into a surge protector, unplug the printer, and plug it directly into an electrical outlet.

Is there a problem with the connections?

If the printer is connected to an external device, the problem may be with this device. Check the setup information that came with the device to make sure it is properly installed.

If printing using a USB cable, make sure the cable is securely attached to both the printer and the computer.

Before you print, you may need to restart the computer.

General Printing Problem

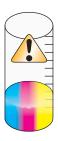
You cannot receive a more specific error message because the printer and the computer do not have bidirectional communication.

To receive a more specific error message, see "Bidirectional communication is not established" on page 95.

To find the problem without establishing bidirectional communication, see "Checking printer readiness" on page 89.

Ink Low

A print cartridge is almost out of ink.



Install a new cartridge. For more information, see "Installing print cartridges" on page 56.

To order a new cartridge, see "Ordering paper and other supplies" on page 61.

Out of Memory

The printer software cannot obtain enough memory to print.

Try the following:

- Before sending a document to print, close any other open programs. The printer may print a blank page when too many programs are open on the computer.
- Follow the instructions on the error screen. These instructions reduce the amount of memory needed to print.

Out of Paper

- 1 Load paper. For more information, see "Loading paper" on page 28.
- 2 Press to continue printing.

Note: Do not force paper into the printer.

Fixing a printing failure

Follow the instructions on the computer screen.

If the printer still does not print, contact the Customer Support Center:

- **1** Do one of the following:
 - In Windows Vista, click
 - In Windows XP and earlier, click Start.
- 2 Click Programs or All Programs → Lexmark 1500 Series.
- 3 Click Solution Center, and then click the Contact Information tab.

Print File Error

To use the Print Files function, your printer must be connected to a computer, and both the printer and computer must be on.

The error may include any of the following causes listed below.

Cause	Solution
The printer failed to find an application or software on the computer to print the file or files stored on the memory device.	Make sure you have software installed on your computer that can open files with the desired file extensions.
The printer failed to retrieve the file or files stored on the memory device.	Make sure that: The memory device has not been removed. The memory card or flash drive is not damaged or corrupted.

Unsupported file types found on memory card

The memory card inserted in the printer contains unsupported file types. Insert a memory card with supported file types. For more information on supported file types, see the *User's Guide* on the CD that came with your printer.

Paper Jam

The printer has a paper jam, and you must clear the paper path.

Note: To avoid paper jams, do not force paper into the printer.

Multiple All-In-Ones found

Multiple Lexmark printers, attached either locally or over a network, have been detected on your computer. You can choose which printer you want to use:

- 1 Select the printer from the list.
- 2 Click OK.

Notices

Product information

Product name:

Lexmark 1500 Series

Machine type:

4118

Model(s):

W22

W2E

Edition notice

June 2007

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For information on supplies and downloads, visit www.lexmark.com.

If you don't have access to the Internet, you can contact Lexmark by mail:

Lexmark International, Inc. Bldg 004-2/CSC 740 New Circle Road NW Lexington, KY 40550

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CAUTION: A CAUTION identifies something that could cause you harm.



CAUTION: This type of CAUTION indicates that you should not touch the marked area.



CAUTION: This type of *CAUTION* indicates a *hot surface*.



CAUTION: This type of *CAUTION* indicates a *shock hazard*.



CAUTION: This type of *CAUTION* indicates a *tipping hazard*.

Federal Communications Commission (FCC) compliance information statement

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

The manufacturer is not responsible for radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

Note: To assure compliance with FCC regulations on electromagnetic interference for a Class B computing device, use a properly shielded and grounded cable such as Lexmark part number 1021294 for USB attach. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Any questions regarding this compliance information statement should be directed to:

Director of Lexmark Technology & Services Lexmark International, Inc. 740 West New Circle Road Lexington, KY 40550 (859) 232–3000

Exposure to radio frequency radiation

The following notice is applicable if your printer has a wireless network card installed.

The radiated output power of this device is far below the radio frequency exposure limits of the FCC and other regulatory agencies. A minimum separation of 20 cm (8 inches) must be maintained between the antenna and any persons for this device to satisfy the RF exposure requirements of the FCC and other regulatory agencies.

