# **Connection guide**

**Note:** For local printing, you must install the printer software (drivers) before connecting the USB cable.

## Installing printer and software for local printing using Windows

- 1 Launch the drivers CD that shipped with the printer.
- 2 Click Install Printer and Software.

- 3 Click Agree to accept the license agreement.
- 4 Select Suggested, and then click Next.

The Suggested option is the default installation for local setup. If you need to install utilities, change settings, or customize device drivers, select **Custom.** Follow the instructions on the computer screen.

5 Select Local Attach, and then click Finish.

Note: It may take a few minutes for the drivers to completely load.

- 6 Close the drivers CD installer application.
- 7 Connect the USB cable. Be sure to match the USB symbol on the cable to the USB symbol on the printer.
  - **Note:** Only Windows 98 SE, Windows Me, Windows 2000, Windows XP, and Windows Server 2003 operating systems support USB connections. Some UNIX, Linux, and Macintosh computers also support USB connections. See the computer operating system documentation to see if your system supports USB.
- 8 Plug one end of the printer power cord into the socket at the back of the printer and the other end into a properly grounded *electrical* outlet that is near the printer and easily accessible.
- 9 Turn on the printer.

Plugging in the USB cable and turning on the printer prompts the Windows operating system to run the plug and play screens to install the printer as a new hardware device. The installation of printer software (drivers) done in step 1 should satisfy the plug and play requirements. When plug and play is finished, a printer object will appear in your Printers folder.

- **Note:** After the printer completes its internal tests, the **Ready** message indicates that the printer is ready to receive jobs. If you see a message other than **Ready** on the display, see the publications CD for instructions on clearing the message.
- 10 Send a test page to print.

#### Using a parallel or serial cable

For detailed instructions, see the User's Guide on the publications CD that shipped with the printer.

#### Local printing with Mac or UNIX/Linux

For detailed instructions, see the User's Guide on the publications CD that shipped with the printer.

**Note:** Some Windows operating systems require that you have administrative access to install printer software (drivers) on the computer.

### Installing printer and software for network printing using Windows

- 1 Make sure the printer is turned off and unplugged from the wall outlet.
- 2 Connect the printer to a LAN drop or hub using an Ethernet cable that is compatible with your network.
- 3 Plug one end of the printer power cord into the socket at the back of the printer and the other end into a properly grounded outlet.
- 4 Turn on the printer.
  - **Note:** After the printer completes its internal tests, the **Ready** message indicates that the printer is ready to receive jobs. If you see a message other than **Ready** on the display, see the publications CD for instructions on clearing the message.
- 5 Go to a computer on the same network, and launch the drivers CD that shipped with the printer.
- 6 Click Install Printer and Software.
- 7 Click Agree to accept the license agreement.
- 8 Select **Suggested**, and then click **Next**.
- 9 Select Network Attach, and then click Next.
- 10 Select your printer model from the list, and then click Next.
- 11 Select your printer port from the list, and then click **Finish** to complete the installation. A printer object is created in the Printers folder on the computer.

If your printer port is not listed, click **Add Port**. Enter the information requested to create a new printer port. Select the option to create an Enhanced TCP/IP Network Port. Other port options will not give you full functionality.

12 Send a test page to print.

#### Other network cabling options

The following may also be available as network options for the printer. More information is available in the *User's Guide* on the publications CD that shipped with the printer.

- Fiber optic internal print servers
- Ethernet internal print servers
- Wireless internal print servers
- Ethernet external print servers
- Wireless external print servers

Detailed instructions for installation are shipped with the product.

#### Network printing using Mac, UNIX/Linux, or NetWare

For information about this support, see the User's Guide on the publications CD that shipped with the printer.

You can find some additional information on the drivers CD that shipped with the printer. Launch the drivers CD, and click **View Documentation**.

# Information guide

There are numerous publications available to help you understand the printer and its functions. This page will help you locate publications and other information for the printer.

## Help menu pages

There are Help menu pages resident in the printer. Each topic can be printed individually, or select **Print All** to print all of them.

Menu Item	Use it to
Print All	Print all of the guides.
Information Guide (this page)	Locate additional information.
Print Quality Guide	Resolve print quality and troubleshooting issues.
Printing Guide	Send, print, cancel print jobs, and load media.
Supplies Guide	Order supplies.
Media Guide	See what types of media are supported by the printer.
Menu Map	View all menus and menu items available.
Connection Guide	Connect the printer as a local or network printer.
Moving Guide	Safely move the printer.

## Setup sheet

The *Setup* sheet packaged with the printer provides information about setting up the printer.

