



# Online User's Guide

**HL-L9430CDN**

**HL-L9470CDN**

**!CAUTION** Before using this product, read carefully these instructions for correct operation.  
Keep the User's Guide in a secure place for future reference.

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## Before You Use Your Machine

- [Definitions of Notes](#)
- [Trademarks](#)
- [Open Source Licensing](#)
- [Copyright and License](#)
- [Important Notes](#)

## Definitions of Notes

We use the following symbols and conventions throughout this User's Guide:

 <b>WARNING</b>	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injuries.
 <b>CAUTION</b>	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injuries.
<b>IMPORTANT</b>	IMPORTANT indicates a potentially hazardous situation which, if not avoided, may result in damage to property or loss of product functionality.
<b>NOTE</b>	NOTE specifies the operating environment, conditions for installation, or special conditions of use.
	Tips icons indicate helpful hints and supplementary information.
	Electrical Hazard icons alert you to possible electrical shock.
	Fire Hazard icons alert you to the possibility of a fire.
	Hot Surface icons warn you not to touch hot machine parts.
	Prohibition icons indicate actions you must not perform.
<b>Bold</b>	Bold style identifies buttons on the machine's control panel or computer screen.
<i>Italics</i>	Italicised style emphasises an important point or refers you to a related topic.
Courier New	Courier New font identifies messages shown on the machine's LCD.



### Related Information

- [Before You Use Your Machine](#)

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### Related Information

- [Before You Use Your Machine](#)



## Open Source Licensing

This product includes open source software.

To view Open Source Licensing Remarks and Copyright Information, go to your model's **Manuals** page at [support.brother.com](http://support.brother.com).



### Related Information

- [Before You Use Your Machine](#)
-

## Copyright and License

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This product includes software developed by the following vendors:

This product includes the "KASAGO TCP/IP" software developed by ZUKEN ELMIC, Inc.

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U.S.Patent Office 5,860,082/6,260,156



### Related Information

- [Before You Use Your Machine](#)
-

## Important Notes

- Check [support.brother.com](http://support.brother.com) for Brother driver and software updates.
- To keep your machine performance up to date, check [support.brother.com](http://support.brother.com) for the latest firmware upgrade. Otherwise, some of your machine's functions may not be available.
- Do not use this product outside the country of purchase as it may violate the wireless telecommunication and power regulations of that country.
- Not all models are available in all countries.
- Before giving your machine to anyone else, replacing it, or disposing of it, Brother strongly recommends resetting it to its factory settings to remove all personal information.
- Windows 10 in this document represents Windows 10 Home, Windows 10 Pro, Windows 10 Education and Windows 10 Enterprise.
- Windows Server 2008 in this document represents Windows Server 2008 and Windows Server 2008 R2.
- The screens or images in this User's Guide are for illustration purposes only and may differ from those of the actual products.
- Unless otherwise specified, the screens in this manual are from Windows 10. Screens on your computer may vary depending on your operating system.
- The contents of this document and the specifications of this product are subject to change without notice.
- In this document XXX-XXXX represents your machine's model name.



### Related Information

- [Before You Use Your Machine](#)

## Introduction to Your Machine

- [Before Using Your Machine](#)
- [Front View and Back View](#)
- [Control Panel Overview](#)
- [How to Navigate the Touchscreen LCD](#)
- [How to Enter Text on Your Machine](#)
- [Access Brother Utilities \(Windows\)](#)
- [Input/Output Port Locations on Your Machine](#)

## Before Using Your Machine

Before attempting any printing operation, confirm the following:

- Make sure you have installed the printer driver.
- For USB or network cable users: Make sure the interface cable is physically secure.

### Firewall (Windows)

If your computer is protected by a firewall and you are unable to network print, you may need to configure the firewall settings. If you are using the Windows Firewall and you installed the drivers using the steps in the installer, the necessary firewall settings have been already set. If you are using any other personal firewall software, see the User's Guide for your software or contact the software manufacturer.

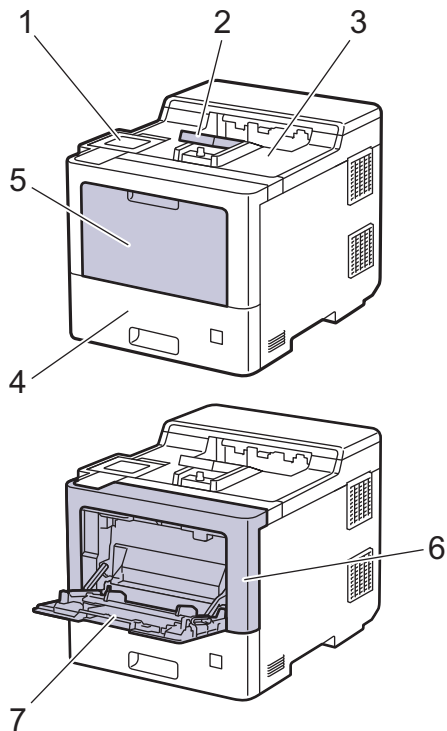


### Related Information

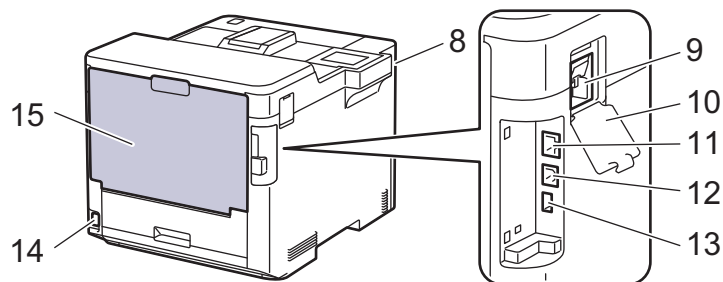
- [Introduction to Your Machine](#)
-

## Front View and Back View

### Front View



### Back View



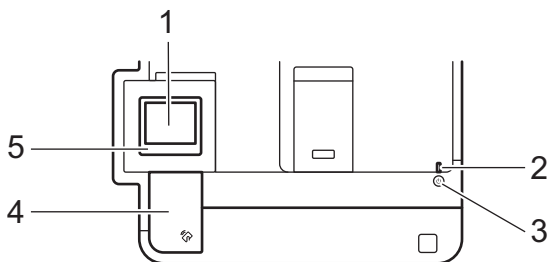
1. Touch panel with a tiltable touchscreen LCD
2. Face-down output tray support flap
3. Face-down output tray
4. Paper tray
5. Multi-purpose tray (MP tray) cover
6. Front cover
7. Multi-purpose tray (MP tray)
8. USB accessory port (Front)
9. Wireless module connector
10. Wireless module cover
11. 10BASE-T / 100BASE-TX / 1000BASE-T port
12. USB port
13. USB accessory port (Rear)
14. AC power connector / cord
15. Back cover (Face-up output tray)



## Related Information

- [Introduction to Your Machine](#)
-

# Control Panel Overview

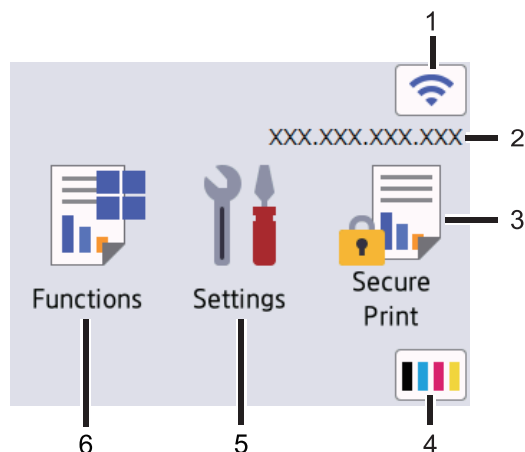


## 1. Touchscreen Liquid Crystal Display (LCD)

Access menus and options by pressing them on the touchscreen.

From the Home screen, you can access the WiFi setup <sup>1</sup>, Toner level, Settings, Functions, and Secure Print screens.

The Home screen displays the machine's status when the machine is idle. When displayed, this screen indicates that your machine is ready for the next command.




### 1. (Wireless Status) <sup>1</sup>

Press to configure wireless settings.

For certain models, the Home screen displays the wireless status when the optional Wireless Module is installed.

If you are using a wireless connection, a four-level indicator on the Home screen displays the current wireless signal strength.



If you see  displayed as the Wireless Status, press it to select a wireless connection method or edit an existing wireless connection.

### 2. IP Address

If the IP Address setting in the Screen Settings menu is turned on, your machine's IP Address appears on the Home screen.

### 3. [Secure Print]


Press to access the Secure Print option.

<sup>1</sup> For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.




4.  (Toner)


Displays the remaining toner life. Press to access the [Toner] menu.

5.  [Settings]

Press to access the [Settings] menu.

Use the Settings menu to access all of your machine's settings.

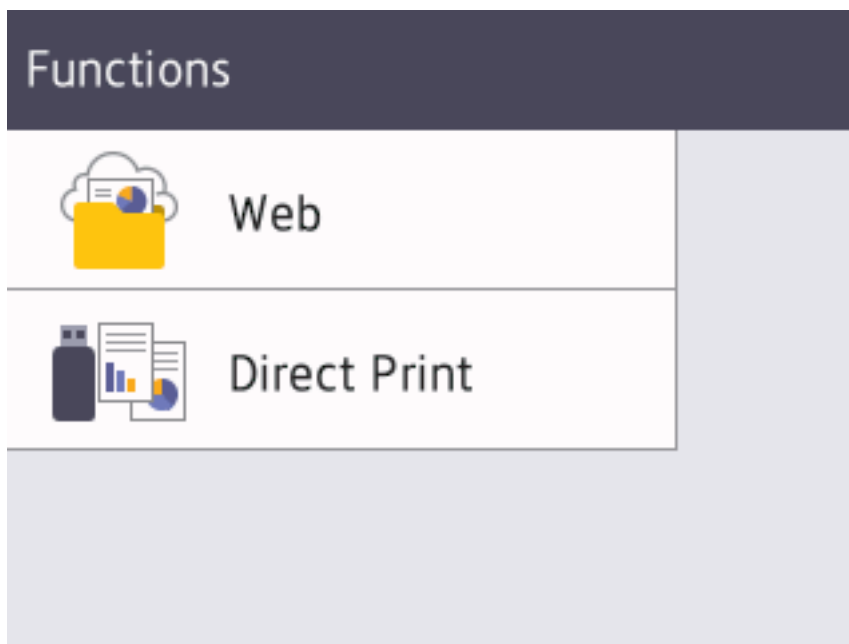
If the Setting Lock is set to On, a lock icon  appears on the LCD. You must unlock the machine to change any settings.

6.  [Functions]

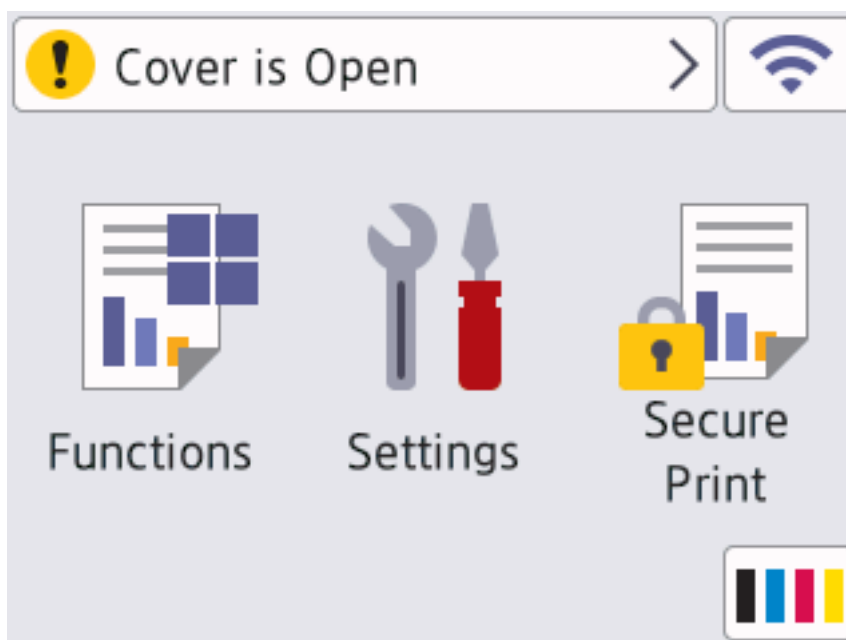
Press to access the Functions screen.

 [Direct Print]




Press to access the Direct Print menu.



**Warning icon**





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The warning icon  appears when there is an error or maintenance message; press  to view it, and then press  to return to Ready Mode.

## 2. LED Power Indicator

The LED lights up depending on the machine's power status.

## 3. Power On/Off

- Turn the machine on by pressing .
- Turn the machine off by pressing and holding down .

## 4. Near Field Communication (NFC)

You can use card authentication by touching the IC card to the NFC Reader on the control panel.

## 5. Touchpanel



Press to go back to the previous menu.



Press to return to the Home screen.



Press to cancel an operation. Press to cancel a programmed print job and clear it from the machine's memory.

---

## Related Information

- [Introduction to Your Machine](#)
-

## How to Navigate the Touchscreen LCD

Press your finger on the LCD to operate it. To display and access all the options, press ▲ or ▼ on the LCD to scroll through them.

### IMPORTANT

DO NOT press the LCD with a sharp object such as a pen or stylus. It may damage the machine.

### NOTE

DO NOT touch the LCD immediately after plugging in the power cord or turning on the machine. Doing this may cause an error.



This product adopts the font of ARPHIC TECHNOLOGY CO.,LTD.

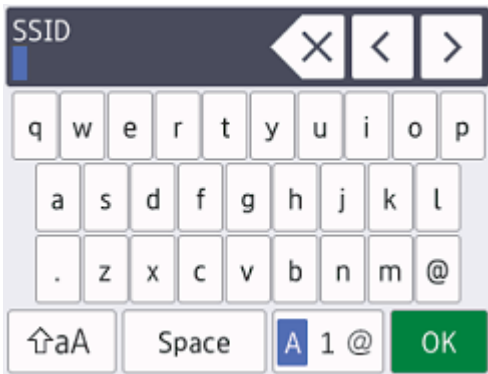




### Related Information

- [Introduction to Your Machine](#)

## How to Enter Text on Your Machine

- When you must enter text on your machine, a keyboard appears on the LCD.
- The characters that are available may differ depending on your country.
- The keyboard layout may differ depending on the operation you perform.






- Press  to cycle between letters, numbers and special characters.
- Press  to cycle between lowercase and uppercase letters.
- To move the cursor to the left or right, press ◀ or ▶.

### Inserting spaces

- To enter a space, press [Space].

### Making corrections

- If you entered a character incorrectly and want to change it, press ◀ or ▶ to move the cursor to the incorrect character and press . Enter the correct character.
- To insert a character, press ◀ or ▶ to move the cursor to the correct place, and then enter the character.
- Press  for each character you want to erase, or press and hold  to erase all the characters.



### Related Information

- [Introduction to Your Machine](#)

#### Related Topics:


- [Configure Your Machine for a Wireless Network Using the Machine's Control Panel Setup Wizard](#)
- [Configure Your Machine for a Wireless Network When the SSID Is Not Broadcast](#)

## Access Brother Utilities (Windows)


**Brother Utilities** is an application launcher that offers convenient access to all Brother applications installed on your computer.


1. Do one of the following:

- (Windows 10, Windows Server 2016 and Windows Server 2019)


Click  > **Brother** > **Brother Utilities**.

- (Windows 8.1 and Windows Server 2012 R2)

Move your mouse to the lower left corner of the **Start** screen and click  (if you are using a touch-based device, swipe up from the bottom of the **Start** screen to bring up the **Apps** screen).

When the **Apps** screen appears, tap or click  (**Brother Utilities**).