Industry Canada compliance statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003.

Avis de conformité aux normes de l'industrie du Canada

Cet appareil numérique de classe B est conforme aux exigences de la norme canadienne relative aux équipements pouvant causer des interférences NMB-003.

European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directives 89/336/EEC and 2006/95/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility and safety of electrical equipment designed for use within certain voltage limits.

A declaration of conformity with the requirements of the directives has been signed by the Director of Manufacturing and Technical Support, Lexmark International, Inc., S.A., Boigny, France.

This product satisfies the Class B limits of EN 55022 and safety requirements of EN 60950.

Industry Canada notice

The following notices are applicable if your printer has a wireless network card installed.

Industry Canada (Canada)

This device complies with Industry Canada specification RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device has been designed to operate only with the antenna provided. Use of any other antenna is strictly prohibited per regulations of Industry Canada.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF fields in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb.

The term "IC:" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Industry Canada (Canada)

Cet appareil est conforme à la norme RSS-210 d'Industry Canada. Son fonctionnement est soumis aux deux conditions suivantes :

(1) cet appareil ne doit pas provoquer d'interférences et (2) il doit accepter toute interférence reçue, y compris celles risquant d'altérer son fonctionnement.

Cet appareil a été conçu pour fonctionner uniquement avec l'antenne fournie. L'utilisation de toute autre antenne est strictement interdite par la réglementation d'Industry Canada.

En application des réglementations d'Industry Canada, l'utilisation d'une antenne de gain supérieur est strictement interdite.

Pour empêcher toute interférence radio au service faisant l'objet d'une licence, cet appareil doit être utilisé à l'intérieur et loin des fenêtres afin de garantir une protection optimale.

Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

L'installateur de cet équipement radio doit veiller à ce que l'antenne soit implantée et dirigée de manière à n'émettre aucun champ HF dépassant les limites fixées pour l'ensemble de la population par Santé Canada. Reportez-vous au Code de sécurité 6 que vous pouvez consulter sur le site Web de Santé Canada www.hc-sc.gc.ca/rpb.

Le terme « IC » précédant le numéro de d'accréditation/inscription signifie simplement que le produit est conforme aux spécifications techniques d'Industry Canada.

European EC directives conformity statement for radio products

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Compliance is indicated by the CE marking.



The Alert sign indicates that there are restrictions within certain member states.

A declaration of conformity with the requirements of the directives is available from the Director of Manufacturing and Technical Support, Lexmark International, S. A., Boigny, France.

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This product satisfies the limits of EN 55022; safety requirements of EN 60950; radio spectrum requirements of ETSI EN 300 328; and the EMC requirements of EN 55024, ETSI EN 301 489-1 and ETSI EN 301 489-17.

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Noise emission levels

The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296. **Note:** Some modes may not apply to your product.

1-meter average sound pressure, dBA		
Printing	48	
Ready	inaudible	

Values are subject to change. See www.lexmark.com for current values.

Waste from Electrical and Electronic Equipment (WEEE) directive



The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products. If you have further questions about recycling options, visit the Lexmark Web site at **www.lexmark.com** for your local sales office phone number.

Product disposal

Do not dispose of the printer or supplies in the same manner as normal household waste. Consult your local authorities for disposal and recycling options.

Temperature information

Ambient temperature	15° ~ 32° C (60° ~ 90° F)
Shipping and storage temperature	-40° ~ 60° C (-40° ~ 140° F), 1° ~ 60° C (34° ~ 140° F)

ENERGY STAR



Power consumption

Product power consumption

The following table documents the power consumption characteristics of the product.

Note: Some modes may not apply to your product.