# **Publications CD**

The publications CD which was shipped with the printer contains a *User's Guide*, *Setup* sheet, *Menus and Messages Guide*, and a copy of the Help menu pages.

The *User's Guide* provides information about loading media, ordering supplies, troubleshooting, clearing jams, and removing options. It also includes administrative support information.

The *Menus and Messages Guide* provides information to change the printer settings. It describes the menus available, the menu items under each menu, and the values available.

# Lexmark Web site

Copies of the User's Guide, Setup sheet, Menus and Messages Guide, and Help menu pages are available on the Lexmark Web site at **www.lexmark.com**.

# **Drivers CD**

The drivers CD which was shipped with the printer contains the necessary printer drivers to get the printer up and running. It may also contain printer utilities, screen fonts, and additional documentation.

## **Other languages**

The User's Guide, Setup sheet, Menus and Messages Guide, and Help menu pages are also available in other languages.

Media guide Page 1 of 2

# Media guide

The printer supports the following media sizes. Select custom sizes up to the maximum specified for the Universal setting.

Legend:	✓ — supported	×— unsupported		
Media size	Dimensions	250 and 500-sheet trays	Multipurpose feeder	2000-sheet drawer
A4	210 x 297 mm (8.27 x 11.7 in.)	1	1	✓
A5	148 x 210 mm (5.83 x 8.27 in.)	1	✓ ✓	<u> </u>
JIS B5	182 x 257 mm (7.17 x 10.1 in.)	1	✓	✓ ✓
Letter	215.9 x 279.4 mm (8.5 x 11 in.)	1	1	✓
Legal	215.9 x 355.6 mm (8.5 x 14 in.)	1	<b>v</b>	✓ ✓
Executive	184.2 x 266.7 mm (7.25 x 10.5 in.)	1	1	✓ ✓
Folio	216 x 330 mm (8.5 x 13 in.)	✓*	1	×
Statement	139.7 x 215.9 mm (5.5 x 8.5 in.)	∕*	✓	×
Universal**	69.85 x 210 mm to 229 x 355.6 mm (2.75 x 8.27 in. to 8.5 x 14.0 in.)	1		×
7 ¾ Envelope (Monarch)	98.4 x 190.5 mm (3.875 x 7.5 in.)	×	1	×
9 Envelope	98.4 x 225.4 mm (3.875 x 8.875 in.)	×	1	×
Com 10 Envelope	104.8 x 241.3 mm (4.12 x 9.5 in.)	×	✓ ✓	×
DL Envelope	110 x 220 mm (4.33 x 8.66 in.)	×		×
C5 Envelope	162 x 229 mm (6.38 x 9.01 in.)	×	1	×
B5 Envelope	176 x 250 mm (6.93 x 9.84 in.)	×	1	×
Other Envelope	98.4 x 89.0 mm to 297.0 x 431.8 mm (3.9 x 3.5 in. to 11.7 x 17.0 in.)	×	<i>✓</i>	×
* This size does r ** This size settir	not appear in the Paper Size menu ung formats the page for 215.9 x 355.6	ntil Auto Size Sensing is ch 6 mm (8.5 x 14 in.) unless t	nanged. See the User's the size is specified by the size is specified b	<i>Guide</i> for more information. he software application.

## Storing media

Use the following guidelines for proper media storage. These help avoid media feeding problems and uneven print quality:

- For best results, store media in an environment where the temperature is approximately 21°C (70°F) and the relative humidity is 40%.
- Store cartons of media on a pallet or shelf, rather than directly on the floor.
- When storing individual packages of media out of the original carton, make sure they rest on a flat surface so the edges do not buckle or curl.
- Do not place anything on top of the media packages.
- Store paper in its original wrapper until you load it into the printer.

# Avoiding jams hints

The following hints can help avoid jams:

- Use only recommended paper or specialty media (referred to as media).
- Do not overload the media sources. Make sure the stack height does not exceed the maximum height indicated by the load line labels in the sources.
- Do not load wrinkled, creased, damp, or curled media.
- Flex, fan, and straighten media before you load it. If jams do occur with print media, try feeding one sheet at a time through the multipurpose feeder.
- Do not use media that has been cut or trimmed by hand.
- Do not mix media sizes, weights, or types in the same media source.
- Make sure the recommended print side is loaded in the source according to your simplex or duplex needs.
- Keep media stored in an acceptable environment. See "Storing media" for more information.
- Do not remove trays during a print job.
- Push all trays in firmly after loading them.
- Make sure the guides in the trays are properly positioned for the size of media loaded. Make sure the guides are not placed too tightly against the stack of media.
- Make sure all cables that connect to the printer are correctly attached. See the *Setup* sheet for more information.
- If a jam occurs, clear the entire media path. See the User's Guide for information on clearing jams.