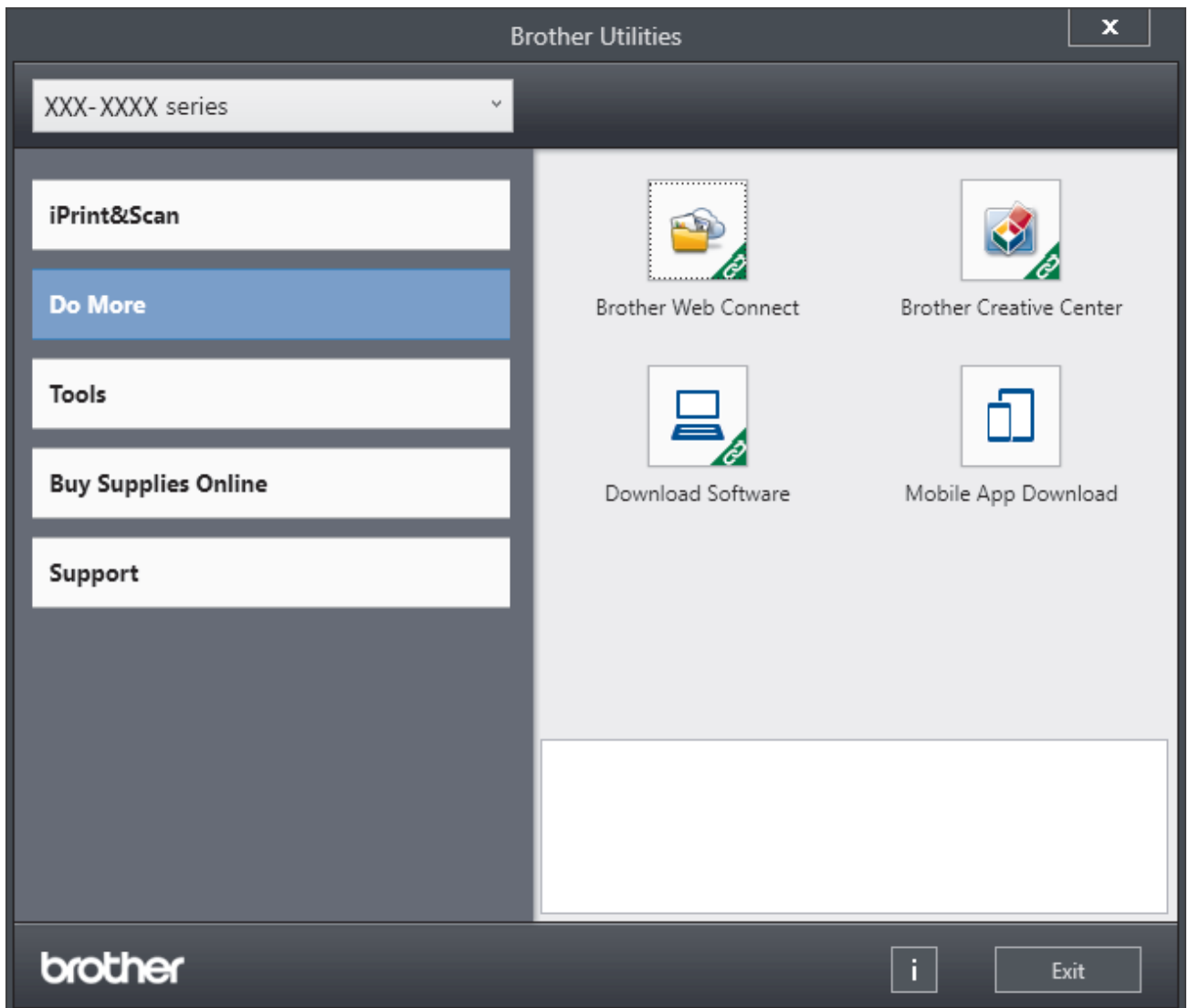
- (Windows 7, Windows Server 2008 and Windows Server 2008 R2)

Click  (**Start**) > **All Programs** > **Brother** > **Brother Utilities**.

- (Windows Server 2012)

Tap or click  (**Brother Utilities**) either on the **Start** screen or the desktop.

2. Select your machine (where XXXX is the name of your model).



3. Choose the operation you want to use.



## Related Information

- [Introduction to Your Machine](#)
  - [Uninstall the Software and Drivers \(Windows\)](#)
-

## Uninstall the Software and Drivers (Windows)

1. Do one of the following:
  - (Windows 10, Windows Server 2016 and Windows Server 2019)  
Click  > **Brother** > **Brother Utilities**.
  - (Windows 8.1 and Windows Server 2012 R2)  
Move your mouse to the lower left corner of the **Start** screen and click  (if you are using a touch-based device, swipe up from the bottom of the **Start** screen to bring up the **Apps** screen).  
When the **Apps** screen appears, tap or click  (**Brother Utilities**).
  - (Windows Server 2012)  
Tap or click  (**Brother Utilities**) either on the **Start** screen or the desktop.
  - (Windows 7, Windows Server 2008 and Windows Server 2008 R2)  
Click  (**Start**) > **All Programs** > **Brother** > **Brother Utilities**.
2. Select your model from the drop-down list (if it is not already selected).
3. Click **Tools** in the left navigation bar.
  - If the **Software Update Notification** icon is visible, select it, and then click **Check now** > **Check for Software Updates** > **Update**. Follow the on-screen instructions.
  - If the **Software Update Notification** icon is not visible, go to the next step.
4. Click **Uninstall** in the **Tools** section of **Brother Utilities**.  
Follow the instructions in the dialog box to uninstall the software and drivers.

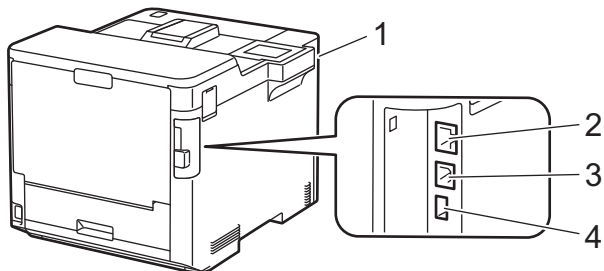


### Related Information

- [Access Brother Utilities \(Windows\)](#)

## Input/Output Port Locations on Your Machine

The input/output ports are located on the back and front of the machine.



1. USB accessory port (Front)
2. LAN port (For Network models)
3. USB port
4. USB accessory port (Rear)

When connecting the USB or Ethernet cable, follow the instructions in the software/driver installer.

To install the driver and software necessary for operating your machine, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).



### Related Information

- [Introduction to Your Machine](#)



## Paper Handling

- [Load Paper](#)
- [Paper Settings](#)
- [Change the Tray Size for 2-sided Printing](#)
- [Unprintable Area](#)
- [Recommended Print Media](#)
- [Using Special Paper](#)

## Load Paper

- [Load and Print Using the Paper Tray](#)
- [Load and Print Using the Multi-purpose Tray \(MP Tray\)](#)
- [Clear Paper Jams](#)

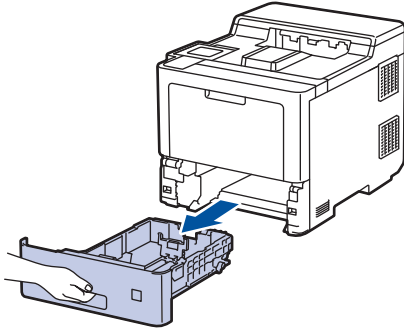
## Load and Print Using the Paper Tray

- [Load Paper in the Paper Tray](#)
- [Printing Problems](#)

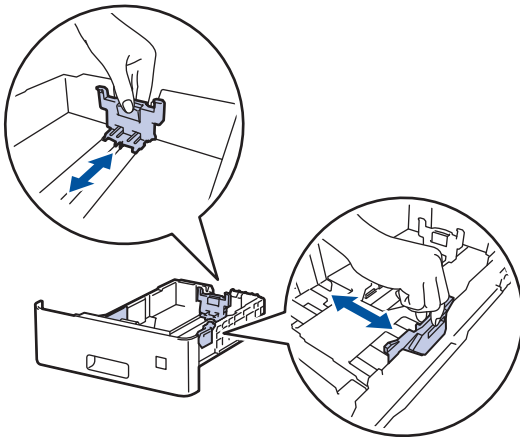
## Load Paper in the Paper Tray

- If the Check Paper setting is set to On and you pull the paper tray out of the machine, a message appears on the LCD asking if you want to change the paper size and paper type. Change the paper size and paper type settings if needed, following the LCD instructions.
- When you load a different size and type of paper in the tray, you must also change the Paper Size and Paper Type settings in the machine, or on your computer.

1. Pull the paper tray completely out of the machine.



2. Press the green levers to slide the paper guides to fit the paper.

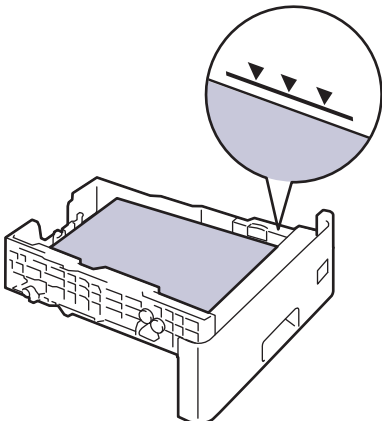


3. Fan the stack of paper well.
4. Load paper in the paper tray with the printing surface *face down*.



When you use letterhead or preprinted paper, load the paper in the correct orientation. See *Related Information: Change Machine Settings to Print on Letterhead or Preprinted Paper Using the Paper Tray*.

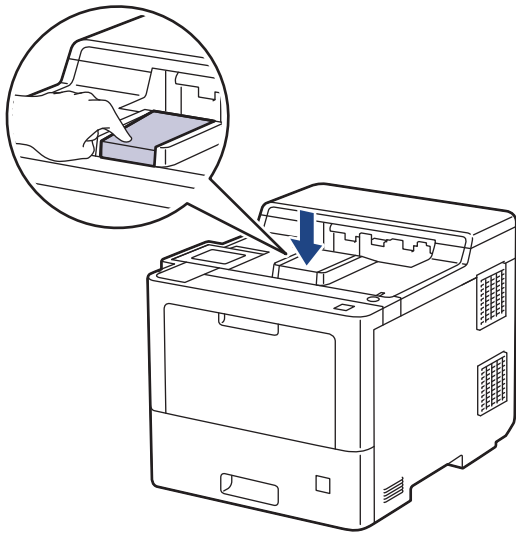
5. Make sure the paper is below the maximum paper mark (▼▼▼).  
Overfilling the paper tray will cause paper jams.



6. Slowly push the paper tray completely into the machine.

---

7. Push the support flap to open it to prevent paper from sliding off the face down output tray.



### Related Information

- [Load and Print Using the Paper Tray](#)
  - [Change Machine Settings to Print on Letterhead or Preprinted Paper Using the Paper Tray](#)
-

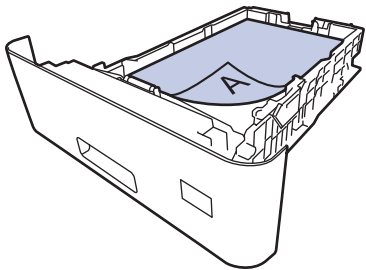
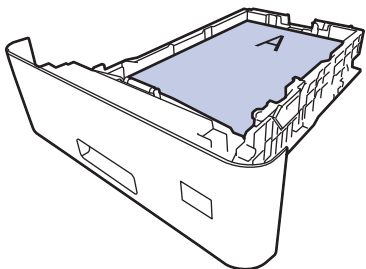
## Change Machine Settings to Print on Letterhead or Preprinted Paper Using the Paper Tray



When you use letterhead or preprinted paper for 2-sided printing, change the machine's settings.



- DO NOT load different sizes and types of paper in the paper tray at the same time. Doing this may cause the paper to jam or misfeed.
- If the print position is misaligned with the letterhead or preprinted objects, the print position is adjustable using the Print Position setting for the paper tray.

### Orientation

	<p>For 1-sided printing</p> <ul style="list-style-type: none"><li>• face down</li><li>• top edge toward the front of the paper tray</li></ul>
	<p>For automatic 2-sided printing (long edge binding)</p> <ul style="list-style-type: none"><li>• face up</li><li>• bottom edge toward the front of the paper tray</li></ul>

1. Press  [Settings] > [All Settings] > [Printer] > [2-sided] > [Single Image] > [2-sided Feed].
2. Press .



### Related Information

- [Load Paper in the Paper Tray](#)

## Load and Print Using the Multi-purpose Tray (MP Tray)

You can load thin paper, thick paper, recycled paper, bond paper, glossy paper, letterhead, coloured paper, labels, up to 100 sheets of plain paper, or up to 15 envelopes in the MP tray.

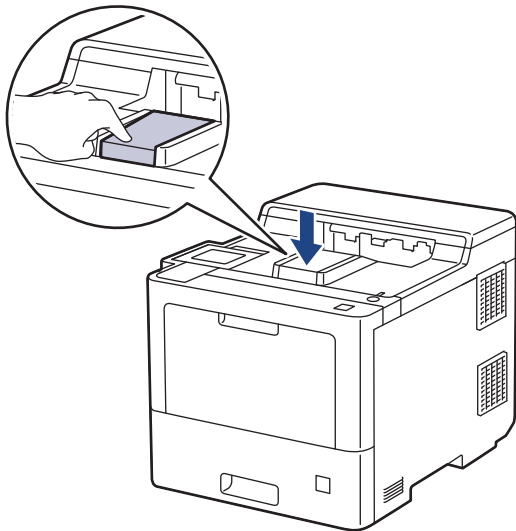
- [Load Paper in the Multi-purpose Tray \(MP Tray\)](#)
- [Load and Print Labels Using the MP Tray](#)
- [Load and Print Envelopes Using the MP Tray](#)
- [Printing Problems](#)

## Load Paper in the Multi-purpose Tray (MP Tray)

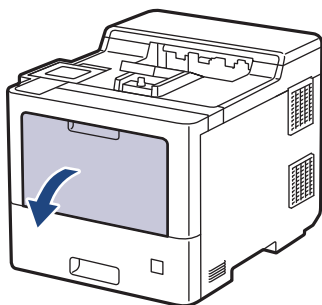
When you load a different size and type of paper in the tray, you must also change the Paper Size and Paper Type settings in the machine, or on your computer.

- Plain Paper
- Thin Paper
- Thick Paper
- Recycled Paper
- Bond Paper
- Glossy Paper
- Letterhead
- Coloured Paper

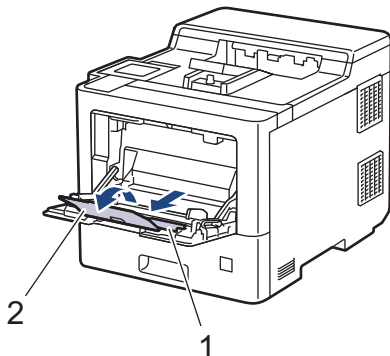
1. Push the support flap to open it to prevent paper from sliding off the face down output tray.



2. Open the MP tray and lower it gently.

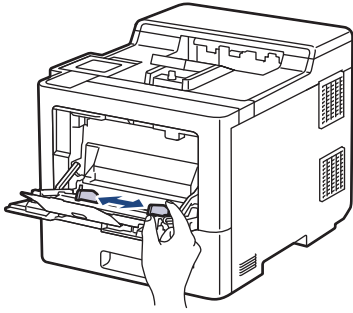


3. Pull out the MP tray support (1) and unfold the flap (2).

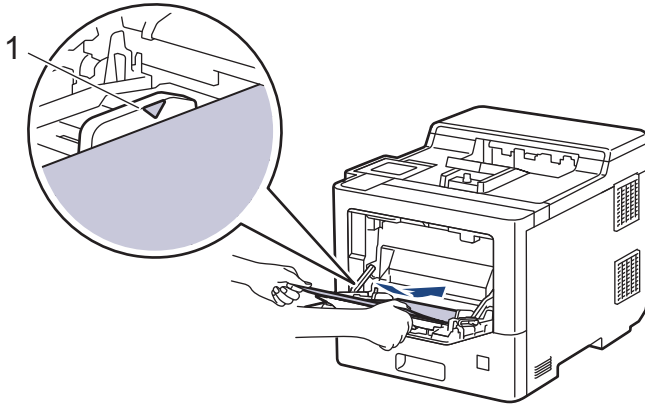




- 
4. Slide the MP tray paper guides to fit the width of the paper you are using.



5. Load paper with the printing surface *face up* in the MP tray.



- Make sure the paper is below the maximum paper mark (1).
- When using glossy paper, load only one sheet at a time in the MP tray to avoid a paper jam.
- When you use letterhead or preprinted paper, load the paper in the correct orientation. See *Related Information: Change Machine Settings to Print on Letterhead or Preprinted Paper Using the MP Tray*.



### Related Information

- [Load and Print Using the Multi-purpose Tray \(MP Tray\)](#)
  - [Change Machine Settings to Print on Letterhead or Preprinted Paper Using the MP Tray](#)

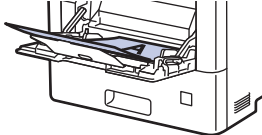
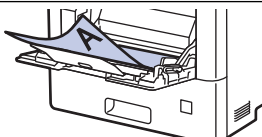
## Change Machine Settings to Print on Letterhead or Preprinted Paper Using the MP Tray



When you use letterhead or preprinted paper for 2-sided printing, change the machine's settings.