Mode	Description	Power consumption (Watts)
Printing	The product is generating hard-copy output from electronic inputs.	13.8
Copying	The product is generating hard-copy output from hard-copy original documents.	not applicable
Scanning	The product is scanning hard-copy documents.	not applicable
Ready	The product is waiting for a print job.	7.5
Power Saver	The product is in energy-saving mode.	5.8
High Off	The product is plugged into a wall outlet, but the power switch is turned off.	not applicable
Low Off (<1 W Off)	The product is plugged into a wall outlet, the power switch is turned off, and the product is in the lowest possible power consumption mode.	not applicable
Off	The product is plugged into a wall outlet, but the power switch is turned off.	0.6

The power consumption levels listed in the previous table represent time-averaged measurements. Instantaneous power draws may be substantially higher than the average.

Values are subject to change. See www.lexmark.com for current values.

Power Saver

This product is designed with an energy-saving mode called Power Saver. The Power Saver Mode is equivalent to the EPA Sleep Mode. The Power Saver Mode saves energy by lowering power consumption during extended periods of inactivity. The Power Saver Mode is automatically engaged after this product is not used for a specified period of time, called the Power Saver Timeout.

Factory default Power Saver Timeout for this product (in minutes):	,	
--	---	--

Off mode

If this product has an off mode which still consumes a small amount of power, then to completely stop product power consumption, disconnect the power supply cord from the wall outlet.

Total energy usage

It is sometimes helpful to calculate the total product energy usage. Since power consumption claims are provided in power units of Watts, the power consumption should be multiplied by the time the product spends in each mode in order to calculate energy usage. The total product energy usage is the sum of each mode's energy usage.

Statement of Limited Warranty

Lexmark International, Inc., Lexington, KY

This limited warranty applies to the United States. For customers outside the U.S., see the country-specific warranty information that came with your product.

This limited warranty applies to this product only if it was originally purchased for your use, and not for resale, from Lexmark or a Lexmark remarketer, referred to in this statement as "Remarketer."

Limited warranty

Lexmark warrants that this product:

- —Is manufactured from new parts, or new and serviceable used parts, which perform like new parts
- —Is, during normal use, free from defects in material and workmanship

If this product does not function as warranted during the warranty period, contact a Remarketer or Lexmark for repair or replacement (at Lexmark's option).

If this product is a feature or option, this statement applies only when that feature or option is used with the product for which it was designed. To obtain warranty service, you may be required to present the feature or option with the product.

If you transfer this product to another user, warranty service under the terms of this statement is available to that user for the remainder of the warranty period. You should transfer proof of original purchase and this statement to that user.

Limited warranty service

The warranty period starts on the date of original purchase as shown on the purchase receipt. The warranty period ends 12 months later.

To obtain warranty service you may be required to present proof of original purchase. You may be required to deliver your product to the Remarketer or Lexmark, or ship it prepaid and suitably packaged to a Lexmark designated location. You are responsible for loss of, or damage to, a product in transit to the Remarketer or the designated location.

When warranty service involves the exchange of a product or part, the item replaced becomes the property of the Remarketer or Lexmark. The replacement may be a new or repaired item. The replacement item assumes the remaining warranty period of the original product.

Replacement is not available to you if the product you present for exchange is defaced, altered, in need of a repair not included in warranty service, damaged beyond repair, or if the product is not free of all legal obligations, restrictions, liens, and encumbrances.

Before you present this product for warranty service, remove all print cartridges, programs, data, and removable storage media (unless directed otherwise by Lexmark).

For further explanation of your warranty alternatives and the nearest Lexmark authorized servicer in your area, contact Lexmark at (800) 332-4120, or on the World Wide Web at http://support.lexmark.com.

Remote technical support is provided for this product throughout its warranty period. For products no longer covered by a Lexmark warranty, technical support may not be available or only be available for a fee.

Extent of limited warranty

We do not warrant uninterrupted or error-free operation of any product.

Warranty service does not include repair of failures caused by:

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- -Accidents or misuse
- —Unsuitable physical or operating environment
- -Maintenance by anyone other than Lexmark or a Lexmark authorized servicer
- -Operation of a product beyond the limit of its duty cycle
- -Use of printing media outside of Lexmark specifications
- -Supplies (such as ink) not furnished by Lexmark
- -Products, components, parts, materials, software, or interfaces not furnished by Lexmark

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Networking glossary

ad hoc mode A setting for a wireless device that lets it communicate directly with other wireless

devices without an access point or router

ad hoc network A wireless network that does not use an access point

AutoIP address An IP address automatically assigned by a network device. If the device is set to use

DHCP, but no DHCP server is available, an AutoIP address may be assigned by the

device.