Menu map Page 1 of 1

# Menu map

A number of menus are available on the operator panel to make it easy to change printer settings. The menu map below shows the menus and menu items available. For more information about menu items, see the *Menus and Messages Guide* on the publications CD.

Note: Some menu items may not be available based on the printer model or options installed.

Paper Menu Default Source Paper Size/Type Configure MP Envelope Enhance Substitute Size Paper Texture Paper Weight Paper Loading Custom Types Universal Setup Bin Setup	Reports Menu Settings Page Device Statistics Network Setup Page Profiles List NetWare Setup Page Print Fonts Print Directory	Settings Setup Menu Finishing Menu Quality Menu Utilities Menu PDF Menu POStScript Menu PCL Emul Menu HTML Menu Image Menu	Network/Ports TCP/IP IPv6 Standard Network Network [x] Standard USB USB [x] Parallel Parallel [x] Serial [x] NetWare AppleTalk LexLink	Security Max Invalid PIN Job Expiration Help Print All Print Quality Printing Guide Media Guide Menu Map Information Guide Connection Guide Moving Guide
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### Understanding the operator panel



For more information on the operator panel, see the User's Guide on the publications CD.

# Moving the printer

Follow these guidelines to move the printer to another location.

**CAUTION:** The printer weighs 23 kg (51 lb). It requires at least two people to lift it safely. Use the printer handholds to lift it, and make sure your fingers are not under the printer when you set it down.

CAUTION: Follow these guidelines to avoid injuring yourself or damaging the printer:

- Remove all printer options before moving the printer. Place the options in the original packaging.
- Always use at least two people to lift the printer.
- Always turn off the printer using the power switch before moving it.
- Disconnect all cords and cables from the printer before moving it.

Note: Damage to the printer caused by improper moving is not covered by the printer warranty.

### Moving the printer and options to another location

The printer and options can be safely moved to another location by following these precautions:

- Keep the printer in an upright position.
- Any cart used to move the printer must have a surface able to support the full bottom surface of the printer. Any cart used to move the options must have a surface able to support the dimensions of the options.
- Severe jarring movements may cause damage to the printer and options, and must be avoided.

# **Printing guide**

This help topic covers information about sending a job to print, printing from a USB flash memory device, canceling a print job, printing a menu settings page, printing confidential jobs, printing on special media, and loading paper.

# Sending a job to print

A printer driver is software that lets your computer communicate with your printer. When you choose **Print** from a software application, a window representing the printer driver opens. You can then select the appropriate settings for the specific job you are sending to the printer. Print settings selected from the driver override the default settings selected from the printer operator panel.

You may need to click **Properties** or **Setup** from the initial Print box to see all of the available printer settings you can change. If you are not familiar with a feature in the printer driver window, open the online Help for more information.

To support all the printer features, use the custom printer drivers supplied with your printer.

To print a job from a typical Windows application:

- 1 Open the file you want to print.
- 2 From the File menu, select **Print**.
- 3 Select the correct printer, then modify the printer settings as appropriate (such as the pages you want to print or the number of copies).
- 4 Click **Properties** or **Setup** to adjust printer settings that were not available on the first screen, and then click **OK**.
- 5 Click **OK** or **Print** to send the job to the selected printer.

# Printing from a USB flash memory device

A USB Direct interface is located on the front of the operator panel so you can insert a USB flash memory device and print PDF documents.

- 1 Make sure the printer is on and **Ready** is displayed.
- 2 Insert a USB flash memory device into the front USB Direct interface.
  - Note: If you insert the drive when the printer is busy printing other jobs, the message **Printing other jobs** will appear. Select **Continue** and your job prints after the other jobs finish.



- 3 Press ▼ until the √ appears next to the document you want to print.
- 4 Press 🗸.

A screen asking the number of copies to be printed appears.

- 5 To print only one copy, press 

   ✓. Otherwise, press ▲ to indicate the number of copies, and then press √.
  - **Note:** Do not remove the USB flash memory device from the USB Direct interface until the document has finished printing.

The document will begin printing.

# Canceling a print job

There are several methods for canceling a print job:

- Canceling a job from the printer operator panel
- Canceling a job from a computer running Windows
  - Canceling a job from the taskbar
  - Canceling a job from the desktop
- Canceling a job from a Macintosh computer running Mac OS 9.x
- Canceling a job from a Macintosh computer running Mac OS X

# Canceling a job from the printer operator panel

**Note:** For more information about the operator panel, see Understanding the printer operator panel in the *User's Guide*.