- DO NOT load different sizes and types of paper in the paper tray at the same time. Doing this may cause the paper to jam or misfeed.
- If the print position is misaligned with the letterhead or preprinted objects, the print position is adjustable using the Print Position setting for the MP tray.

### Orientation

	For 1-sided printing <ul style="list-style-type: none"><li>• face up</li><li>• top edge first</li></ul>
	For automatic 2-sided printing (long edge binding) <ul style="list-style-type: none"><li>• face down</li><li>• bottom edge first</li></ul>

1. Press  [Settings] > [All Settings] > [Printer] > [2-sided] > [Single Image] > [2-sided Feed].
2. Press .



### Related Information

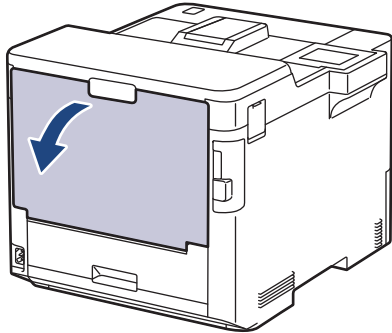
- [Load Paper in the Multi-purpose Tray \(MP Tray\)](#)

## Load and Print Labels Using the MP Tray

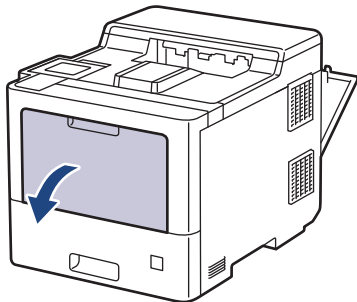
When the back cover (face up output tray) is pulled down, the machine has a straight paper path from the MP tray through to the back of the machine. Use this paper feed and output method when you print on labels.

When you load a different size and type of paper in the tray, you must also change the Paper Size and Paper Type settings in the machine, or on your computer.

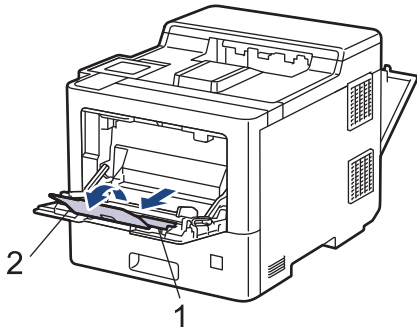
1. Open the machine's back cover (the face up output tray).



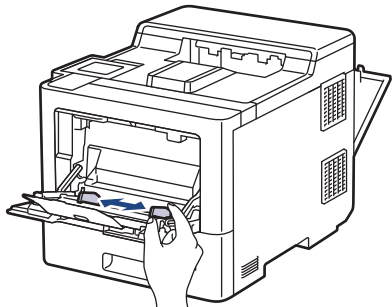
2. On the front of the machine, open the MP tray and lower it gently.



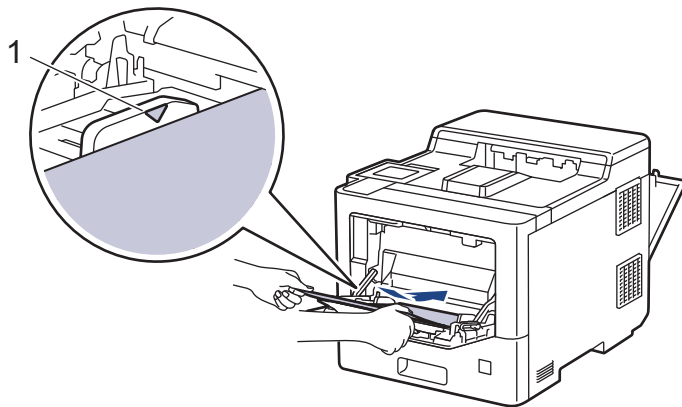
3. Pull out the MP tray support (1) and unfold the flap (2).



4. Slide the MP tray paper guides to fit the width of the labels you are using.



- 
5. Load labels with the printing surface *face up* in the MP tray.



Make sure the labels are below the maximum paper mark (1).

6. Change your print preferences in the Print screen.
7. Send your print job to the machine.
8. After the machine prints, close the back cover (the face up output tray) until it locks in the closed position.



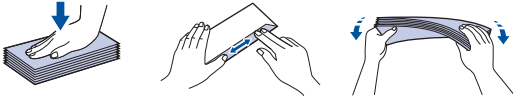
### Related Information

- [Load and Print Using the Multi-purpose Tray \(MP Tray\)](#)
-

## Load and Print Envelopes Using the MP Tray

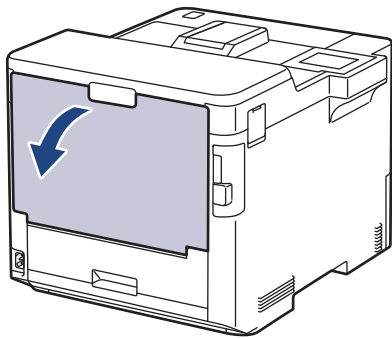
You can load up to 15 envelopes in the MP tray.

Before loading, press the corners and sides of the envelopes to make them as flat as possible.

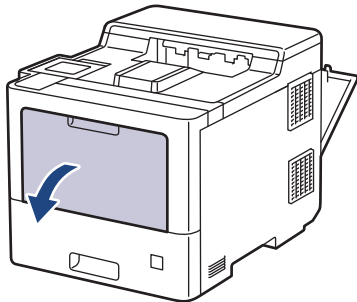


When you load a different size and type of paper in the tray, you must also change the Paper Size and Paper Type settings in the machine, or on your computer.

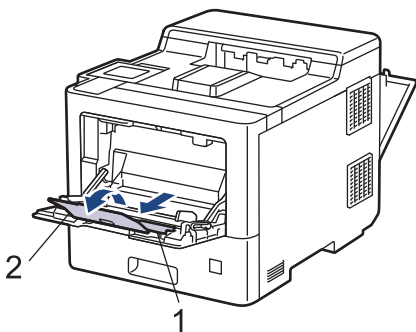
1. Open the machine's back cover (the face up output tray).



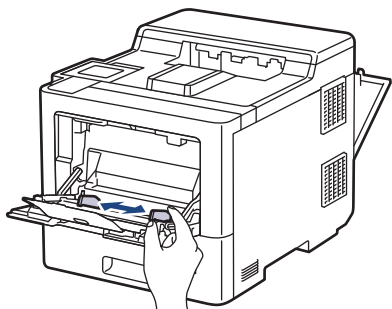
2. On the front of the machine, open the MP tray and lower it gently.



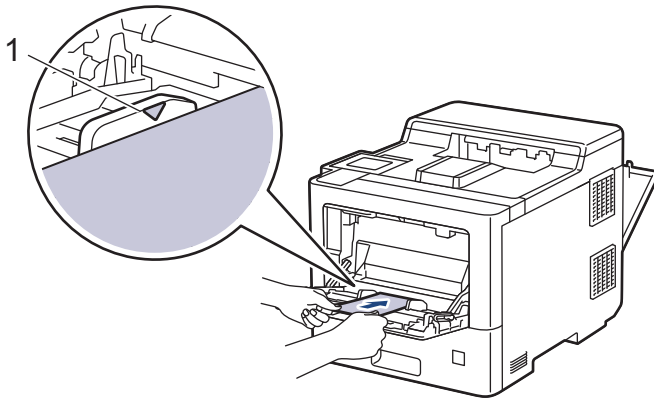
3. Pull out the MP tray support (1) and unfold the flap (2).



4. Slide the MP tray paper guides to fit the width of the envelopes that you are using.



5. Load envelopes with the printing surface *face up* in the MP tray.



Load up to 15 envelopes in the MP tray with the printing surface face up. Make sure the envelopes are below the maximum paper mark (1). Loading more than 15 envelopes may cause paper jams.

6. Change your print preferences in the Print dialog box.

Settings	Options for Envelopes
Paper Size	Com-10 DL C5 Monarch
Media Type	Envelopes Env. Thick Env. Thin

7. Send your print job to the machine.

8. After the machine prints, close the back cover (the face up output tray) until it locks in the closed position.



### Related Information




- [Load and Print Using the Multi-purpose Tray \(MP Tray\)](#)

## Paper Settings

- [Change the Paper Size and Paper Type](#)
- [Change the Check Paper Setting](#)
- [Clear Paper Jams](#)

## Change the Paper Size and Paper Type

When you change the size and type of the paper you load in the tray, you must change the Paper Size and Paper Type settings on the LCD at the same time.

1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting] > [Paper Type].
2. Press ▲ or ▼ to display the paper tray options, and then press the option you want.
3. Press ▲ or ▼ to display the paper type options, and then press the option you want.
4. Press .
5. Press ▲ or ▼ to display the [Paper Size] option, and then press [Paper Size].
6. Press ▲ or ▼ to display the paper tray options, and then press the option you want.
7. Press ▲ or ▼ to display the paper size options, and then press the option you want.
8. Press .



### Related Information



- [Paper Settings](#)



## Change the Check Paper Setting

When you turn on your machine's Check Paper setting, the machine displays a message when you remove a paper tray or load paper using the MP tray, asking if you changed the paper size and paper type.

The default setting is On.

1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting] > [Check Paper].
2. Press [On] or [Off].
3. Press .



### Related Information

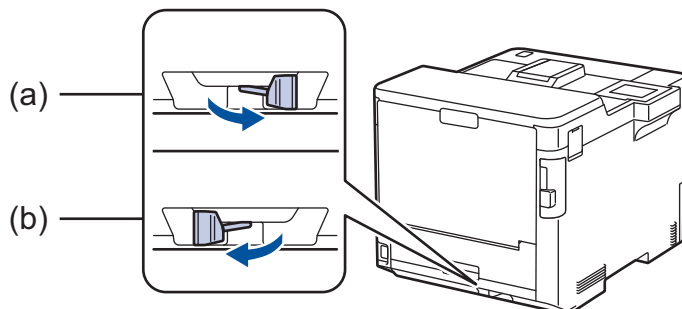
- [Paper Settings](#)
-

## Change the Tray Size for 2-sided Printing

When you print on both sides of the paper, you must set the 2-sided tray size to the paper size. If you do not set the 2-sided tray, the paper will not feed correctly, resulting in a skewed printout or a paper jam.

This feature is not available in some countries.

1. Slide the lever on the 2-sided tray to the correct paper size.



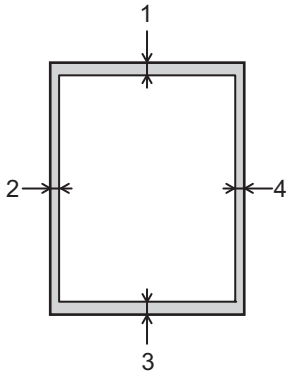
- a. A4 (for A4)
- b. Letter (for Letter, Legal, Mexico Legal, India Legal and Folio)

### ✓ Related Information

- [Paper Handling](#)

## Unprintable Area

The measurements in the table below show maximum unprintable areas from the edges of the most commonly used paper sizes. The measurements may vary depending on the paper size or settings in the application you are using.



Do not attempt to print into these areas; your output will not reflect anything in these areas.

Usage	Document Size	Top (1) Bottom (3)	Left (2) Right (4)
Print	Letter	4.2 mm	4.2 mm
	A4	4.2 mm	4.2 mm
	Legal	4.2 mm	4.2 mm



### Related Information

- [Paper Handling](#)

## Recommended Print Media

To get the best print quality, we recommend using the paper listed in the table.

Paper Type	Item
Plain Paper	APP Blue Flag Ship 70 g/m <sup>2</sup> APP Gold Flag Ship 80 g/m <sup>2</sup> Advanced Agro Double A 80 g/m <sup>2</sup>



### Related Information

- [Paper Handling](#)

#### Related Topics:

- [Clear Paper Jams](#)

## Using Special Paper

Always test paper samples before purchasing them to ensure desirable performance.

- DO NOT use inkjet paper; it may cause a paper jam or damage your machine.
- If you use bond paper, paper with a rough surface, or paper that is wrinkled or creased, the paper may exhibit degraded performance.

Store paper in its original packaging and keep it sealed. Keep the paper flat and away from moisture, direct sunlight, and heat.

### IMPORTANT

Some types of paper may not perform well or may cause damage to your machine.

DO NOT use paper:

- that is highly textured
- that is extremely smooth or shiny
- that is curled or warped
- that is coated or has a chemical finish
- that is damaged, creased or folded
- that exceeds the recommended weight specification in this guide
- with tabs and staples
- with letterheads using low temperature dyes or thermography
- that is multipart or carbonless
- that is designed for inkjet printing

If you use any of the types of paper listed above, they may damage your machine. This damage is not covered under any Brother warranty or service agreement.



### Related Information

- [Paper Handling](#)

#### Related Topics:

- [Clear Paper Jams](#)

## Print

- [Print from Your Computer \(Windows\)](#)
- [Print from Your Computer \(Mac\)](#)
- [Secure Print Using a USB Flash Drive](#)
- [Print Data Directly from a USB Flash Drive](#)
- [Print Duplicate Copies](#)
- [Cancel a Print Job](#)
- [Test Print](#)

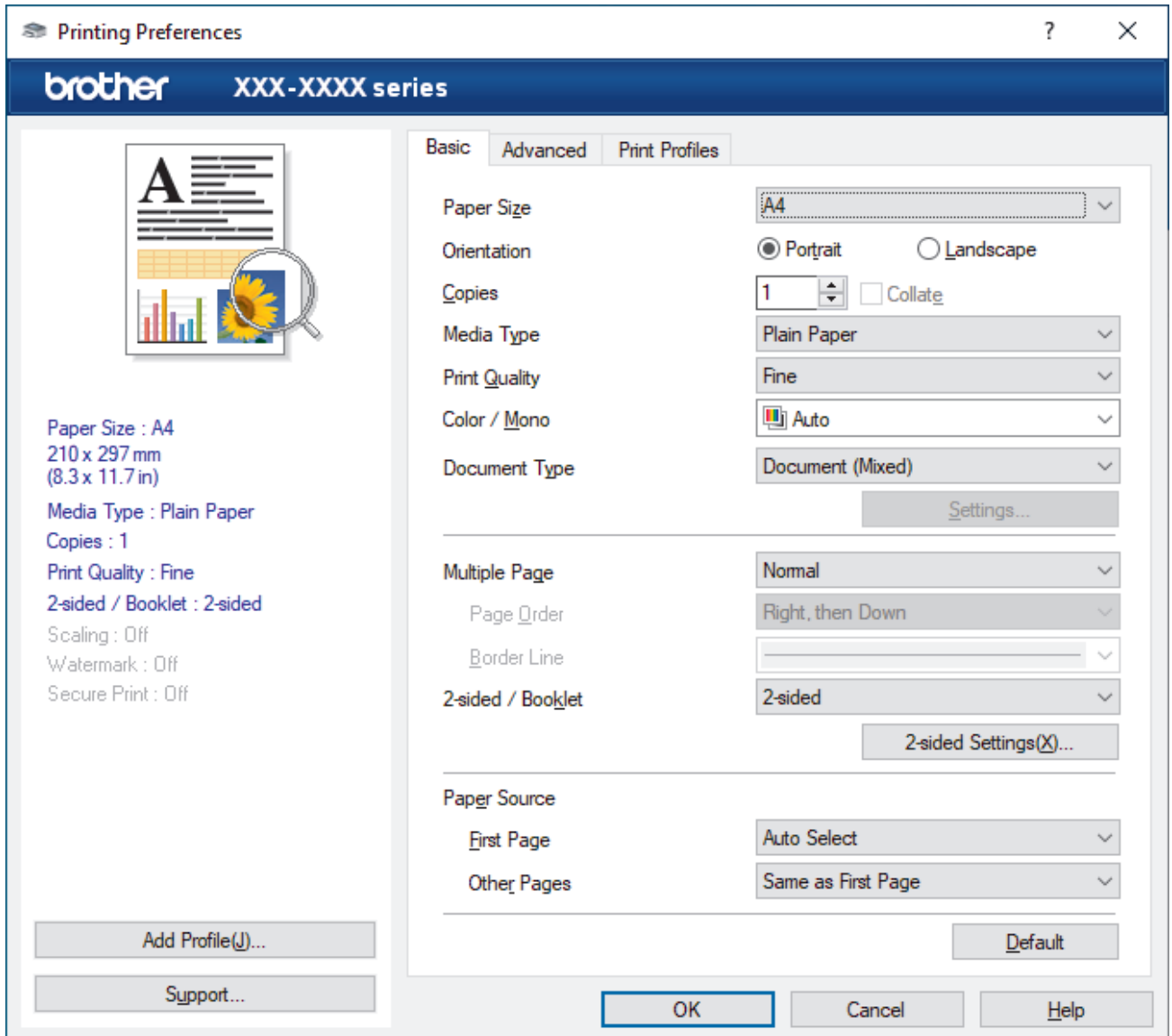
## Print from Your Computer (Windows)

- [Print a Document \(Windows\)](#)
- [Print Settings \(Windows\)](#)
- [Secure Print \(Windows\)](#)
- [Change the Default Print Settings \(Windows\)](#)
- [Print a Document Using the BR-Script3 Printer Driver \(PostScript® 3™ Language Emulation\) \(Windows\)](#)
- [Monitor the Status of the Machine from Your Computer \(Windows\)](#)

## Print a Document (Windows)

1. Select the print command in your application.
2. Select **Brother XXX-XXXX** (where XXXX is the name of your model), and then click the printing properties or preferences button.