BSS (Basic Service Set)

Basic Service Set describes the type of wireless network that you are using. The BSS

type can be one of the following: Infrastructure network or Ad-Hoc network.

channel A specific radio frequency used by two or more wireless devices to communicate with

each other. All devices on the network must use the same channel.

DHCP (Dynamic Host Configuration

Protocol)

A language used by DHCP servers

DHCP IP address An IP address automatically assigned by a DHCP server

DHCP server A computer or router that gives a unique IP address to each device on the network.

Unique addresses prevent conflicts.

infrastructure mode A setting for a wireless device that lets it communicate directly with other wireless

devices using an access point or router

installation cable Connects the printer to the computer temporarily during some methods of installation.

internal wireless print server A device that lets computers and printers talk to each other over a network without cables

IP (Internet Protocol) address

The network address of a computer or printer. Each device on the network has its own

network address. The address may be assigned manually by you (Static IP address), automatically by the DHCP server (DHCP IP address), or automatically by the device

(AutoIP address).

ipconfig A command that displays the IP address and other network information of a Windows

computer

MAC (Media Access Control) address A hardware address that uniquely identifies each device on a network. You can usually

find the MAC address printed on the device.

MAC filtering A method of limiting access to your wireless network by specifying which MAC addresses

may communicate on the network. This setting may be specified on wireless routers or

access points.

network adapter/cardA device that lets computers or printers talk to each other over a network

network hub A device that connects multiple devices on a wired network

network name See "SSID (Service Set Identifier)" on page 117

ping A test to see if your computer can communicate with another device

printer nickname The name you assign to your printer so that you and others can identify it on the network

router A device that shares a single Internet connection with multiple computers or other

devices. The basic router controls network traffic.

security key A password, such as a WEP key or a WPA pass phrase, used to make a network secure

signal strength Measure of how strongly a transmitted signal is being received

SSID (Service Set Identifier) The name of a wireless network. When you connect a printer to a wireless network, the

printer needs to use the same SSID as the network. Also referred to as network name

or BSS (Basic Service Set).

Static IP address An IP address assigned manually by you

switch A device similar to a network hub that can connect different networks together

UAA (Universally Administered Address) An address assigned to a network printer or print server by the manufacturer. To find

the UAA, print a network setup page and look for the UAA listing.

USB cableA lightweight, flexible cable that lets the printer communicate with the computer at much

higher speeds than parallel cables

USB port A small, rectangular port on the back of the computer that connects the peripheral

devices using a USB cable, and lets them communicate at high speeds

WEP (Wired Equivalent Privacy)

A security setting that helps prevent unauthorized access to a wireless network. Other

possible security settings are WPA and WPA2.

wireless access point A device that connects wireless devices together to form a wireless network

wireless router A router that also serves as a wireless access point

Wi-Fi An industry term that describes the technology used to create an interoperable wireless

local area network (WLAN).

WPA (Wi-Fi Protected Access)

A security setting that helps prevent unauthorized access to a wireless network. WPA

is not supported on ad hoc wireless networks. Other possible security settings are WEP

and WPA2.

WPA2 A newer version of WPA. Older routers are less likely to support this. Other possible

security settings are WPA and WEP.