If the job you want to cancel is printing, and **Busy** appears on the display:

- 1 Press 🚫 on the operator panel.
- 2 Press ▼ until the √ appears next to Cancel Job.
- 3 Press 🗸 .

The message **Canceling Job** is displayed until the job is canceled.

# *Canceling a job from a computer running Windows*

#### Canceling a job from the taskbar

When you send a job to print, a small printer icon appears in the right corner of the taskbar.

1 Double-click the printer icon.

A list of print jobs appears in the printer window.

- 2 Select the job you want to cancel.
- 3 Press the **Delete** key on the keyboard.

#### Canceling a job from the desktop

- 1 Minimize all programs to reveal the desktop.
- 2 Double-click the My Computer icon.

3 Double-click the **Printers** icon.

A list of available printers appears.

- 4 Double-click the printer you selected when you sent the job.
  - A list of print jobs appears in the printer window.
- 5 Select the job you want to cancel.
- 6 Press the **Delete** key on the keyboard.

# Canceling a job from a Macintosh computer running Mac OS 9.x

When you send a job to print, the printer icon for your selected printer appears on the desktop.

- 1 Double-click the printer icon on your desktop.
  - A list of print jobs appears in the printer window.
- 2 Select the print job you want to cancel.
- 3 Press the button with the trash can.

# Canceling a job from a Macintosh computer running Mac OS X

- 1 Open Applications → Utilities, and then double-click Print Center or Printer Setup.
- 2 Double-click the printer you are printing to.
- 3 In the printer window, select the print job you want to cancel.
- 4 Press Delete.

### Printing the menu settings page

You can print a menu settings page to review the default printer settings and to verify your printer options are installed correctly.

- 1 Make sure the printer is on.
- 2 Press is on the operator panel.
- 3 Press  $\mathbf{\nabla}$  until the  $\sqrt{}$  appears next to **Reports**.
- 4 Press 🗸 .
- 5 Press ▼ until the √ appears next to Menu Settings Page.

6 Press 🗸 .

The printer returns to **Ready** after the page prints.

### Printing a network setup page

You can print a network setup page to review the default printer settings and to verify the printer options are installed correctly.

- 1 Make sure the printer is on.
- 2 Press log on the operator panel.
- 3 Press  $\mathbf{\nabla}$  until the  $\sqrt{}$  appears next to **Reports**.
- 4 Press 🗸 .
- 5 Press ▼ until the √ appears next to Network Setup Page or Network <x> Setup Page.
- 6 Press 🗸 .

The printer returns to the Ready state after the network setup page prints.

# Printing confidential and held jobs

The confidential and held jobs function lets you print or delete a confidential job, a verify print job, a reserve print job, or a repeat print job.

When sending a job to the printer, you can specify in the driver that you want the printer to hold the job in memory. Once your job is stored in printer memory, go to the printer and use the printer operator panel to specify what you want to do with your print job.

All confidential and held jobs have a user name associated with them. To access confidential or held jobs, select Held Jobs from the home screen, and then select your user name. After selecting your user name, you can:

> Print All Jobs Print A Job Print Copies

Delete All Jobs Delete A Job

#### Printing a confidential job

When you send a confidential job to the printer, you must enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 0–9. The job is held in printer memory until

you enter the same four-digit PIN from the operator panel and choose to print or delete the job. This ensures the job does not print until you are there to retrieve it. No one else using the printer can print the job without the PIN.

#### Windows

- 1 From a word processor, spreadsheet, browser, or other application, select **File** → **Print**.
- 2 Click **Properties**. (If there is no Properties button, click **Setup**, and then click **Properties**.)
- 3 Depending on the operating system, you may have to click the **Other Options** tab →, and then click **Print and Hold**.
  - Note: If you have difficulty finding Print and Hold → Confidential Print, click **Help** and refer to the topic Confidential Print or Print and Hold, and then follow the driver instructions.
- 4 Enter a User Name and PIN.
- 5 Send your job to the printer.

Go to the printer when you are ready to retrieve your confidential print job, and follow the steps for printing held jobs.

#### Macintosh

- 1 From a word processor, spreadsheet, browser, or other application, select **File** → **Print**.
- 2 In the Copies & Pages or General pop-up menu, select **Job Routing**.
  - a When using Mac OS 9, if Job Routing is not a choice on the pop-up menu, select Plug-in Preferences → Print Time Filters.
  - b Then turn down the disclosure triangle to the left of Print Time Filters, and select Job Routing.
  - c Then, in the pop-up menu, select **Job Routing**.
- 3 In the radio group, select **Confidential Print**.
- 4 Enter a User Name and PIN.
- 5 Send your job to the printer.