The printer driver window appears.



3. Make sure you have loaded the correct size paper in the paper tray.
4. Click the **Paper Size** drop-down list, and then select your paper size.
5. In the **Orientation** field, select the **Portrait** or **Landscape** option to set the orientation of your printout.



If your application contains a similar setting, we recommend that you set the orientation using the application.

6. Type the number of copies (1-999) you want in the **Copies** field.
7. Click the **Media Type** drop-down list, and then select the type of paper you are using.
8. To print multiple pages on a single sheet of paper or print one page of your document on multiple sheets, click the **Multiple Page** drop-down list, and then select your options.
9. Change other printer settings, if needed.
10. Click **OK**.
11. Complete your print operation.





## Related Information

- [Print from Your Computer \(Windows\)](#)

### **Related Topics:**

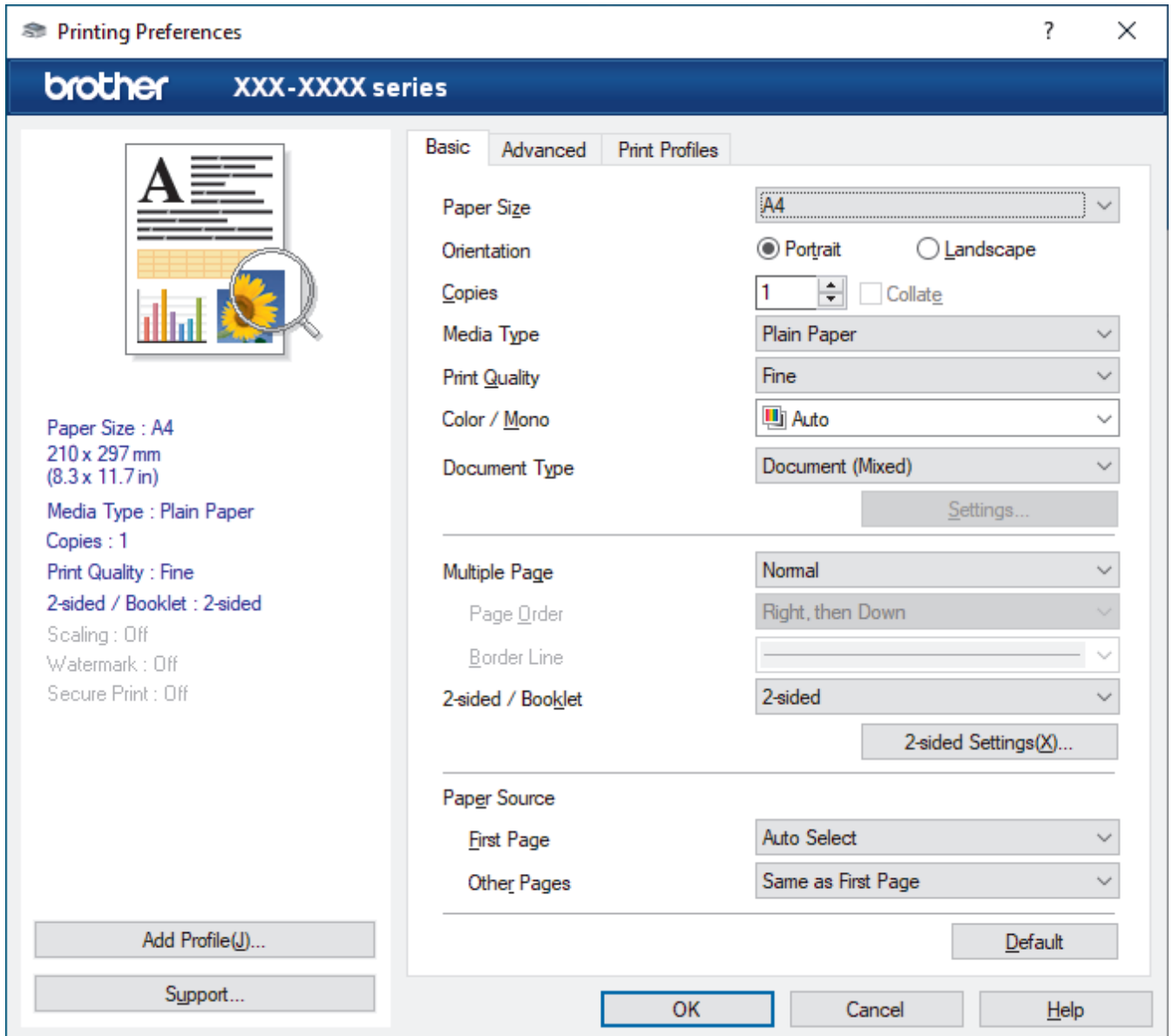
- [Clear Paper Jams](#)
  - [Print Settings \(Windows\)](#)
-

## Print Settings (Windows)

>> **Basic Tab**

>> **Advanced Tab**

### Basic Tab



#### 1. Paper Size

Select the paper size you want to use. You can either choose from standard paper sizes or create a custom paper size.

#### 2. Orientation

Select the orientation (portrait or landscape) of your printout.

If your application contains a similar setting, we recommend that you set the orientation using the application.

#### 3. Copies

Type the number of copies (1-999) that you want to print in this field.

#### Collate

Select this option to print sets of multi-page documents in the original page order. When this option is selected, one complete copy of your document will print, and then reprint according to the number of

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copies you choose. If this option is not selected, then each page will print according to the number of copies chosen before the next page of the document is printed.

#### 4. Media Type

Select the media type you want to use. To achieve the best print results, the machine automatically adjusts its print settings according to the selected media type.

#### 5. Print Quality

Select the print quality you want. Because print quality and speed are related, the higher the quality, the longer it will take to print the document.

#### 6. Colour / Mono

Select the Colour/Mono settings to use.

### NOTE

- The machine's colour sensor is very sensitive and may perceive faded black text or an off-white background as colour. If you know that your document is black and white and you want to conserve colour toner, select the **Mono** mode.
- If either the Cyan, Magenta, or Yellow toner reaches the end of its life while printing a colour document, the print job cannot be completed. Cancel your print job and select to start the print job again in the **Mono** mode, as long as the Black toner is available.

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#### 7. Document Type

Select the type of document you want to print.

##### Settings button

Specify advanced settings, such as colour mode.

##### Colour Mode

Select the colour mode to suit your preference.

##### Import

To adjust the print configuration of a particular image, click **Settings**. When you have finished adjusting the image parameters, such as brightness and contrast, import those settings as a print configuration file. Use the **Export** option to create a print configuration file from the current settings.

##### Export

To adjust the print configuration of a particular image, click **Settings**. When you have finished adjusting the image parameters, such as brightness and contrast, export those settings as a print configuration file. Use the **Import** option to load a previously exported configuration file.

##### Improve Grey Colour

Select this option to improve the image quality of shaded areas.

##### Enhance Black Printing

If a black graphic does not print correctly, select this setting.

##### Improve Pattern Printing

Select this option to improve the pattern printing if printed fills and patterns are different from the fills and patterns you see on your computer screen.

#### 8. Multiple Page

Select this option to print multiple pages on a single sheet of paper, or print one page of your document on multiple sheets.

##### Page Order

Select the page order when printing multiple pages on a single sheet of paper.

##### Border Line

Select the type of border to use when printing multiple pages on a single sheet of paper.

## 9. 2-sided / Booklet (available only for certain models)

Select this option to print on both sides of the paper, or print a document in booklet format using 2-sided printing.

### 2-sided Settings button

Click this button to select the type of 2-sided binding. Four types of 2-sided bindings are available for each orientation.

## 10. Paper Source

Select the paper source setting according to your print conditions or purpose.

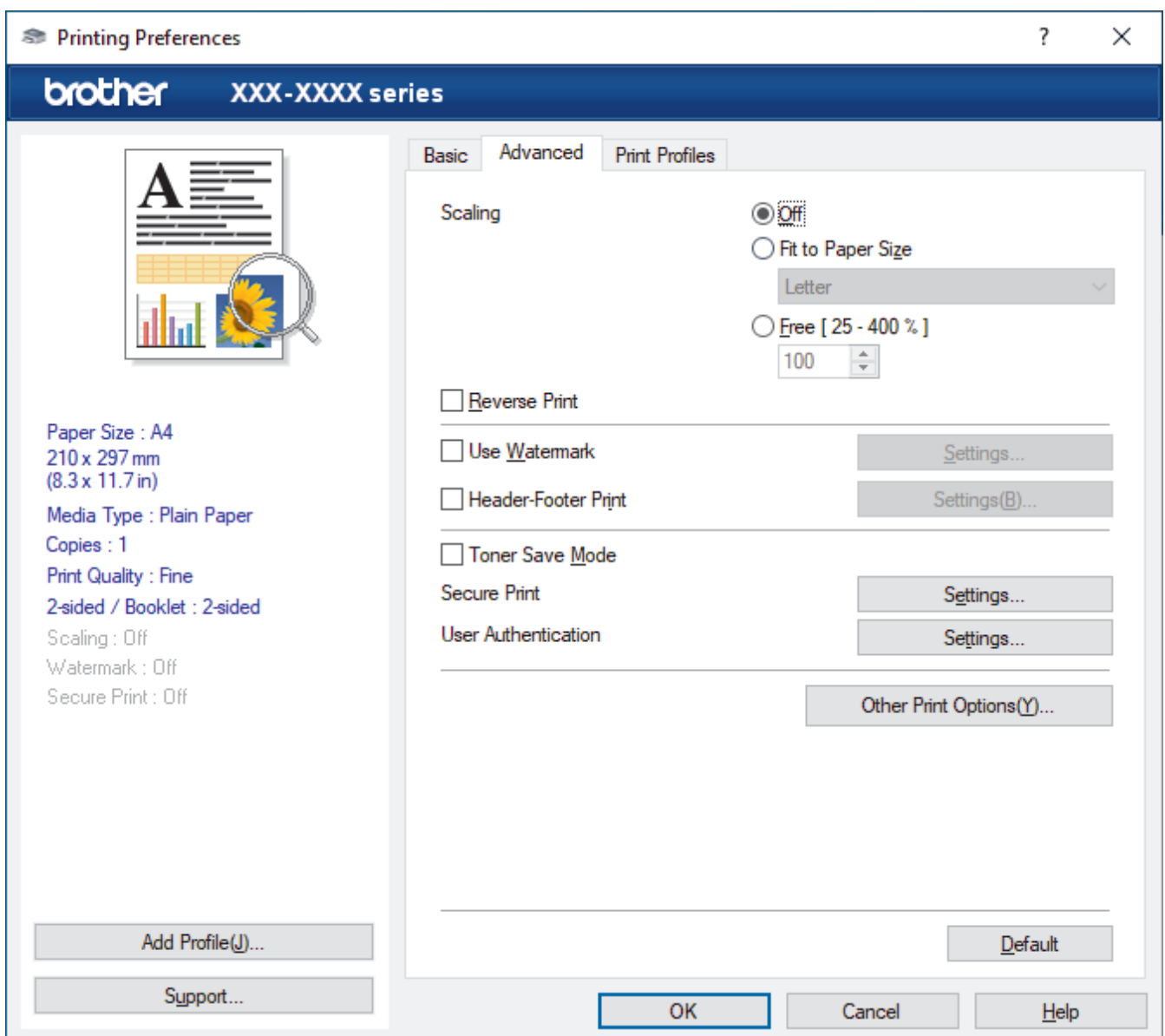
### First Page

Select the paper source to use for printing the first page.

### Other Pages

Select the paper source to use for printing the second and subsequent pages.

## Advanced Tab



### 1. Scaling

Select these options to enlarge or reduce the size of the pages in your document.

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## Fit to Paper Size

Select this option to enlarge or reduce the document pages to fit a specified paper size. When you select this option, select the paper size you want from the drop-down list.

## Free [25 - 400%]

Select this option to enlarge or reduce the document pages manually. When you select this option, type a value into the field.

## 2. Reverse Print

Select this option to rotate the printed image 180 degrees.

## 3. Use Watermark

Select this option to print a logo or text on your document as a watermark. Select one of the preset watermarks, add a new watermark, or use an image file you have created.

## 4. Header-Footer Print

Select this option to print the date, time, and Login User Name on the document.

## 5. Toner Save Mode

Select this feature to conserve toner by using less toner to print documents; printouts appear lighter, but are still legible.

## 6. Secure Print

This feature ensures that confidential or sensitive documents do not print until you enter a password on the machine's control panel.

## 7. Administrator

This feature allows you to change the administrator password and restrict various printing functions.

## 8. User Authentication

This feature allows you to confirm the restrictions for each user.

## 9. Output Tray (available only for certain models)

Select the output tray for printed pages.

## 10. Other Print Options button

### Sleep Time

Select this option to set the machine to enter sleep mode immediately after printing.

### Macro/Stream

Select this feature to print an electronic form (macro/stream), which you have stored in your machine's memory, as an overlay on the print job.

### Improve Print Output

Select this option to reduce the amount of paper curling and improve the toner fixing.

### Skip Blank Page

Select this option to allow the printer driver to automatically detect blank pages and exclude them from printing.

### Special Red Color (available only for some countries)

Use several red colour to meet your needs. If you could accept our recommended colour, select the **Use the recommended red color**. If you cannot accept our recommended red colour, select the **Select another red color**. Click the **Print the red color patch** button and select another red colour number. Enter the colour number in the **Enter color number** box.

## NOTE

- The showed red colour is just image sample, please note that it possibly happens the difference between the image and the actual printed red colour.
- For the best output effect, when you select **Special Red Color** mode, **Toner Save Mode** is unavailable. If you need to use **Toner Save Mode**, close **Special Red Color** mode.

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## TrueType Mode

### Mode

Select how the fonts are processed for printing.

### Use Printer TrueType Fonts(available only for certain models)

Select whether to use built-in fonts for the font processing.

### Eco settings

Select this option to reduce printing noise.



## Related Information

- [Print from Your Computer \(Windows\)](#)

### Related Topics:

- [The Mailbox Unit](#)
  - [Print a Document \(Windows\)](#)
-

## Secure Print (Windows)

Use Secure Print to ensure that confidential or sensitive documents do not print until you enter a password on the machine's control panel.

The secure data is deleted from the machine when you turn the machine off.

1. Select the print command in your application.
2. Select **Brother XXX-XXXX** (where XXXX is the name of your model), and then click the printing properties or preferences button.  
The printer driver window appears.
3. Click the **Advanced** tab.
4. Click the **Settings** button in the **Secure Print** field.
5. Select the **Secure Print** check box.
6. Type your four-digit password in the **Password** field.



You must set a separate password for each document.

7. Type the **User Name** and **Job Name** in the text field, if needed.
8. Click **OK**, to close the **Secure Print Settings** window.
9. Click **OK**.
10. Complete your print operation.
11. On the machine's control panel, press [Secure Print].
12. Press ▲ or ▼ to display the user names, and then press to select your user name.
13. Enter your four-digit password, and then press [OK].
14. Press ▲ or ▼ to display the print job, and then press it.
15. Enter the number of copies you want.
16. Press [Start].

After you have printed the secured data, it will be cleared from the machine's memory.






### Related Information


- [Print from Your Computer \(Windows\)](#)

## Change the Default Print Settings (Windows)

When you change an application's print settings, the changes only apply to documents printed with that application. To change print settings for all Windows applications, you must configure the printer driver properties.