Index

A	С	checking your network name
access cover 15	cable connections	(Windows) 79
ad hoc wireless network	checking 91, 92	cleaning
adding a printer using	canceling print jobs 35	exterior of the printer 60
Windows 27	cannot print	print cartridge nozzles 59
creating using Windows 25	from a flash drive 96	color effects
adjusting brightness	from a memory card 96	applying 51
automatically 49, 51	from digital camera using	colors on paper do not match colors
adjusting the hue of a photo 50	PictBridge 96	on the screen 86
adjusting the saturation of a	card reader light 14	communication not available
photo 50	cards	error 104
Advanced button 18	loading 29	communication problems
aligning print cartridges 59	memory 43	establishing bidirectional
assigning IP address 24	printing 36	communication 95
automatic duplex 41	cartridge carrier jam 101	connecting
·	cartridge missing error 104	PictBridge-enabled digital
В	cartridge nozzles, cleaning 59	camera 45
banner paper	cartridges, print	connecting cables 91, 92
loading 31	aligning 59	contents, box 13
banner paper jams 100	cleaning the nozzles 59	creating and viewing slideshow 55
banner printing problems	installing 56	cropping
checking spool settings 90	ordering 61	photo 48
banner, printing 39	preserving 61	custom-size paper, loading 30
blank or incorrect page prints 85	removing 57	custom-size paper, printing 38
blurring photo 49	using genuine Lexmark 58	_
booklet, assembling 38	wiping 59	D
booklets	CD	Despeckle
printing 37	printing photos from 51	change setting 50
both sides of the paper, printing	transferring all photos using	digital camera
on 41	computer 46	printing photos using the
box contents 13	transferring selected photos using	computer 51
Brightness	the computer 46	Digital Print Order Format
automatic adjustment 49, 51	changing	printing photos 55
Brightness / Contrast setting	temporary files preferences 47	documents
changing 51	changing gamma value of a photo	printing 32
button	or image 50	duplex
duplex 14	changing library preferences 47	light is blinking 64
form feed 14	Changing photo resolution/size 48	duplex unit 14
power 14	changing searched folders	does not operate correctly 101
buttons, Productivity Studio	preferences 47	duplexing
Photo Greeting Cards 17	changing temporary files	understanding 40
Photo Packages 17	preferences 47	duplexing (two-sided printing
Poster 17	changing transfer settings 48	manually 41
Transfer Photos 17	changing wireless settings after	duplexing (two-sided printing)
using 17	installation 77	automatically 41
buttons, Solution Center	changing wireless settings after	_
Advanced 18	installation (Windows) 81	E
How To 18	characters on printout are missing	emission
Maintenance 18	or unexpected 85	notices 108, 109, 110, 111
Troubleshooting 18	check printer ports (Windows) 81	Enhancements tab
using 18	checking printer readiness 89	blur 49

Brightness / Contrast 51	G	L
Brightness / Contrast setting 51	gamma value	labels, loading 29
Despeckle setting 50	changing 50	last page first 34
enhance 50	general printing problem error 105	Lexmark Productivity Studio
hue 50	getting a document to print 93	creating and viewing
saturation 50	glossy paper, loading 28	slideshow 55
selecting color effect 51	glossy photo paper or	library preferences
sharpen 49	transparencies stick together 86	changing 47
enhancing photo 50	greeting cards	loading
envelopes	loading 29	banner paper 31
loading 28	printing 36	custom-size paper 30
printing 36		envelopes 28
error messages	Н	glossy paper 28
cartridge missing 104	heavyweight matte paper,	greeting cards 29
clearing 104	loading 28	heavyweight matte paper 28
communication not available 104	How To button 18	index cards 29
general printing problem 105		iron-on transfers 30
ink low 105	1	labels 29
out of memory 105	image, changing gamma value 50	paper 28
out of paper 105	improving print quality 81	photo cards 29
paper jam 106	index cards	photo paper 28
printing failure 105	loading 29	postcards 29
unsupported file types found on	printing 36	transparencies 30
memory card 106	information, finding 9	8.4
error messages troubleshooting print file error 106	ink levels seem incorrect 84	M
exterior of the printer	ink levels seem to go down	MAC address 22
cleaning 60	quickly 85	Maintenance button 18
clearing oo	ink low error 105	manual duplex 41
F	inserting	memory card
factory default settings	flash drives 44	cannot print from 96
resetting internal wireless print	memory cards 43	inserting 43
server 77	installing	printing documents or photos
resetting the printer 40	network printer 24	from 35
faded colors 86	print cartridges 56 printer software 16, 68	printing photos using the computer 51
FCC notices 108	internal wireless print server 16	transferring all photos using the
finding	resetting to factory default	computer 45
information 9	settings 77	transferring selected photos using
publications 9	IP address, assigning 24	the computer 46
Web site 9	iron-on transfers, loading 30	memory card and PictBridge
flash drive	iron-on transfers, printing 38	troubleshooting
cannot print from 96	more on transfers, primaring se	nothing happens when memory
inserting 44	J	card is inserted 102
printing documents or photos	jams and misfeeds troubleshooting	memory card cannot be
from 35	banner paper jams 100	inserted 102
printing photos using the	cartridge carrier jam 101	memory card reader and PictBridge
computer 51	paper jam in printer 97	troubleshooting
transferring all photos using	paper jam in the duplex unit 98	power light and duplex light are
computer 46	paper jam in the paper	blinking alternately 64
transferring selected photos using	support 97	memory card slots 14
the computer 46	paper or specialty media	memory card troubleshooting
fonts	misfeeds 99	memory card cannot be
resolving problems 90	printer does not feed paper,	inserted 102