Go to the printer when you are ready to retrieve your confidential print job, and follow the "At the printer" steps on page 4.

#### At the printer

- 1 Press ▼ until the √ appears next to Held Jobs.
- 2 Press 🗸.
- 3 Press ▼ until the √ appears next to your user name.
- 4 Press 🗸.
- 5 Press ▼ until the √ appears next to Confidential Jobs.
- 6 Press 🗸.
- 7 Enter your PIN.

For more information, see "Entering a personal identification number (PIN)".

- 8 Press ▼ until the √ appears next to the job you want to print.
- 9 Press 🗸.
  - **Note:** After your job prints, it is deleted from printer memory.

#### Entering a personal identification number (PIN)

After you select your user name and Confidential Job, the Enter Pin screen appears.

- 1 Use the numeric pad to the right of the display to enter the four-digit PIN associated with your confidential job.
  - **Note:** As you enter the PIN, asterisks appear on the display to ensure confidentiality.

If you enter an invalid PIN, the Invalid PIN screen appears.

Press  $\checkmark$  to reenter the PIN or press  $\checkmark$  until the  $\checkmark$  appears next to Cancel, and then press  $\checkmark$ .

- 2 Press ▼ until the √ appears next to the job you want to print.
- 3 Press 🗸.
  - **Note:** After your job prints, it is deleted from printer memory.

#### Printing and deleting held jobs

Held jobs (Verify Print, Reserve Print, or Repeat Print) are printed or deleted from the printer operator panel and do not require a PIN number.

#### **Verify Print**

If you send a Verify Print job, the printer prints one copy and holds the remaining copies you requested in printer memory. Use Verify Print to examine the first copy to see if it is satisfactory before printing the remaining copies. Once all copies are printed, the Verify Print job is automatically deleted from printer memory.

#### **Reserve Print**

If you send a Reserve Print job, the printer does not print the job immediately. It stores the job in memory so you can print the job later. The job is held in memory until you delete it from the Held Jobs menu. Reserve Print jobs may be deleted if the printer requires extra memory to process additional held jobs.

#### **Repeat Print**

If you send a Repeat Print job, the printer prints all requested copies of the job *and* stores the job in memory so you can print additional copies later. You can print additional copies as long as the job remains stored in memory.

**Note:** Repeat Print jobs are automatically deleted from printer memory when the printer requires extra memory to process additional held jobs.

#### Windows

- 1 From a word processor, spreadsheet, browser, or other application, select **File** → **Print**.
- 2 Click **Properties**. (If there is no Properties button, click **Setup**, and then click **Properties**.)
- 3 Depending on the operating system, you may have to click the **Other Options** tab, and then click **Print and Hold**.
  - Note: If you have difficulty finding Print and Hold → Held Jobs, click **Help**, and refer to the topic Held Jobs or Print and Hold, then follow the driver instructions.

4 Select the type of held job you want, and then send your job to the printer.

Go to the printer when you are ready to retrieve your confidential print job, and follow the "At the printer" steps on page 5.

#### Macintosh

- 1 From a word processor, spreadsheet, browser, or other application, select **File** → **Print**.
- 2 In the **Copies & Pages** or **General** pop-up menu, select **Job Routing**.
  - a When using Mac OS 9, if Job Routing is not a choice on the pop-up menu, select Plug-in Preferences → Print Time Filters.
  - b Then turn down the disclosure triangle to the left of Print Time Filters, and select Job Routing.
  - c Then, in the pop-up menu, select Job Routing.
- 3 In the radio group, select the type of held job you want, enter a user name, and then send your job to the printer.

Go to the printer when you are ready to retrieve your confidential print job, and follow the "At the printer" steps on page 5.

#### At the printer

- 1 Press ▼ until the √ appears next to Held Jobs.
- 2 Press 🗸.
- 3 Press ▼ until the √ appears next to your user name.
- 4 Press 🗸.
- 5 Press ▼ until the √ appears next to the type of action you want to perform:

Print All Jobs	Delete All Jobs
Print A Job	Delete A Job
Print Copies	

- 6 Press 👽.
- 7 Press ▼ until the √ appears next to the job you want.
- 8 Press 🗸.

The job will print or be deleted according to the type of print job and action you selected.