- Do one of the following:
  - For Windows 10, Windows Server 2016 and Windows Server 2019  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.
  - For Windows 8.1  
Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings**, and then click **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.
  - For Windows Server 2012 R2  
Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**.
  - For Windows Server 2012  
Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings**, and then click **Control Panel**. In the **Hardware** group, click **View devices and printers**.
  - For Windows 7 and Windows Server 2008 R2  
Click  (**Start**) > **Devices and Printers**.
  - For Windows Server 2008  
Click  (**Start**) > **Control Panel** > **Hardware and Sound** > **Printers**.
- Right-click the **Brother XXX-XXXX** icon (where XXX-XXXX is the name of your model), and then select **Printer properties**. If printer driver options appear, select your printer driver.  
The printer properties dialog box appears.
- Click the **General** tab, and then click the **Printing Preferences...** or **Preferences...** button.  
The printer driver dialog box appears.  

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  - To configure the tray settings, click the **Device Settings** tab (available only for certain models).
  - To change the printer port, click the **Ports** tab.

---
- Select the print settings you want to use as defaults for all of your Windows programs.
- Click **OK**.
- Close the printer properties dialog box.



### Related Information




- [Print from Your Computer \(Windows\)](#)
  - [Configure the Optional Tray Settings \(Windows\)](#)



## Configure the Optional Tray Settings (Windows)

Access your machine's Properties to auto-detect your machine's Optional Tray and serial number.

The printer driver automatically detects the Optional Tray during the driver installation. If you added the Optional Tray after the driver installation, follow these steps:

1. Do one of the following:
  - For Windows 10, Windows Server 2016, and Windows Server 2019  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.
  - For Windows 8.1  
Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings**, and then click **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.
  - For Windows Server 2012 R2  
Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**.
  - For Windows Server 2012  
Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings**, and then click **Control Panel**. In the **Hardware** group, click **View devices and printers**.
  - For Windows 7 and Windows Server 2008 R2  
Click  (**Start**) > **Devices and Printers**.
  - For Windows Server 2008  
Click  (**Start**) > **Control Panel** > **Hardware and Sound** > **Printers**.
2. Right-click the **Brother XXX-XXXX** icon (where XXX-XXXX is the name of your model), and then select **Printer properties**. If printer driver options appear, select your printer driver.  
The printer properties dialog box appears.
3. Click the **Device Settings** tab.
4. Click the **Auto Detect** button.  
The Optional Tray and the machine's serial number are automatically detected.
5. Click the **Apply** button.
6. Close the printer properties dialog box.

The **Auto Detect** function is not available under the following machine conditions:

- The machine power switch is off.
- The machine is in a network-shared environment.
- The machine and your computer are not connected.



### Related Information

- [Change the Default Print Settings \(Windows\)](#)

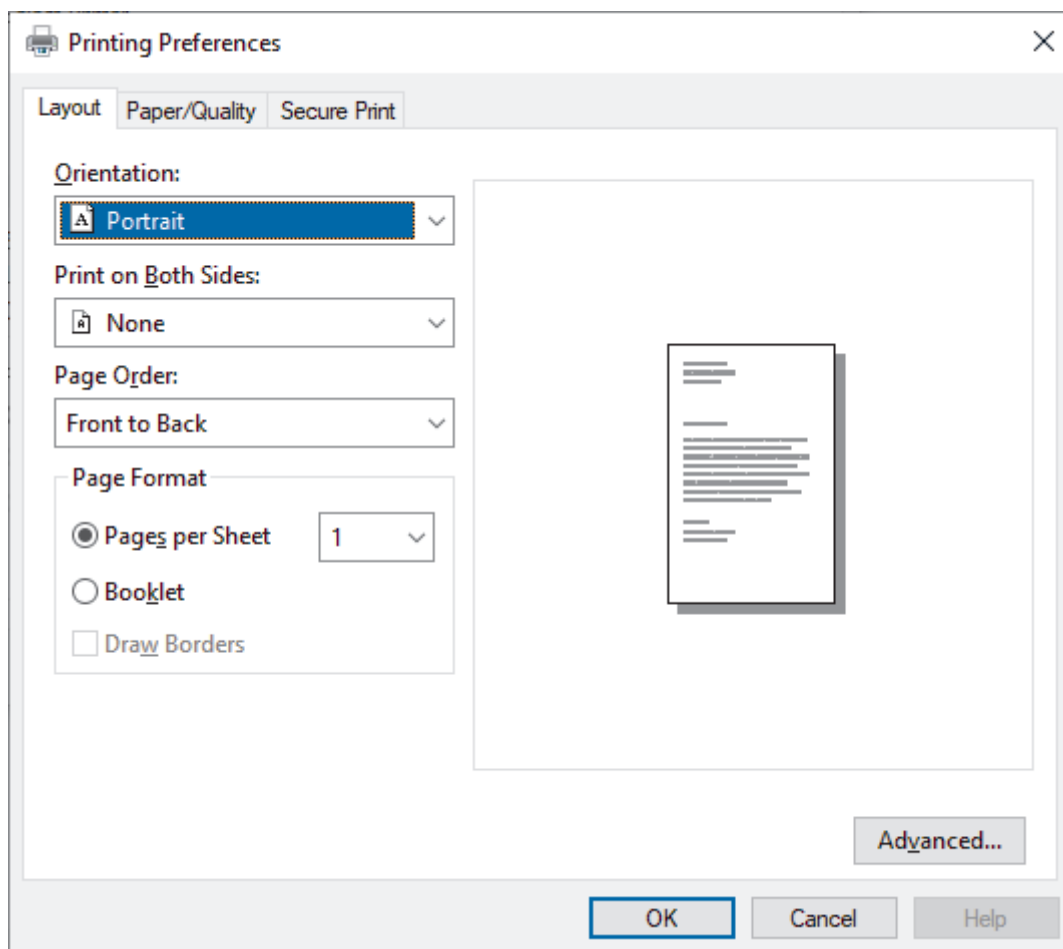
## Print a Document Using the BR-Script3 Printer Driver (PostScript® 3™ Language Emulation) (Windows)

The BR-Script3 printer driver lets you print PostScript® data more clearly.

Go to your model's **Downloads** page at [support.brother.com](http://support.brother.com) to install the PS driver (BR-Script3 printer driver).

1. Select the print command in your application.
2. Select **Brother XXX-XXXX BR-Script3** (where XXXX is the name of your model), and then click the printing properties or preferences button.

The printer driver window appears.



3. Click the **Layout**, **Paper/Quality**, or **Secure Print** tab to change basic print settings. (available only for certain models)  
Click the **Layout** or **Paper/Quality** tab, and then click the **Advanced...** button to change advanced print settings. Click **OK**.
4. Click **OK**.
5. Complete your print operation.







### ✓ Related Information

- [Print from Your Computer \(Windows\)](#)

## Monitor the Status of the Machine from Your Computer (Windows)

The Status Monitor is a configurable software tool for monitoring the status of one or more machines, allowing you to get immediate notification of errors.

Do one of the following:

- Double-click the  icon in the task tray.
- (Windows 10, Windows Server 2016 and Windows Server 2019)  
Click  > **Brother** > **Brother Utilities**.  
Click the drop-down list and select your model name (if not already selected). Click **Tools** in the left navigation bar, and then click **Status Monitor**.
- (Windows 8.1 and Windows Server 2012 R2)  
Move your mouse to the lower left corner of the **Start** screen and click  (if you are using a touch-based device, swipe up from bottom of the **Start** screen to bring up the **Apps** screen). When the **Apps** screen appears, tap or click  (**Brother Utilities**), and then click the drop-down list and select your model name (if not already selected). Click **Tools** in the left navigation bar, and then click **Status Monitor**.
- (Windows 8.1 and Windows Server 2012)  
Click  (**Brother Utilities**), and then click the drop-down list and select your model name (if not already selected). Click **Tools** in the left navigation bar, and then click **Status Monitor**.
- (Windows 7, Windows Server 2008 and Windows Server 2008 R2)  
Click  (**Start**) > **All Programs** > **Brother** > **Brother Utilities**.  
Click the drop-down list and select your model name (if not already selected). Click **Tools** in the left navigation bar, and then click **Status Monitor**.

### Troubleshooting

Click the **Troubleshooting** button to access the support website.

### Visit the Genuine Supplies website

Click the **Visit the Genuine Supplies website** button for more information on Brother genuine supplies.

### Related Information

- [Print from Your Computer \(Windows\)](#)

#### Related Topics:

- [Printing Problems](#)

## **Print from Your Computer (Mac)**

- [Print Using AirPrint](#)

## Print Using AirPrint

- [Print from iPad, iPhone, or iPod touch](#)
- [Print Using AirPrint \(macOS\)](#)
- [Clear Paper Jams](#)

## Secure Print Using a USB Flash Drive

USB Storage Print allows you to save secure print data to the USB flash drive and print it later by entering a password on the machine's control panel.

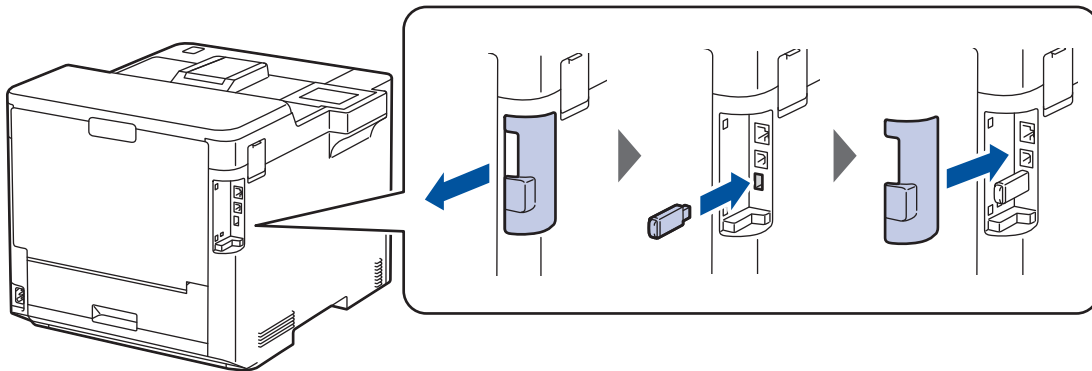
### NOTE



USB flash drive requirements:

- Storage Size: 8 GB or more
- Format: FAT32/exFAT

For more information on the printer driver settings, see *Related Information*.

1. Connect your USB flash drive to the USB port (Rear).



2. Press .
3. On the machine's control panel, press  [Settings] > [All Settings] > [Printer] > [Job Save Location].
4. Press [USB flash drive (Rear port)].  
The message appears on the LCD to initialise the USB flash drive.
5. Press .
6. Press and hold [OK] for two seconds to initialise.  
The machine restarts and activates the USB Storage Print feature.

### NOTE

- When the machine restarts to activate the USB Storage Print feature, all the stored jobs, Macro/Stream and Font data are deleted from the machine's memory.
- When the machine restarts to activate the USB Storage Print feature, the Macro/Stream and Font data are deleted from the USB flash drive.

7. In the printer driver, complete the settings for Secure Print and execute the print command in your application.
8. On the machine's control panel, press [Secure Print].
9. Press ▲ or ▼ to display the user names, and then press to select your user name.
10. Enter your four-digit password, and then press [OK].
11. Press ▲ or ▼ to display the print job, and then press it.
12. Enter the number of copies you want.
13. Press [Start].

---

The machine prints the data and deletes the print job from the USB flash drive.

## IMPORTANT

DO NOT remove the USB flash drive from the USB port (Rear) until the machine has finished printing.

---



### Related Information

- [Print](#)

#### Related Topics:

- [Error and Maintenance Messages](#)
-

## Print Data Directly from a USB Flash Drive

You can print photos directly from digital camera media or a USB flash drive. Supported file types are PDF, JPEG, TIFF, XPS, and PRN.

- [Compatible USB Flash Drives](#)
- [Print Data Directly from a USB Flash Drive or Digital Camera Supporting Mass Storage](#)
- [Create a PRN File for Direct Printing \(Windows\)](#)



## Compatible USB Flash Drives

### IMPORTANT

The USB direct interface supports only USB flash drives and digital cameras that use the USB mass storage standard. Other USB devices are not supported.

Compatible USB Flash Drives	
USB Class	USB Mass Storage Class
USB Mass Storage Sub Class	SCSI or SFF-8070i
Transfer Protocol	Bulk transfer Only
Format <sup>1</sup>	FAT12/FAT16/FAT32/exFAT
Sector Size	Max. 4096 Byte
Encryption	Encrypted devices are not supported.

<sup>1</sup> NTFS format is not supported.



### Related Information

- [Print Data Directly from a USB Flash Drive](#)

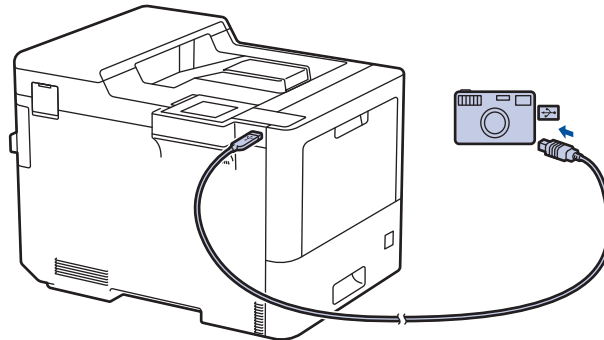
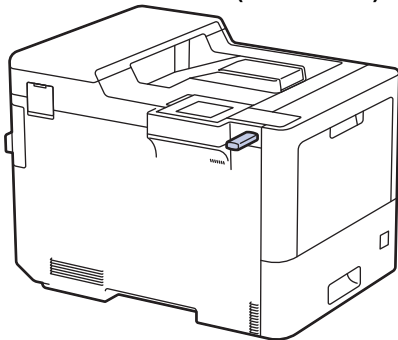
## Print Data Directly from a USB Flash Drive or Digital Camera Supporting Mass Storage

- Make sure your digital camera is turned on.
- Your digital camera must be switched from PictBridge mode to Mass Storage mode.

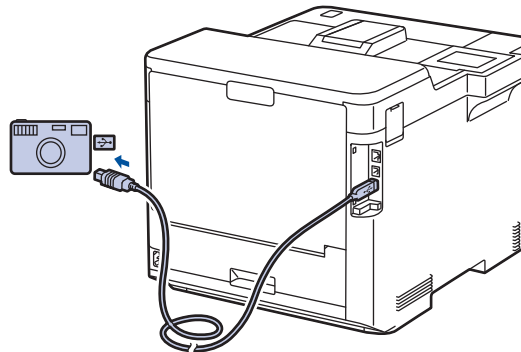
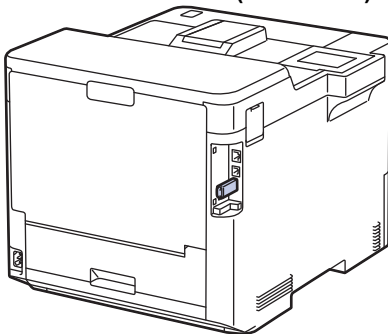
### IMPORTANT

To prevent damage to your machine, DO NOT connect any device other than a digital camera or USB flash drive to the USB direct interface.

#### USB Port Location (Front View)



#### USB Port Location (Rear View)




1. Connect your USB flash drive or digital camera to the USB direct interface. The LCD displays the [Checking Image] message.



- If an error occurs, the USB menu does not appear on the LCD.
- When the machine is in Deep Sleep mode, the LCD does not display any information even if you connect a USB flash drive to the USB direct interface. Press any button on the control panel to wake up the machine.
- If your machine has been set to Secure Function Lock On, you may not be able to print from a USB flash drive or digital camera.
- If the machine prompts you to choose the USB port, select it on the touchscreen.

2. Press ▲ or ▼ to select the file you want, and then press it.



To print an index of the files stored on the USB flash drive or digital camera, press  [Index Print] on the touchscreen. Press [Mono Start] or [Colour Start] to print the data.

3. Do one of the following:

- To change the settings, press [Print Settings]. Go to the next step.

- 
- If you want to use the default settings, enter the number of copies, and then press [Mono Start] or [Colour Start].

4. Select the print settings you want to change:


- [Print Quality]
- [Tray Use]
- [Paper Type]
- [Paper Size]
- [Multiple Page]
- [Orientation]
- [2-sided]
- [Collate]
- [PDF Print Options]
- [PDF Fit to Page]



---

Depending on the file type, some of these settings may not appear.

---

5. Press [OK].
6. Enter the number of copies you want.
7. Press [Mono Start] or [Colour Start] to print the data.
8. Press .

### IMPORTANT

DO NOT remove the USB flash drive or digital camera from the USB direct interface until the machine has finished printing.

---



### Related Information

- [Print Data Directly from a USB Flash Drive](#)
-

## Create a PRN File for Direct Printing (Windows)

These instructions may vary depending on your print application and operating system.

1. Select the print command in your application.
2. Select your model, and then select the print to file option.
3. Complete your print operation.
4. Enter the required information to save the file.