envelopes, or specialty media 99

N	memory card slots 14	transferring selected photos from
network adapters	paper exit tray 15	memory card using the
using 24	paper feed guard 15	computer 46
network printer	paper guides 15	photos do not print from memory
installing 24	paper support 15	card across wireless network 103
network printer does not show up in	PictBridge port 14	PictBridge port 14
printer selection list during	power button 14	PictBridge-enabled digital camera
installation (Windows) 78	power supply 16	connecting 45
network setup page	print server 16	printing photos from 54
printing 23	USB port 16	ping the printer (Windows) 80
networking	Wi-Fi indicator 15	ping the wireless access point
IP addresses 23	pausing print jobs 35	(Windows) 79
noise emission levels 111	photo	poor text and graphic quality 82
nothing happens when memory	adjusting hue 50	postcards
card is inserted 102	adjusting saturation 50	loading 29
notices 108, 109, 110, 111, 112	applying color effect 51	printing 36
N-up feature 34	blurring 49	poster 37
•	cropping 48	Poster button 17
0	enhancing 50	posters, printing 36
One-Click Auto Fix 49	sharpening 49	power
ordering paper and other	photo cards, loading 29	button 14
supplies 61	Photo Greeting Cards button 17	light blinking alternately with
out of memory error 105	Photo Packages 52	duplex light 64
out of paper error 105	Photo Packages button 17	light is blinking 64
• •	photo paper, loading 28	supply 16
P	Photo resolution/size	power button is not lit 63
page does not print 67	changing 48	preferences, library
page prints with different fonts 86	photo smudges 84	changing 47
paper	photo, changing gamma value 50	preferences, searched folders
choosing specialty 35	photos	changing 47
paper and other supplies	automatic red-eye reduction 49	preferences, temporary files
ordering 61	printing all from a memory	changing 47
paper continues to jam 100	device 53	print cartridge
paper exit tray 15	printing from a Web page 33	checking 84
paper feed guard 15	printing from CD using the	print cartridge nozzles,
paper guides 15	computer 51	cleaning 59
paper jam	printing from digital camera using	print cartridges
duplex unit 98	the computer 51	aligning 59
paper support 97	printing from PictBridge-enabled	cleaning the nozzles 59
printer 97	digital camera 54	installing 56
paper jam error 106	printing from removable storage	ordering 61
paper or specialty media	device using the computer 51	preserving 61
misfeeds 99	red-eye reduction 49	refilling 58
paper support 15	rotating 48	removing 57
paper, loading 28	smudges, preventing 84 transferring all photos from CD or	using genuine Lexmark 58 wiping 59
partial document or photo	flash drive using computer 46	print file error 106
prints 81	transferring all photos from	print lie error 100 print is dark or smudged 87
partial photo prints when using	memory card using the	print is dark or smudged '67' print jobs
PictBridge 97	computer 45	canceling 35
parts	transferring selected photos from	-
access cover 15	CD or flash drive using the	print quality troubleshooting skewed print 84
card reader light 14	computer 46	print quality, improving 81
duplex button 14	Computer 40	print quality, improving 51 print settings
duplex unit 14		saving and deleting 39
form feed button 14		Javing and deleting 03