## Printing on specialty media

*Media* is paper, card stock, transparencies, labels, and envelopes. The last four are sometimes referred to as *specialty media*. Follow these instructions to print on specialty media.

- 1 Load the media as specified for the tray being used. See "Loading media" on page 6 for help.
- 2 From the printer operator panel, set the Paper Type and Paper Size according to the media you loaded. See "Setting the Paper Type and Paper Size" on page 8 for help.
- 3 From the computer software application, set the paper type, size, and source according to the media you loaded.

#### Windows

- a From a word processor, spreadsheet, browser, or other application, select File → Print.
- **b** Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.
- c Click the Paper tab.

A paper tray list will appear.

- **d** Select the tray containing the special media.
- **Note:** If you have difficulty finding paper tray list, click **Help** and then follow the driver instructions.
- e Select the media type (transparencies, envelopes, and so on) from the **Paper Type** list box.
- f Select the size of the specialty media from the **Paper Size** list box.
- **g** Click **OK**, and then send the print job as usual.

#### Mac OS 9

- a From a word processor, spreadsheet, browser, or other application, select File → Page Setup.
- **b** Select the size of the specialty media from the **Paper** pop-up menu.
- c Click OK.

- d From the word processor, spreadsheet, browser, or other application, select
   File → Print.
- e With General selected on the top pop-up menu, go to the Paper Source pop-up menus and select the tray containing the specialty media, or the name of the media.
- f Click Print.

#### Mac OS X

- a From a word processor, spreadsheet, browser, or other application, select File → Page Setup.
- **b** Select the printer from the **Format for** pop-up menu.
- **c** Select the size of the specialty media from the **Paper** pop-up menu.
- d Click OK.
- e From the word processor, spreadsheet, browser, or other application, select
   File → Print.
- f On the Copies & Pages pop-up menu, select Imaging.
- g Select the specialty media on the **Paper Type** pop-up menu.
- h On the Imaging pop-up menu, select Paper Feed.
- i Select the tray containing the specialty media from the All pages from or First page from / Remaining from pop-up menus.
- j Click Print.

### Loading media

Get the most from the printer by properly loading the trays, and setting the types and sizes for media.

#### General guidelines

- Do not overload the media sources.
- Make sure the stack height does not exceed the maximum height indicated by the labels on the guides. Overloading may cause jams.
- Never mix media types within a tray.

# Loading 250-sheet, 500-sheet trays, or the universally adjustable tray

Do not remove trays while a job prints or while **Busy** blinks on the operator panel. Doing so may cause a jam.

1 Remove the tray from the printer, and place it on a flat, level surface.



2 Squeeze the side guide tab, and slide the guide to the outside of the tray.



Printing guide Page 7 of 8

3 Squeeze the rear guide tab, and slide the guide to the correct position for the size media you are loading.



4 Flex the sheets back and forth to loosen them, then fan them. Do not fold or crease the print media. Straighten the edges on a level surface.



- 5 Place the print media in the tray:
  - **Note:** Paper must be loaded differently in the trays depending on the options you have installed.
    - print side face down for *simplex* (single-sided) printing
    - print side face up for duplex printing



- 6 Squeeze the side guide tab, and slide the guide toward the inside of the tray until it lightly rests against the edge of the media.
- 7 Insert the tray into the printer.

Without an optional finisher

## Setting the Paper Type and Paper Size

After setting the Paper Type and Paper Size to the correct values for the type and size used in the trays, then any trays containing the same size and type are automatically linked by the printer.

**Note:** If the size of the media you are loading is the same size of the media previously loaded, do not change the Paper Size setting.

To change the Paper Size and Paper Type setting:

- 1 Make sure your printer is on.
- 2 Press in the operator panel.
- 3 Press ▼ until the √ appears next to Paper Menu.
- 4 Press 🗸.
- 5 Press ▼ until the √ appears next to Paper Size/Type.
- 6 Press 🗸.
- 7 Press ▼ until the √ appears next to the input source you want to use.
- 8 Press 🗸.
- 9 Press ▼ until the √ appears next to the paper size you want to use.
- 10 Press 🗸.
- 11 Press ▼ until the √ appears next to the paper type you want to use.
- 12 Press 🗸.

This saves this setting as the new user default size or type setting.

The message **Submitting Selection** appears. The printer returns to the **Ready** state.

#### For more information, see:

- The Media Guide available in the Help Menu.
- The User's Guide on the publications CD.

# Print quality and troubleshooting

Many print quality problems can be solved by replacing a supply or maintenance item that has reached the end of its intended life. Check the operator panel for a message about a printer consumable. See the *User's Guide* for information about other ways to identify consumables that need to be replaced.