---

If the computer prompts you to enter a file name only, you can also specify the folder where you want to save the file by typing the directory name (for example: C:\Temp\FileName.prn).

If a USB flash drive is connected to your computer, you can save the file directly to the USB flash drive.

---



### Related Information

- [Print Data Directly from a USB Flash Drive](#)
-

## Print Duplicate Copies

Use the Carbon Copy function to make multiple copies of the same print data, as if printing on carbon paper. Send the data to individual paper trays that you loaded with different paper types or colours.

For example, you may want to set the machine to send your print data to Tray 1, which you have loaded with blue coloured paper, and then reprint the data in a certain location on the page from the MP Tray, which you have loaded with yellow coloured paper that already contains text.


If you load blue paper in Tray 1 and yellow paper in the MP tray, the printer will automatically feed paper for Sheet 1 from Tray 1 and Sheet 2 from the MP Tray.

If you enable the Carbon Copy function, the machine will always make copies automatically.



(Windows)


The Carbon Copy function also allows you to select a different printing macro/stream for each page.

1. Press  [Settings] > [All Settings] > [Printer] > [Carbon Menu] > [Carbon Copy] > [On].
2. Press ▲ or ▼ to display the [Copies] option, and then press the [Copies] option.
3. Enter the number of copies you want, and then press [OK].
4. Press ▲ or ▼ to display the [Copy1 Tray] option, and then press the [Copy1 Tray] option.
5. Press ▲ or ▼ to display the paper tray where you want to configure the [Copy1 Tray] option, and then press to select the paper tray.



(Windows)

- a. Press ▲ or ▼ to display the [Copy1 Stream] option, and then press the [Copy1 Stream] option.
- b. Press ▲ or ▼ to display the ID number of the macro you want to use, and then press it.


6. Repeat these steps until you have selected all the tray settings for each copy.
7. Press .
8. Send your print job to the machine.



### Related Information

- [Print](#)

## Cancel a Print Job

1. Press .



To cancel multiple print jobs, press and hold  for four seconds.



### Related Information



- [Print](#)

#### Related Topics:

- [Printing Problems](#)
-

## Test Print

If there are problems with print quality, follow these instructions to do a test print:

1. Press  [Settings] > [All Settings] > [Printer] > [Print Options] > [Test Print].
2. Press [Yes].
3. Press .



### Related Information

- [Print](#)

#### Related Topics:

- [Improve the Print Quality](#)
-

## Network

- [Supported Basic Network Features](#)
- [Configure Network Settings](#)
- [Wireless Network Settings](#)
- [Network Features](#)



## Supported Basic Network Features

The machine supports various features depending on the operating system. Use this table to see which network features and connections are supported by each operating system.

Operating Systems	Windows 10 Windows 8.1 Windows 7	Windows Server 2019/2016/2012 R2/2012/2008 R2/2008	macOS v11 macOS v10.15.x macOS v10.14.x
Printing	Yes	Yes	Yes
Web Based Management <sup>1</sup>	Yes	Yes	Yes
Status Monitor	Yes		
Driver Deployment Wizard	Yes	Yes	

<sup>1</sup> The default password to manage this machine's settings is located on the back of the machine and marked "Pwd". We recommend immediately changing the default password to protect your machine from unauthorised access.



When connecting your machine to an outside network such as the Internet, make sure your network environment is protected by a separate firewall or other means in order to prevent information leaks due to inadequate settings or unauthorised access by malicious third parties.



### Related Information

- [Network](#)

## Configure Network Settings


- [Configure Network Details Using the Control Panel](#)
- [Change Machine Settings Using Web Based Management](#)

## Configure Network Details Using the Control Panel

To configure the machine for your network, use the control panel's [Network] menu selections.



- For information about the network settings you can configure using the control panel, see *Related Information: Settings Tables*.
- You can also use Web Based Management to configure and change your machine's network settings.

1. Press  [Settings] > [All Settings] > [Network].
2. Press ▲ or ▼ to display the network option you want, and then press it. Repeat this step until you access the menu you want to configure, and then follow the touchscreen LCD instructions.



### Related Information

- [Configure Network Settings](#)

#### Related Topics:

- [Settings Tables](#)
- [Supported Basic Network Features](#)

## Wireless Network Settings

- [Use the Wireless Network](#)
- [Use Wi-Fi Direct<sup>®</sup>](#)
- [Enable/Disable Wireless LAN](#)
- [Print the WLAN Report](#)

## Use the Wireless Network

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

- [Before Configuring Your Machine for a Wireless Network](#)
- [Configure Your Machine for a Wireless Network Using the Setup Wizard from Your Computer](#)
- [Configure Your Machine for a Wireless Network Using the Machine's Control Panel Setup Wizard](#)
- [Configure Your Machine for a Wireless Network Using the One Push Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Machine for a Wireless Network Using the PIN Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Machine for a Wireless Network When the SSID Is Not Broadcast](#)
- [Configure Your Machine for an Enterprise Wireless Network](#)

## Before Configuring Your Machine for a Wireless Network

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Before attempting to configure a wireless network, confirm the following:

- If you are using an enterprise wireless network, you must know the User ID and Password.
- To achieve optimum results with normal everyday document printing, place your machine as close to the wireless LAN access point/router as possible with minimal obstructions. Large objects and walls between the two devices and interference from other electronic devices can affect the data transfer speed of your documents.

Due to these factors, wireless may not be the best method of connection for all types of documents and applications. If you are printing large files, such as multi-page documents with mixed text and large graphics, you may want to consider selecting wired Ethernet for faster data transfer (supported models only), or USB for the fastest throughput speed.

- Although your machine can be used in both a wired and wireless network (supported models only), only one connection method can be used at a time. However, a wireless network connection and Wi-Fi Direct connection, or a wired network connection (supported models only) and Wi-Fi Direct connection can be used at the same time.
- If there is a signal in the vicinity, wireless LAN allows you to freely make a LAN connection. However, if security settings are not correctly configured, the signal may be intercepted by malicious third-parties, possibly resulting in:
  - Theft of personal or confidential information
  - Improper transmission of information to parties impersonating the specified individuals
  - Dissemination of transcribed communication contents that were intercepted



Make sure you know your wireless router/access point's Network Name (SSID) and Network Key (Password). If you cannot find this information, consult the manufacturer of your wireless router/access point, your system administrator, or Internet provider. Brother cannot provide this information.



### Related Information

- [Use the Wireless Network](#)

## Configure Your Machine for a Wireless Network Using the Setup Wizard from Your Computer

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

1. Download the installer from your model's **Downloads** page at [support.brother.com](http://support.brother.com).
2. Start the installer, and then follow the on-screen instructions.
3. Select **Wireless Network Connection (Wi-Fi)** or **Wireless Network Connection (Wi-Fi) (Optional)**, and then click **Next**.
4. Follow the on-screen instructions.

You have completed the wireless network setup.



### Related Information

- [Use the Wireless Network](#)

## Configure Your Machine for a Wireless Network Using the Machine's Control Panel Setup Wizard

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Before configuring your machine, we recommend writing down your wireless network settings. You will need this information before you continue with the configuration.

1. Check and record the current wireless network settings of the computer to which you are connecting.

Network Name (SSID)

Network Key (Password)

For example:

Network Name (SSID)
HELLO


Network Key (Password)
12345



- Your access point/router may support the use of multiple WEP keys, but your Brother machine supports the use of only the first WEP key.
- If you need assistance during setup and want to contact Brother customer service, make sure you have your SSID (Network Name) and Network Key (Password) ready. We cannot assist you in locating this information.
- If you do not know this information (SSID and Network Key), you cannot continue the wireless setup.

#### How can I find this information?

- Check the documentation provided with your wireless access point/router.
- The initial SSID could be the manufacturer's name or the model name.
- If you do not know the security information, consult the router manufacturer, your system administrator, or your Internet provider.

2. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [Find Wi-Fi Network].
3. When [Enable WLAN?] appears, press [Yes].  
This will start the wireless setup wizard. To cancel, press [No].
4. The machine will search for your network and display a list of available SSIDs.  
If a list of SSIDs is displayed, press ▲ or ▼ to display the SSID to which you want to connect, and then press the SSID.
5. Press [OK].
6. Do one of the following:



- 
- If you are using an authentication and encryption method that requires a Network Key, enter the Network Key you wrote down in the first step.

When you have entered all the characters, press [OK].

- If your authentication method is Open System and your encryption mode is None, go to the next step.

7. The machine attempts to connect to the wireless device you have selected.

If your wireless device is connected successfully, the machine's LCD displays [Connected]. Press [OK].

You have completed the wireless network setup. To install the drivers or your application necessary for operating your device, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).



## Related Information

- [Use the Wireless Network](#)

### Related Topics:


- [How to Enter Text on Your Machine](#)
  - [Wireless LAN Report Error Codes](#)
-

## Configure Your Machine for a Wireless Network Using the One Push Method of Wi-Fi Protected Setup™ (WPS)

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

If your wireless access point/router supports WPS (PBC: Push Button Configuration), you can use WPS from your machine's control panel menu to configure your wireless network settings.

1. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [WPS/Push Button].
2. When [Enable WLAN?] appears, press [Yes].  
This will start the wireless setup wizard. To cancel, press [No].
3. When the touchscreen displays [Start WPS on your wireless access point/router, then press [OK].], press the WPS button on your wireless access point/router. Then press [OK] on your machine. Your machine will automatically detect your wireless access point/router and try to connect to your wireless network.

If your wireless device is connected successfully, the machine's LCD displays [Connected]. Press [OK].

You have completed the wireless network setup. To install the drivers and software necessary to use your machine, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).



### Related Information

- [Use the Wireless Network](#)

#### Related Topics:

- [Wireless LAN Report Error Codes](#)

## Configure Your Machine for a Wireless Network Using the PIN Method of Wi-Fi Protected Setup™ (WPS)

### NOTE

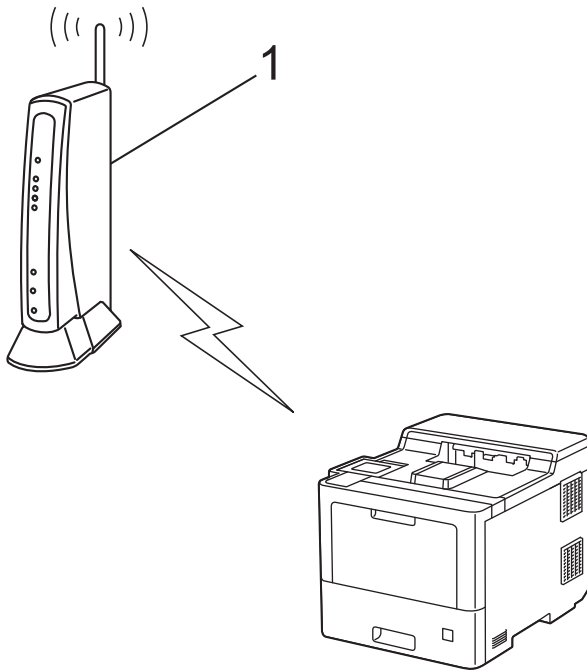
For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

If your wireless LAN access point/router supports WPS, you can use the Personal Identification Number (PIN) Method to configure your wireless network settings.

The PIN Method is one of the connection methods developed by the Wi-Fi Alliance®. By submitting a PIN created by an Enrollee (your machine) to the Registrar (a device that manages the wireless LAN), you can set up the wireless network and security settings. For more information on how to access WPS mode, see the instructions provided with your wireless access point/router.

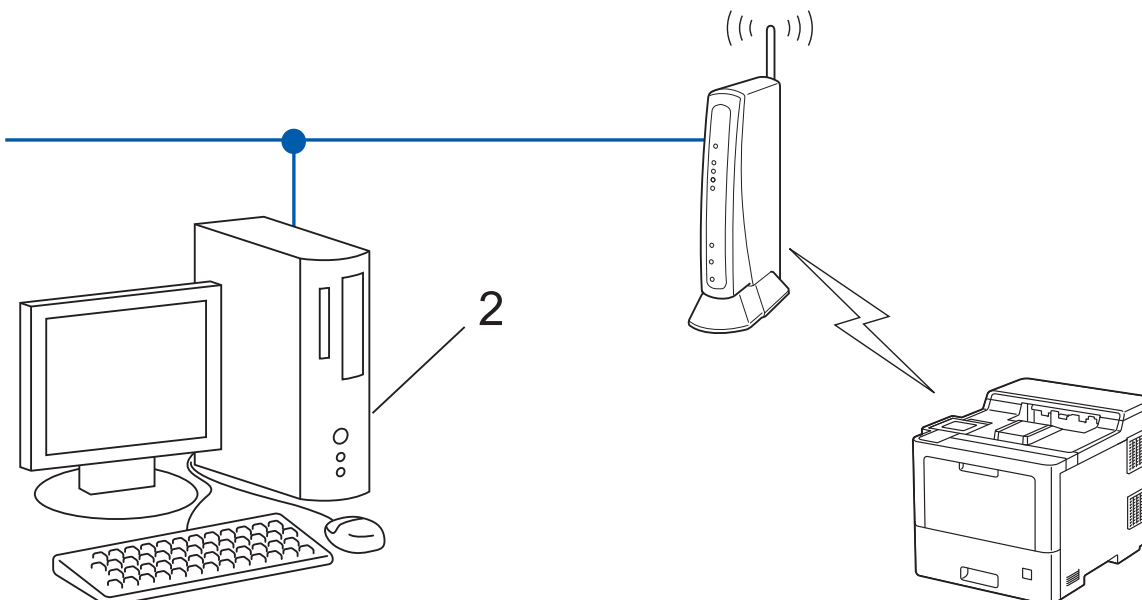
#### Type A


Connection when the wireless LAN access point/router (1) doubles as the Registrar:



#### Type B

Connection when another device (2), such as a computer, is used as the Registrar:





1. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [WPS/PIN Code].
2. When [Enable WLAN?] appears, press [Yes].  
This will start the wireless setup wizard. To cancel, press [No].
3. The LCD displays an eight-digit PIN and the machine starts searching for a wireless LAN access point/router.
4. Using a computer connected to the network, in your browser's address bar, type the IP address of the device you are using as the Registrar. (For example: <http://192.168.1.2>)
5. Go to the WPS settings page and type the PIN, and then follow the on-screen instructions.



- The Registrar is usually the wireless LAN access point/router.
- The settings page may differ depending on the brand of wireless LAN access point/router. For more information, see the instructions supplied with your wireless LAN access point/router.

**If you are using a Windows 7, Windows 8.1, or Windows 10 computer as a Registrar, complete the following steps:**

6. Do one of the following:
  - Windows 10  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **Add a device**.
  - Windows 8.1  
Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings** > **Control Panel** > **Hardware and Sound** > **View devices and printers** > **Add a device**.
  - Windows 7  
Click  (**Start**) > **Devices and Printers** > **Add a device**.



- To use a Windows 7, Windows 8.1, or Windows 10 computer as a Registrar, you must register it to your network in advance. For more information, see the instructions supplied with your wireless LAN access point/router.
- If you use Windows 7, Windows 8.1, or Windows 10 as a Registrar, you can install the printer driver after the wireless configuration by following the on-screen instructions. To install the driver and software necessary to use your machine, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).

7. Select your machine and click **Next**.
8. Type the PIN displayed on the machine's LCD, and then click **Next**.
9. (Windows 7) Select your network, and then click **Next**.

---

10. Click **Close**.

If your wireless device is connected successfully, the machine's LCD displays [Connected]. Press [OK].

You have completed the wireless network setup. To install the drivers or your application necessary for operating your device, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).



### Related Information

- [Use the Wireless Network](#)

#### Related Topics:

- [Wireless LAN Report Error Codes](#)
-

## Configure Your Machine for a Wireless Network When the SSID Is Not Broadcast

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Before configuring your machine, we recommend writing down your wireless network settings. You will need this information before you continue with the configuration.

1. Check and write down the current wireless network settings.


Network Name (SSID)		
Authentication Method	Encryption Mode	Network Key
Open System	NONE	-
	WEP	
Shared Key	WEP	
WPA/WPA2-PSK	AES	
	TKIP	

For example:

Network Name (SSID)		
HELLO		
Authentication Method	Encryption Mode	Network Key
WPA2-PSK	AES	12345678



If your router uses WEP encryption, enter the key used as the first WEP key. Your Brother machine supports the use of the first WEP key only.

2. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [Find Wi-Fi Network].
3. When [Enable WLAN?] appears, press [Yes].  
This will start the wireless setup wizard. To cancel, press [No].
4. The machine will search for your network and display a list of available SSIDs. Press ▲ or ▼ to display the [<New SSID>] option.
5. Press [<New SSID>], and then press [OK].
6. Enter the SSID name, and then press [OK].
7. Select the Authentication Method.
8. Do one of the following:
  - If you selected the [Open System] option, press [None] or [WEP].  
If you selected the [WEP] option for Encryption type, enter the WEP key, and then press [OK].
  - If you selected the [Shared Key] option, enter the WEP key, and then press [OK].
  - If you selected the [WPA/WPA2-PSK] option, press [TKIP+AES] or [AES].

---

Enter the WPA™ key, and then press [OK].



Your Brother machine supports the use of the first WEP key only.

9. The machine attempts to connect to the wireless device you have selected.

If your wireless device is connected successfully, the machine's LCD displays [Connected]. Press [OK].

You have completed the wireless network setup. To install the drivers or your application necessary for operating your device, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).



### Related Information

- [Use the Wireless Network](#)

#### Related Topics:

- [I Cannot Complete the Wireless Network Setup Configuration](#)
  - [How to Enter Text on Your Machine](#)
  - [Wireless LAN Report Error Codes](#)
-

## Configure Your Machine for an Enterprise Wireless Network

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Before configuring your machine, we recommend writing down your wireless network settings. You will need this information before you continue with the configuration.

1. Check and record the current wireless network settings.

Network Name (SSID)			
Authentication Method	Encryption Mode	User ID	Password
EAP-FAST/NONE	AES		
	TKIP		
EAP-FAST/MS-CHAPv2	AES		
	TKIP		
EAP-FAST/GTC	AES		
	TKIP		
PEAP/MS-CHAPv2	AES		
	TKIP		
PEAP/GTC	AES		
	TKIP		
EAP-TTLS/CHAP	AES		
	TKIP		
EAP-TTLS/MS-CHAP	AES		
	TKIP		
EAP-TTLS/MS-CHAPv2	AES		
	TKIP		
EAP-TTLS/PAP	AES		
	TKIP		
EAP-TLS	AES		-
	TKIP		-


For example:

Network Name (SSID)			
HELLO			
Authentication Method	Encryption Mode	User ID	Password
EAP-FAST/MS-CHAPv2	AES	Brother	12345678





- If you configure your machine using EAP-TLS authentication, you must install the client certificate issued by a CA before you start configuration. Contact your network administrator about the client certificate. If you have installed more than one certificate, we recommend writing down the certificate name you want to use.
- If you verify your machine using the common name of the server certificate, we recommend writing down the common name before you start configuration. Contact your network administrator about the common name of the server certificate.

2. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [Find Wi-Fi Network].
3. When [Enable WLAN?] appears, press [Yes].  
This will start the wireless setup wizard. To cancel, press [No].
4. The machine will search for your network and display a list of available SSIDs. Press ▲ or ▼ to display the [<New SSID>] option.
5. Press [<New SSID>], and then press [OK].
6. Enter the SSID name, and then press [OK].
7. Select the Authentication Method.
8. Do one of the following:
  - If you selected the [EAP-FAST], [PEAP] or [EAP-TTLS] option, press ▲ or ▼ to select the Inner Authentication Method [NONE], [CHAP], [MS-CHAP], [MS-CHAPv2], [GTC] or [PAP].



Depending on your Authentication Method, the Inner Authentication Method selections may differ.

Select the Encryption Type [TKIP+AES] or [AES].

Select the Verification Method [No Verification], [CA] or [CA + Server ID].

- If you selected the [CA + Server ID] option, enter the server ID, user ID, and password (if required), and then press [OK] for each option.
- For other selections, enter the user ID and Password, and then press [OK] for each option.



If you have not imported a CA certificate into your machine, the machine displays [No Verification].

- If you selected the [EAP-TLS] option, select the Encryption Type [TKIP+AES] or [AES].  
When the machine displays a list of available Client Certificates, select the certificate you want.  
Select the Verification Method [No Verification], [CA] or [CA + Server ID].
  - If you selected the [CA + Server ID] option, enter the server ID and user ID, and then press [OK] for each option.
  - For other selections, enter the user ID, and then press [OK].

9. The machine attempts to connect to the wireless device you have selected.

If your wireless device is connected successfully, the machine's LCD displays [Connected]. Press [OK].

You have completed the wireless network setup. To install the drivers or your application necessary for operating your device, go to your model's **Downloads** page at [support.brother.com](http://support.brother.com).



## Related Information

- [Use the Wireless Network](#)

### Related Topics:

- [Wireless LAN Report Error Codes](#)

## Use Wi-Fi Direct®

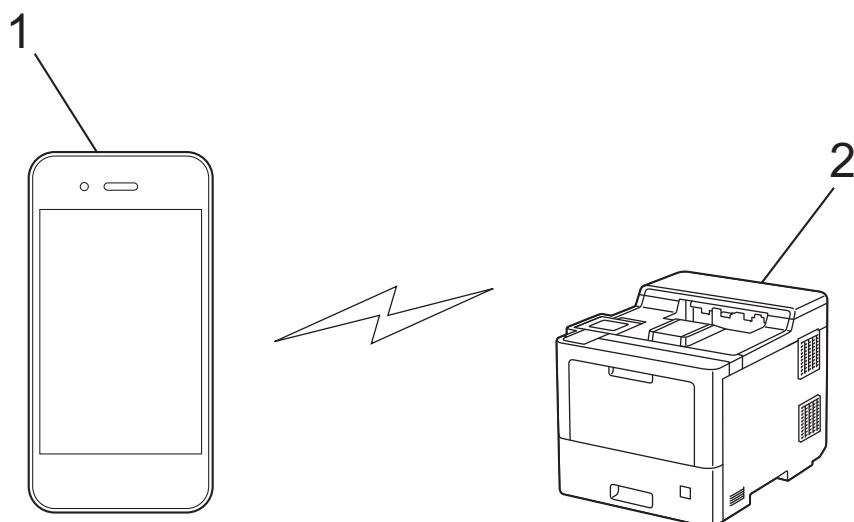
- [Wi-Fi Direct Overview](#)
- [Configure Your Wi-Fi Direct Network Manually](#)
- [Configure Wi-Fi Direct Network Using the Push Button Method](#)

## Wi-Fi Direct Overview

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Wi-Fi Direct is one of the wireless configuration methods developed by the Wi-Fi Alliance®. It allows you to securely connect your mobile device to your machine without using a wireless router/access point.



1. Mobile device
2. Your machine



- You can use Wi-Fi Direct with either the wired or wireless network connection at the same time.
- The Wi-Fi Direct-supported device can become a Group Owner. When configuring the Wi-Fi Direct network, the Group Owner serves as an access point.

### ✓ Related Information

- [Use Wi-Fi Direct®](#)

#### Related Topics:

- [Configure Your Wi-Fi Direct Network Manually](#)
- [Configure Wi-Fi Direct Network Using the Push Button Method](#)

## Configure Your Wi-Fi Direct Network Manually


### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Configure the Wi-Fi Direct settings from the machine's control panel:



When the machine receives a Wi-Fi Direct request from your mobile device, the message [Wi-Fi Direct connection request received. Press [OK] to connect.] appears on the LCD. Press [OK] to connect.

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Manual].
2. The machine will display the SSID (Network Name) and Password (Network Key). Go to your mobile device's wireless network settings screen, select the SSID, and then enter the password.
3. When your mobile device connects successfully, the machine's LCD displays [Connected].
4. Press [Close].



### Related Information

- [Use Wi-Fi Direct®](#)


#### Related Topics:


- [Wi-Fi Direct Overview](#)
- [Configure Wi-Fi Direct Network Using the Push Button Method](#)


## Configure Wi-Fi Direct Network Using the Push Button Method


### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

 When the machine receives a Wi-Fi Direct request from your mobile device, the message [Wi-Fi Direct connection request received. Press [OK] to connect.] appears on the LCD. Press [OK] to connect.

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Push Button] on your machine's LCD.

 If your mobile device does not support Wi-Fi Direct, do the following:

- a. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Group Owner], and then press [On].
  - b. Press ▲ or ▼ to select the [Push Button].
2. When the [Activate Wi-Fi Direct on other device. Then Press [OK].] message appears, turn your mobile device's Wi-Fi Direct function on (for more information, see your mobile device's user's guide). Press [OK] on your machine.
  3. Do one of the following:
    - If your mobile device displays a list of machines with Wi-Fi Direct enabled, select your Brother machine.
    - If your Brother machine displays a list of mobile devices with Wi-Fi Direct enabled, select your mobile device. To search for available devices again, press [Rescan].
  4. When your mobile device connects successfully, the machine's LCD displays [Connected].
  5. Press [Close].

### Related Information

- [Use Wi-Fi Direct®](#)



#### Related Topics:

- [Wi-Fi Direct Overview](#)
- [Configure Your Wi-Fi Direct Network Manually](#)

## Enable/Disable Wireless LAN

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

1. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)].
2. Press ▲ or ▼ to select the [WLAN Enable] option. Press [WLAN Enable].
3. Do one of the following:
  - To enable Wi-Fi, select [On].
  - To disable Wi-Fi, select [Off].
4. Press .



### Related Information



- [Wireless Network Settings](#)

## Print the WLAN Report

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

The WLAN Report shows your machine's wireless status. If the wireless connection fails, check the error code on the printed report.

1. Press  [Settings] > [All Settings] > [Print Reports] > [WLAN Report].
2. Press [Yes].  
The machine will print the WLAN Report.
3. Press .

If the WLAN Report does not print, check your machine for errors. If there are no visible errors, wait for one minute and then try to print the report again.

### Related Information

- [Wireless Network Settings](#)
  - [Wireless LAN Report Error Codes](#)

#### Related Topics:

- [My Machine Cannot Print over the Network](#)
- [I Want to Check that My Network Devices are Working Correctly](#)

## Wireless LAN Report Error Codes

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

If the Wireless LAN Report shows that the connection failed, check the error code on the printed report and see the corresponding instructions in the table:

Error Code	Problem and Recommended Solutions
TS-01	<p>The WLAN (Wi-Fi) is not enabled.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"><li>• Enable the WLAN setting on your machine.</li><li>• If a network cable is connected to your machine, disconnect it.</li></ul>
TS-02	<p>The wireless router/access point cannot be detected.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"><li>• Make sure the wireless router/access point is on.</li><li>• Temporarily place your machine closer to the wireless router/access point when you are configuring the wireless settings.</li><li>• If your wireless router/access point is using MAC address filtering, confirm that the MAC address of the machine is allowed in the filter. You can find the MAC address by printing the Network Configuration Report.</li><li>• If you manually entered the Network Name (SSID) and security information (authentication method/encryption method), the information may be incorrect. Check the Network Name and security information again and re-enter the correct information.</li><li>• Restart your wireless router/access point. If you cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</li></ul>
TS-03	<p>The wireless enterprise network and security settings you entered may be incorrect.</p> <p>Check the following points and try to set up your wireless connection again:</p> <p>Verify the following information:</p> <ul style="list-style-type: none"><li>- Network Name (SSID) you selected to configure your machine.</li><li>- Security information you selected to configure your machine (such as the authentication method, encryption method, or User ID).</li></ul> <p>If you still cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</p>



Error Code	Problem and Recommended Solutions
TS-04	<p>Your machine does not support the authentication and encryption methods used by the selected wireless router/access point.</p> <p>For infrastructure mode (Most common)</p> <p>Change the authentication and encryption methods of the wireless router/access point. Your machine supports the following authentication and encryption methods:</p> <ul style="list-style-type: none"> <li>• WPA-Personal: TKIP / AES</li> <li>• WPA2-Personal: TKIP / AES</li> <li>• Open: WEP / NONE (without encryption)</li> <li>• Shared key: WEP</li> </ul> <p>If your issue is not solved, the Network Name (SSID) or security settings you entered may be incorrect. Check that all wireless network settings are correct for your network.</p>
TS-05	<p>The Network Name (SSID) and Network Key (Password) are incorrect.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"> <li>• Confirm the Network Name (SSID) and Network Key (Password).</li> <li>• If your Network Key contains upper-case and lower-case letters, make sure you type them correctly.</li> <li>• If you cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</li> <li>• If your wireless router/access point uses WEP encryption with multiple WEP keys, write down and use only the first WEP key.</li> </ul>
TS-06	<p>The wireless security information (authentication method/encryption method/Network Key (Password)) is incorrect.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"> <li>• Confirm the Network Key. If your Network Key contains upper-case and lower-case letters, make sure you type them correctly.</li> <li>• Confirm whether the authentication method entered and the authentication method or encryption method supported by the wireless router/access point are the same.</li> <li>• If the network key, authentication method, and encryption method have been confirmed, restart your wireless router/access point and the machine.</li> <li>• If your wireless router/access point's Stealth Mode is on, you may need to disable it to connect to the wireless network.</li> </ul> <p>If you cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</p>
TS-07	<p>The machine cannot detect a wireless router/access point that has WPS (Wi-Fi Protected Setup) enabled.</p> <p>Check the following points and try again:</p> <ul style="list-style-type: none"> <li>• To check if your wireless router/access point supports WPS, look for the WPS symbol displayed on the router/access point. For more information, see the documentation provided with your wireless router/access point.</li> <li>• To set up your wireless connection using WPS, you must configure both your machine and the wireless router/access point. For more information, see the user's guide.</li> <li>• If you do not know how to set up your wireless router/access point using WPS, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</li> </ul>

Error Code	Problem and Recommended Solutions
TS-08	<p>Two or more wireless routers or access points that have WPS enabled are detected.</p> <p>Check the following points and try again:</p> <ul style="list-style-type: none"> <li>• Make sure that only one wireless router/access point within range has WPS enabled, and then try to connect again.</li> <li>• Try to connect again after a few minutes to avoid interference from other access points/routers.</li> </ul>



How to confirm wireless security information (SSID/authentication method/encryption method/Network Key) of your WLAN access point/router:

1. The default security settings may be provided on a label attached to the WLAN access point/router. Or the manufacturer's name or model number of the WLAN access point/router may be used as the default security settings.
2. See the documentation provided with your WLAN access point/router for information on how to find the security settings.
  - If the WLAN access point/router is set to not broadcast the SSID, the SSID will not automatically be detected. You will have to manually enter the SSID name.
  - The Network key may also be described as the Password, Security Key, or Encryption Key.

If you do not know the SSID and wireless security settings of your WLAN access point/router or how to change the configuration, see the documentation provided with your WLAN access point/router, ask the manufacturer of your access point/router or ask your Internet provider or network administrator.



## Related Information

- [Print the WLAN Report](#)

### Related Topics:

- [My Machine Cannot Print over the Network](#)
- [I Want to Check that My Network Devices are Working Correctly](#)
- [Configure Your Machine for a Wireless Network Using the One Push Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Machine for a Wireless Network Using the PIN Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Machine for a Wireless Network Using the Machine's Control Panel Setup Wizard](#)
- [Configure Your Machine for a Wireless Network When the SSID Is Not Broadcast](#)
- [Configure Your Machine for an Enterprise Wireless Network](#)

## Network Features



- [Print the Network Configuration Report](#)
- [Synchronise Time with the SNTP Server Using Web Based Management](#)
- [Gigabit Ethernet \(Wired Network Only\)](#)
- [Reset the Network Settings to the Factory Settings](#)

## Print the Network Configuration Report

The Network Configuration Report lists the network configuration, including the network print server settings.



- **Node Name:** The Node Name appears on the current Network Configuration Report. The default Node Name is "BRNxxxxxxxxxxx" for a wired network or "BRWxxxxxxxxxxx" for a wireless network (where "xxxxxxxxxxx" is your machine's MAC Address / Ethernet Address.)
- If the IP Address on the Network Configuration Report shows 0.0.0.0, wait for one minute and try printing it again.
- You can find your machine's settings, such as the IP address, subnet mask, node name, and MAC Address on the report, for example:
  - IP address: 192.168.0.5
  - Subnet mask: 255.255.255.0
  - Node name: BRN000ca0000499
  - MAC Address: 00-0c-a0-00-04-99

1. Press  [Settings] > [All Settings] > [Print Reports] > [Network Configuration].
2. Press [Yes].  
The machine prints the Network Configuration Report.
3. Press .



### Related Information

- [Network Features](#)

#### Related Topics:

- [Check Your Machine's Network Settings](#)
- [Use the Network Connection Repair Tool \(Windows\)](#)
- [Access Web Based Management](#)
- [Error Messages](#)
- [I Want to Check that My Network Devices are Working Correctly](#)
- [Configure the Gigabit Ethernet Settings Using Web Based Management](#)

## **Synchronise Time with the SNTP Server Using Web Based Management**

The Simple Network Time Protocol (SNTP) is used to synchronise the time used by the machine for authentication with the SNTP time server. You can automatically or manually synchronise the machine's time with the Coordinated Universal Time (UTC) provided by the SNTP time server.