print speed is slow 83 custom-size paper 38 print troubleshooting document 32 ready or busy printing is listed as blank or incorrect page prints 85 documents or photos from status 91 cannot print from digital camera memory card or flash drive 35 recycling using PictBridge 96 envelopes 36 WEEE statement 111 checking printer readiness 89 greeting cards 36 red-eve duplex unit does not operate index cards 36 automatic reduction 49 correctly 101 iron-on transfers 38 manual reduction 49 establishing bidirectional last page first 34 refilling print cartridges 58 communication 95 multiple pages on one sheet 34 removing print cartridges 57 flash drive, cannot print from 96 network setup page 23 resetting improving print quality 81 on both sides of the paper 40 internal wireless print server to ink levels seem incorrect 84 Photo Packages 52 factory default settings 77 ink levels seem to go down photos from CD using the printer to factory default 40 quickly 85 computer 51 reverse page order 34 memory card, cannot print photos from digital camera using rotating photo 48 from 96 the computer 51 run the Wireless Setup Utility partial document or photo photos from PictBridge-enabled (Windows) 80 prints 81 digital camera 54 partial photo prints when using photos from Productivity PictBridge 97 Studio 52 safety information 2 photo smudges 84 photos from removable storage saving and deleting print poor quality at the edges of the device using the computer 51 settings 39 page 83 photos from the Productivity searched folders preferences poor text and graphic quality 82 Studio 52 changing 47 print speed is slow 83 photos using DPOF settings 55 security information 19 printer is out of paper 95 postcards 36 security keys 74 test page does not print 92 poster 37 setup troubleshooting white lines appear in graphics or posters 36 duplex light is blinking 64 black areas 88 reverse page order 34 page does not print 67 printed characters are improperly test page 91 power button is not lit 63 formed or not aligned 87 transparencies 39 power light is blinking 64 printer two-sided 40, 41 software does not install 66 no communication 95 Web page 32 sharpening photo 49 printer cannot communicate over Web page, photos only 33 slideshow printing failure error 105 peer-to-peer network 93 creating and viewing 55 printer does not feed paper, printouts have alternating bands of smudging, preventing in photos 84 envelopes, or specialty media 99 light and dark print 87 software printer is out of paper 95 Productivity Studio Productivity Studio 17 printer plugged in but does not printing photos 52 removing and reinstalling 68 print 93 viewing photos 52 Solution Center 18 printer software Productivity Studio buttons software does not install 66 installing 16 Photo Greeting Cards 17 Solution Center reinstalling 68 Photo Packages 17 understanding 18 removing 68 Poster 17 Solution Center buttons updating 95 Transfer Photos 17 Advanced 18 printer status understanding 17 How To 18 checking 89 Productivity Studio, Maintenance 18 printing understanding 17 Troubleshooting 18 all photos from a memory publications, finding 9 understanding 18 device 53 solving printer communication banner 39 problems 68 booklets 37 quality settings, checking 91 speed settings, checking 91 Quick Fixes tab cards 36 collate 34 using One-Click Auto Fix 49