**Note:** Use only components and supplies from the printer manufacturer. Using supplies from other manufacturers can degrade print quality, performance, and safety.

The Quality Menu operator panel options can be adjusted to help improve print quality. For more information about these menu options, see the *Menus and Messages Guide* on the publications CD.

Menu selection	Purpose	Values		
Print Resolution	Defines the number of dots printed per inch (dpi).	600 dpi*		
		1200 Image Q		
		1200 dpi		
		2400 Image Q		
Toner Darkness	Lightens or darkens printed output and conserves toner.	1–10	8* is the default setting.	
			Select a lower number to lighten the printed output or save toner.	
Brightness	Adjusts the gray value of printed objects.	-6 - +6	0* is the default setting.	
Contrast	Adjusts the contrast of printed objects.	0–5	0* is the default setting.	

In addition, the Enhance Fine Lines and Gray Correction options can be enabled to improve print quality. These settings are available on the driver and on the printer Embedded Web Server (EWS) interface. For more information about these options, see the driver Help.

Driver option	Purpose	Values <sup>†</sup>	
Enhance Fine Lines	A selection to enable a print mode preferable for certain files containing fine line detail, such as architectural drawings, maps, electronic circuit diagrams, and flow charts.	On	In the driver, enable the check box.
		Off*	In the driver, disable the check box.
Gray Correction	Automatically adjusts the contrast enhancement applied to images. <b>Note:</b> Selecting this feature disables the manual Brightness and Contrast controls.	Auto*	In the driver, enable the check box.
		Off	In the driver, disable the check box.
<sup>†</sup> Values marked by an asterisk (*) are the factory default settings.			

The information in the following table may help you solve print quality problems. If these suggestions still do not correct the problem, call for service. You may have a printer part that requires adjustment or replacement.

Problem	Action
Print is too light.	<ul> <li>The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge pointing downward, shake the print cartridge back and forth. Reinstall the cartridge, and then press v.</li> <li>Change the <b>Toner Darkness</b> setting in the Quality Menu.</li> <li>If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu.</li> <li>Verify the correct print media is being used.</li> </ul>
Toner smears or print comes off the page.	<ul> <li>If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu.</li> <li>Verify the print media is within the printer specifications. See the <i>User's Guide</i> for more details.</li> <li>If the problem continues, turn the printer off, and contact the place you bought your printer.</li> </ul>
Toner appears on the back of the printed page.	Toner is on the transfer roll. To help prevent this, do not load print media that is smaller than the page size of the job to be printed. Open and close the printer top front cover to run the printer setup cycle and clean the transfer roll.
Toner fog or background shading appears on the page.	<ul> <li>Check the print cartridge to make sure it is installed correctly.</li> <li>Replace the print cartridge.</li> <li>Replace the charge rolls.</li> </ul>
Entire page is white.	<ul> <li>Make sure the packaging material is removed from the print cartridge.</li> <li>Check the print cartridge to be sure it is installed correctly.</li> <li>The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge, and then press </li> </ul>

Problem	Action
Streaks appear on the page.	<ul> <li>The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge, and then press v.</li> <li>If you are using preprinted forms, make sure the ink can withstand temperatures of 212°C (414°F).</li> </ul>
Printing is too dark.	Change the <b>Toner Darkness</b> setting in the Quality Menu. See the <i>Menus and Messages Guide</i> on the publications CD for more information. <b>Note:</b> Macintosh computer users should make sure the lines per inch (lpi) setting is not set too high in the software application.
Characters have jagged or uneven edges. ABC DEF	<ul> <li>Change the Print Resolution setting in the Quality Menu to 600 dpi, 1200 Image Q, 1200 dpi, or 2400 Image Q. See the <i>Menus and Messages Guide</i> on the publications CD for more settings information.</li> <li>If you are using downloaded fonts, verify the fonts are supported by the printer, the host computer, and the software application.</li> </ul>
Part or all of the page is printed in black.	Check the print cartridge to see if it is installed correctly. Make sure the charge roll is secure and not at end of life.

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Problem	Action	
The job prints, but the top and side margins are incorrect. ABC E	<ul> <li>Make sure the Paper Size setting in the Paper Menu is correct.</li> <li>Make sure the margins are set correctly in your software application.</li> </ul>	
Ghost images appear.	<ul> <li>Make sure the <b>Paper Type</b> setting in the Paper Menu is correct.</li> <li>Replace the print cartridge.</li> </ul>	
Gray background prints.	<ul> <li>The Toner Darkness setting may be too dark. Change the Toner Darkness setting in the Quality Menu. See the <i>Menus and Messages Guide</i> on the publications CD for more information.</li> <li>The print cartridge may be defective. Replace the print cartridge.</li> </ul>	
Repeating defects appear.	Either the print cartridge, transfer rollers, or the fuser is defective. See "Print quality troubleshooting" for more information.	
Some of the print is cut off on the sides, top, or bottom of the media.	Move the guides in the tray to the proper positions for the size loaded.	
Print is skewed or inappropriately slanted.		
Transparency print quality is poor.	<ul> <li>Use only transparencies recommended by the printer manufacturer.</li> <li>Make sure the <b>Paper Type</b> setting in the Paper Menu is set to Transparency.</li> </ul>	

## Print quality troubleshooting

To help isolate print quality problems, print the Print Quality Test Pages.

**Note:** A  $\checkmark$  (check mark) appears to the left of an item to indicate that it is selected.

- 1 Turn the printer off.
- 2 Hold down **√** and **▶**, and turn the printer on.

The Performing Self Test message appears followed by Config Menu.

3 Press ▼ until Prt Quality Pgs is selected, and then press √.

The pages are formatted. The **Printing Quality Test Pages** message appears, then the pages print. The message remains on the operator panel until all the pages print.

The Print Quality Test Pages contain four pages printed in English text only. The first page contains general printer information. The second page is gray with two black squares, and the third page is solid black. The fourth page is blank so you can see if there is streaked or smeared toner appearing on the page.

After the Print Quality Test Pages print, to exit the Config Menu:

- 4 Press ▼ until Exit Config Menu is selected, and then press √.
- 5 The messages **Resetting Printer** and **Performing Self Test** appear, and the printer returns to **Ready**.

If another type of print quality problem exists, see the Troubleshooting chapter in the *User's Guide* on the publications CD.

# Print defects guide

Match a set of repeating defects on a print job to the marks on one of the vertical lines. The line that best matches the defects on the print job indicates which particular part is causing the defect.

For example, the distance between these two marks represents a repeating defect that occurs every 28.3 mm (1.11 in.), which means the charge rollers need to be replaced.



**Note:** If the defect appears on the printed side of a single-sided print job, replace the **toner cartridge** before replacing the **fuser**.



# **Supplies guide**

#### Ordering a print cartridge

When the 88 Toner is Low message appears, you should order a new print cartridge. You may be able to print several more pages after the 88 Toner is Low message appears by shaking the print cartridge.

To use the remaining toner, remove the print cartridge, and then shake it back and forth.

You need to have a new cartridge available when the current one no longer prints satisfactorily. The following table lists the part numbers for ordering print cartridges.



Part number	Description	Average cartridge yield <sup>1</sup>	T640	T642	T644	
Recommended print cartridges						
64015SA <sup>2</sup> 64016SE <sup>3</sup> 64017SR <sup>4</sup>	Return Program Print Cartridge	6,000 standard pages	X	Х	X	
64015HA <sup>2</sup> 64016HE <sup>3</sup> 64017HR <sup>4</sup>	High Yield Return Program Print Cartridge	21,000 standard pages	X	Х	Х	
64415XA <sup>2</sup> 64416XE <sup>3</sup> 64417XR <sup>4</sup>	Extra High Yield Return Program Print Cartridge	32,000 standard pages			х	
64004HA <sup>2</sup> 64004HE <sup>3</sup> 64004HR <sup>4</sup>	High Yield Return Program Print Cartridge for Label Applications	21,000 standard pages	X	Х	Х	
64404XA <sup>2</sup> 64404XE <sup>3</sup> 64404XR <sup>4</sup>	Extra High Yield Return Program Print Cartridge for Label Applications	32,000 standard pages			Х	
Other available	e print cartridges					
64035SA <sup>2</sup> 64036SE <sup>3</sup> 64037SR <sup>4</sup>	Print Cartridge	6,000 standard pages	X	Х	х	
64035HA <sup>2</sup> 64036HE <sup>3</sup> 64037HR <sup>4</sup>	High Yield Print Cartridge	21,000 standard pages	X	Х	х	
64435XA <sup>2</sup> 64436XE <sup>3</sup> 64437XR <sup>4</sup>	Extra High Yield Print Cartridge	32,000 standard pages			Х	
<sup>1</sup> Declared yield value in accordance with ISO/IEC 19752. <sup>2</sup> Designed for use only in North, Central and South America.						

<sup>b</sup> Designed for use only in Europe, Middle East and Africa.

<sup>4</sup> Designed for use only in Asia, Australia and New Zealand.