printer communication Т establishing bidirectional problems 68 communication 95 test page printer is trying to print to file 93 flash drive, cannot print from 96 printing 91 printer not communicating with improving print quality 81 test page does not print 92 computer 95 ink levels seem incorrect 84 Toolbar printer plugged in but does not ink levels seem to go down printing a Web page 32 print 93 quickly 85 printing only the photos from a printer status 89 memory card, cannot print Web page 33 printouts have alternating bands of from 96 Transfer Photos button 17 light and dark print 87 partial document or photo transfer settings ready or busy printing is listed as prints 81 changing 48 status 91 partial photo prints when using transferring photos resolving font problems 90 PictBridge 97 from CD using computer 46 photo smudges 84 transparencies or photos contain from CD using the computer 46 white lines 88 poor quality at the edges of the from flash drive using page 83 unsupported file types found on computer 46 memory card 106 poor text and graphic quality 82 from flash drive using the vertical straight lines are not print speed is slow 83 computer 46 smooth 88 printer is out of paper 95 from memory card using the wrong printer attached 95 test page does not print 92 computer 45, 46 Troubleshooting button 18 white lines appear in graphics or transparencies troubleshooting, error messages black areas 88 loading 30 out of paper 105 troubleshooting, print quality printing 39 print file error 106 skewed print 84 transparencies or photos contain printing failure error 105 troubleshooting, setup white lines 88 duplex light is blinking 64 troubleshooting, jams and troubleshooting misfeeds page does not print 67 cartridge missing error 104 banner paper jams 100 power button is not lit 63 characters on printout are missing cartridge carrier jam 101 power light is blinking 64 or unexpected 85 paper jam in printer 97 software does not install 66 checking printer status 89 paper jam in the duplex unit 98 troubleshooting, wireless checking quality/speed paper jam in the paper changing wireless settings after settings 91 support 97 installation 77 colors on paper do not match paper or specialty media changing wireless settings after colors on the screen 86 misfeeds 99 installation (Windows) 81 communication not available printer does not feed paper. check printer ports (Windows) 81 error 104 envelopes, or specialty media 99 checking network name faded colors 86 troubleshooting, memory card (Windows) 79 font selections 85 memory card cannot be network printer does not show up general printing problem inserted 102 in printer selection list during error 105 troubleshooting, memory card and installation (Windows) 78 getting document to print 93 photos do not print from memory PictBridge glossy photo paper or nothing happens when memory card across wireless transparencies stick together 86 card is inserted 102 network 103 ink low error 105 troubleshooting, memory card ping printer (Windows) 80 out of memory error 105 reader and PictBridge ping wireless access point page prints with different power light and duplex light are (Windows) 79 fonts 86 blinking alternately 64 run Wireless Setup Utility paper continues to jam 100 troubleshooting, print (Windows) 80 paper jam error 106 blank or incorrect page prints 85 WiFi indicator light is not lit 72 print is dark or smudged 87 cannot print from digital camera wireless network printer does not printed characters are improperly using PictBridge 96 print 75 formed or not aligned 87 wireless printer is no longer checking printer readiness 89 printer cannot communicate over duplex unit does not operate working 76 peer-to-peer network 93 correctly 101

Wireless Setup Utility cannot communicate with printer during installation 78 Wi-Fi indicator light is blinking orange 70 Wi-Fi indicator light is orange 70 two-sided printing, automatic 41 printing, manual 41 two-sided printing understanding 40

U

unsupported file types found on memory card 106 updating printer software 95 USB port 16 enabling 69 using One-Click Auto Fix 49 Quick Fixes tab 49

vertical straight lines are not smooth 88 viewing photos from Productivity Studio 52 photos in the Productivity Studio 52

W Web page printing 32 printing only the photos 33 Web site finding 9 white lines appear in graphics or black areas 88 WiFi indicator light is not lit 72 wireless network adding a printer to existing ad hoc network using Windows 27 common home configurations 20 creating an ad hoc network using Windows 25 MAC address 22 networking overview 20 security keys 74 signal strength 24 types of wireless networks 24 wireless network compatibility 12 wireless network printer does not print 75

wireless printer is no longer working 76 Wireless Setup Utility cannot communicate with printer during installation 78 wireless troubleshooting changing wireless settings after installation 77 changing wireless settings after installation (Windows) 81 check printer ports (Windows) 81 checking network name (Windows) 79 network printer does not show up in printer selection list during installation (Windows) 78 photos do not print from memory card across wireless network 103 ping printer (Windows) 80 ping wireless access point (Windows) 79 run Wireless Setup Utility (Windows) 80 WiFi indicator light is not lit 72 wireless network printer does not print 75 wireless printer is no longer working 76 Wireless Setup Utility cannot communicate with printer during installation 78 Wi-Fi indicator light is blinking orange 70 Wi-Fi indicator light is orange 70 Wi-Fi indicator 15 Wi-Fi indicator light is blinking orange 70 Wi-Fi indicator light is orange 70 wrong printer attached 95