- [Configure Date and Time Using Web Based Management](#)
- [Configure the SNTP Protocol Using Web Based Management](#)

## Configure Date and Time Using Web Based Management

Configure date and time to synchronise the time used by the machine with the SNTP time server.

This feature is not available in some countries.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > Date&Time**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Verify the **Time Zone** settings.



Select the time difference between your location and UTC from the **Time Zone** drop-down list. For example, the time zone for Eastern Time in the USA and Canada is UTC-05:00.

6. Click **Submit**.



### Related Information

- [Synchronise Time with the SNTP Server Using Web Based Management](#)

## Configure the SNTP Protocol Using Web Based Management

Configure the SNTP protocol to synchronise the time the machine uses for authentication with the time kept by the SNTP time server.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Network > Protocol**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Select the **SNTP** check box to activate the settings.
6. Click **Submit**.
7. Restart your Brother machine to activate the configuration.
8. Next to the SNTP check box, click **Advanced Setting**.
9. Configure the settings.

Option	Description
<b>Status</b>	Displays whether the SNTP protocol is enabled or disabled.
<b>Synchronization Status</b>	Confirm the latest synchronisation status.
<b>SNTP Server Method</b>	Select <b>AUTO</b> or <b>STATIC</b> . <ul style="list-style-type: none"><li>• <b>AUTO</b> If you have a DHCP server in your network, the SNTP server will obtain the address from that server automatically.</li><li>• <b>STATIC</b> Type the address you want to use.</li></ul>
<b>Primary SNTP Server Address</b> <b>Secondary SNTP Server Address</b>	Type the server address (up to 64 characters). The secondary SNTP server address is used as a backup to the primary SNTP server address. If the primary server is unavailable, the machine will contact the secondary SNTP server.
<b>Primary SNTP Server Port</b> <b>Secondary SNTP Server Port</b>	Type the port number (1-65535). The secondary SNTP server port is used as a backup to the primary SNTP server port. If the primary port is unavailable, the machine will contact the secondary SNTP port.
<b>Synchronization Interval</b>	Type the number of hours between server synchronisation attempts (1-168 hours).

10. Click **Submit**.



### Related Information

- [Synchronise Time with the SNTP Server Using Web Based Management](#)

## Gigabit Ethernet (Wired Network Only)

Your machine supports 1000BASE-T Gigabit Ethernet. To connect to a 1000BASE-T Gigabit Ethernet Network, you must set the machine's Ethernet link mode to Auto from the machine's control panel or Web Based Management (web browser).



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Use a Category 5e (or greater) network cable. The machine can automatically negotiate the highest supported network speed, for example: to achieve 1000BASE-T network speeds, all connecting infrastructure, including network switches and cables must also support 1000BASE-T speeds. Otherwise the machine will communicate at either 10BASE-T or 100BASE-TX.

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### Related Information

- [Network Features](#)
  - [Configure the Gigabit Ethernet Settings Using Web Based Management](#)
-



## Configure the Gigabit Ethernet Settings Using Web Based Management

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Wired > Ethernet**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Select **Auto** from the **Ethernet Mode** drop-down list.
6. Click **Submit**.
7. To enable the settings, restart your machine.

You can confirm your settings by printing the Network Configuration Report.



### Related Information

- [Gigabit Ethernet \(Wired Network Only\)](#)

#### Related Topics:


- [Print the Network Configuration Report](#)

## Reset the Network Settings to the Factory Settings

You can use your machine's control panel to reset the machine's network settings to its default factory settings. This resets all information, such as the password and IP address.



- This feature restores all network settings to the factory settings.
- You can also reset the print server to its factory settings using Web Based Management.

1. Press  [Settings] > [All Settings] > [Network] > [Network Reset].
2. [Reboot OK?] will be displayed. Press [Yes] for two seconds to confirm.  
The machine will restart.



### Related Information

- [Network Features](#)

#### Related Topics:

- [Reset Functions](#)

## Security

- [Before Using Network Security Features](#)
- [Configure Certificates for Device Security](#)
- [Use SSL/TLS](#)
- [Use SNMPv3](#)
- [Use IPsec](#)
- [Use IEEE 802.1x Authentication for a Wired or a Wireless Network](#)
- [Use Active Directory Authentication](#)
- [Use LDAP Authentication](#)
- [Use Secure Function Lock 3.0](#)
- [Send an Email Securely](#)
- [Store Print Log to Network](#)
- [Lock the Machine Settings from the Control Panel](#)

## Before Using Network Security Features

Your machine employs some of the latest network security and encryption protocols available today. These network features can be integrated into your overall network security plan to help protect your data and prevent unauthorised access to the machine.



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We recommend disabling the Telnet, FTP server, and TFTP protocols. Accessing the machine using these protocols is not secure.

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### Related Information

- [Security](#)
-

## Configure Certificates for Device Security

You must configure a certificate to manage your networked machine securely using SSL/TLS. You must use Web Based Management to configure a certificate.

- [Supported Security Certificate Features](#)
- [Step by Step Guide for Creating and Installing a Certificate](#)
- [Create a Self-signed Certificate](#)
- [Create CSR and Install a Certificate from a Certificate Authority \(CA\)](#)
- [Import and Export the Certificate and Private Key](#)
- [Import and Export a CA Certificate](#)
- [Manage Multiple Certificates](#)

## Supported Security Certificate Features

Your machine supports the use of multiple security certificates, which allows secure management, authentication, and communication with the machine. The following security certificate features can be used with the machine:

- SSL/TLS communication
- SSL communication for SMTP
- IEEE 802.1x authentication
- IPsec

Your machine supports the following:

- Pre-installed certificate

Your machine has a pre-installed self-signed certificate. This certificate enables you to use SSL/TLS communication without creating or installing a different certificate.



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The pre-installed self-signed certificate protects your communication up to a certain level. We recommend using a certificate that is issued by a trusted organisation for better security.

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- Self-signed certificate

This print server issues its own certificate. Using this certificate, you can easily use the SSL/TLS communication without creating or installing a different certificate from a CA.

- Certificate from a Certificate Authority (CA)

There are two methods for installing a certificate from a CA. If you already have a certificate from a CA or if you want to use a certificate from an external trusted CA:

- When using a Certificate Signing Request (CSR) from this print server.
- When importing a certificate and a private key.

- Certificate Authority (CA) Certificate

To use a CA certificate that identifies the CA and owns its private key, you must import that CA certificate from the CA before configuring the security features of the Network.



- If you are going to use SSL/TLS communication, we recommend contacting your system administrator first.
  - When you reset the print server back to its default factory settings, the certificate and the private key that are installed will be deleted. If you want to keep the same certificate and the private key after resetting the print server, export them before resetting, and then reinstall them.
- 



### Related Information

- [Configure Certificates for Device Security](#)
-

## Step by Step Guide for Creating and Installing a Certificate

There are two options when choosing a security certificate: use a self-signed certificate or use a certificate from a Certificate Authority (CA).

### Option 1

#### Self-Signed Certificate

1. Create a self-signed certificate using Web Based Management.
2. Install the self-signed certificate on your computer.

### Option 2

#### Certificate from a CA

1. Create a Certificate Signing Request (CSR) using Web Based Management.
2. Install the certificate issued by the CA on your Brother machine using Web Based Management.
3. Install the certificate on your computer.



#### Related Information

- [Configure Certificates for Device Security](#)

## Create a Self-signed Certificate

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > Certificate**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Click **Create Self-Signed Certificate**.
6. Enter a **Common Name** and a **Valid Date**.
  - The length of the **Common Name** is less than 64 bytes. Enter an identifier, such as an IP address, node name, or domain name to use when accessing this machine through SSL/TLS communication. The node name is displayed by default.
  - A warning will appear if you use the IPPS or HTTPS protocol and enter a different name in the URL than the **Common Name** that was used for the self-signed certificate.
7. Select your setting from the **Public Key Algorithm** drop-down list. The default setting is **RSA(2048bit)**.
8. Select your setting from the **Digest Algorithm** drop-down list. The default setting is **SHA256**.
9. Click **Submit**.



### Related Information

- [Configure Certificates for Device Security](#)



## **Create CSR and Install a Certificate from a Certificate Authority (CA)**

If you already have a certificate from an external trusted CA, you can store the certificate and private key on the machine and manage them by importing and exporting. If you do not have a certificate from an external trusted CA, create a Certificate Signing Request (CSR), send it to a CA for authentication, and install the returned certificate on your machine.

- [Create a Certificate Signing Request \(CSR\)](#)
- [Install a Certificate on Your Machine](#)

## Create a Certificate Signing Request (CSR)

A Certificate Signing Request (CSR) is a request sent to a Certificate Authority (CA) to authenticate the credentials contained within the certificate.

We recommend installing a Root Certificate from the CA on your computer before creating the CSR.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > Certificate**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Click **Create CSR**.
6. Type a **Common Name** (required) and add other information about your **Organization** (optional).



- Your company details are required so that a CA can confirm your identity and verify it to the outside world.
- The length of the **Common Name** must be less than 64 bytes. Enter an identifier, such as an IP address, node name, or domain name to use when accessing this machine through SSL/TLS communication. The node name is displayed by default. The **Common Name** is required.
- A warning will appear if you type a different name in the URL than the Common Name that was used for the certificate.
- The length of the **Organization**, the **Organization Unit**, the **City/Locality**, and the **State/Province** must be less than 64 bytes.
- The **Country/Region** should be a two-character ISO 3166 country code.
- If you are configuring an X.509v3 certificate extension, select the **Configure extended partition** check box, and then select **Auto (Register IPv4)** or **Manual**.

7. Select your setting from the **Public Key Algorithm** drop-down list. The default setting is **RSA(2048bit)**.
8. Select your setting from the **Digest Algorithm** drop-down list. The default setting is **SHA256**.
9. Click **Submit**.

The CSR appears on your screen. Save the CSR as a file or copy and paste it into an online CSR form offered by a Certificate Authority.

---

10. Click **Save**.



- Follow your CA's policy regarding the method to send a CSR to your CA.
  - If you are using the Enterprise root CA of Windows Server 2008/2008 R2/2012/2012 R2/2016/2019, we recommend using the Web Server for the certificate template to securely create the Client Certificate. If you are creating a Client Certificate for an IEEE 802.1x environment with EAP-TLS authentication, we recommend using User for the certificate template.
- 



### **Related Information**

- [Create CSR and Install a Certificate from a Certificate Authority \(CA\)](#)
-

## Install a Certificate on Your Machine

When you receive a certificate from a CA, follow the steps below to install it into the print server:

Only a certificate issued with your machine's CSR can be installed onto the machine. When you want to create another CSR, make sure that the certificate is installed before creating another CSR. Create another CSR only after installing the certificate on the machine. Otherwise, the CSR you created before installing will be invalid.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > Certificate**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Click **Install Certificate**.
6. Browse to the file that contains the certificate issued by the CA, and then click **Submit**.

The certificate has been created and saved in your machine's memory successfully.

To use SSL/TLS communication, the Root Certificate from the CA must be installed on your computer. Contact your network administrator.



### Related Information

- [Create CSR and Install a Certificate from a Certificate Authority \(CA\)](#)

## Import and Export the Certificate and Private Key

Store the certificate and private key on your machine and manage them by importing and exporting them.

- [Import a Certificate and Private Key](#)
- [Export the Certificate and Private Key](#)

## Import a Certificate and Private Key

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > Certificate**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Click **Import Certificate and Private Key**.
6. Browse to the file you want to import.
7. Type the password if the file is encrypted, and then click **Submit**.

The certificate and private key are imported to your machine.



### Related Information

- [Import and Export the Certificate and Private Key](#)

## Export the Certificate and Private Key

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > Certificate**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Click **Export** shown with **Certificate List**.
6. Enter the password if you want to encrypt the file.  
If a blank password is used, the output is not encrypted.
7. Enter the password again for confirmation, and then click **Submit**.
8. Click **Save**.

The certificate and private key are exported to your computer.

You can also import the certificate to your computer.



### Related Information

- [Import and Export the Certificate and Private Key](#)

## Import and Export a CA Certificate

You can import, export, and store CA certificates on your Brother machine.

- [Import a CA Certificate](#)
- [Export a CA Certificate](#)



## Import a CA Certificate

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > CA Certificate**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Click **Import CA Certificate**.
6. Browse to the file you want to import.
7. Click **Submit**.



### Related Information

- [Import and Export a CA Certificate](#)

## Export a CA Certificate

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > CA Certificate**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Select the certificate you want to export and click **Export**.
6. Click **Submit**.
7. Click ▼ next to **Save**, and then specify the location where you want to save the file.



### Related Information

- [Import and Export a CA Certificate](#)

## Manage Multiple Certificates

The multiple certificate feature allows you to use Web Based Management to manage each certificate installed on your machine. In Web Based Management, navigate to the **Certificate** or **CA Certificate** screen to view certificate content, delete, or export your certificates.

	Maximum Number of Certificates Stored on Brother Machine
Self-signed Certificate or Certificate Issued by a CA	5
CA Certificate	6

We recommend storing fewer certificates than allowed, reserving an empty spot in case of certificate expiration. When a certificate expires, import a new certificate into the reserved spot, and then delete the expired certificate. This ensures that you avoid configuration failure.



- When you use HTTPS/IPPS, or IEEE 802.1x, you must select which certificate you are using.
- When you use SSL for SMTP communications, you do not have to choose the certificate. The necessary certificate will be chosen automatically.



### Related Information

- [Configure Certificates for Device Security](#)

## Use SSL/TLS

- [Introduction to SSL/TLS](#)
- [Manage Your Network Machine Securely Using SSL/TLS](#)
- [Print Documents Securely Using SSL/TLS](#)
- [Send an Email Securely](#)

## Introduction to SSL/TLS

Secure Socket Layer (SSL) or Transport Layer Security (TLS) is an effective method of protecting data sent over a local or wide area network (LAN or WAN). It works by encrypting data, such as a print job, sent over a network, so anyone trying to capture it will not be able to read it.

SSL/TLS can be configured on both wired and wireless networks and will work with other forms of security such as WPA keys and firewalls.



### Related Information

- [Use SSL/TLS](#)
    - [Brief History of SSL/TLS](#)
    - [Benefits of Using SSL/TLS](#)
-

## Brief History of SSL/TLS

SSL/TLS was originally created to secure web traffic information, particularly data sent between web browsers and servers. For example, when you use Internet Explorer for Internet Banking and you see https:// and the little padlock icon in the web browser, you are using SSL. SSL grew to work with additional applications, such as Telnet, printer, and FTP software, in order to become a universal solution for online security. Its original design intentions are still being used today by many online retailers and banks to secure sensitive data, such as credit card numbers, customer records, etc.

SSL/TLS uses extremely high levels of encryption and is trusted by banks all over the world.



### Related Information

- [Introduction to SSL/TLS](#)

## Benefits of Using SSL/TLS

The primary benefit of using SSL/TLS is to guarantee secure printing over an IP network by restricting unauthorised users from reading data sent to the machine. SSL's key selling point is that it can be used to print confidential data securely. For example, an HR department in a large company may be printing wage slips on a regular basis. Without encryption, the data contained on these wages slips can be read by other network users. However, with SSL/TLS, anyone trying to capture the data will see a confusing page of code and not the actual wage slip.



### Related Information

- [Introduction to SSL/TLS](#)

## Manage Your Network Machine Securely Using SSL/TLS

- [Configure a Certificate for SSL/TLS and Available Protocols](#)
- [Access Web Based Management Using SSL/TLS](#)
- [Install the Self-signed Certificate for Windows users with Administrator Rights](#)
- [Configure Certificates for Device Security](#)



## Configure a Certificate for SSL/TLS and Available Protocols

Configure a certificate on your machine using Web Based Management before you use SSL/TLS communication.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Network > Protocol**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Click **HTTP Server Settings**.
6. Select the certificate you want to configure from the **Select the Certificate** drop-down list.
7. Click **Submit**.
8. Click **Yes** to restart your print server.



### Related Information

- [Manage Your Network Machine Securely Using SSL/TLS](#)

## Access Web Based Management Using SSL/TLS

To manage your network machine securely, use Web Based Management with the HTTPS protocol.



- To use HTTPS protocol, HTTPS must be enabled on your machine. The HTTPS protocol is enabled by default.
- You can change the HTTPS protocol settings using Web Based Management.

1. Start your web browser.
2. Type "https://Common Name" in your browser's address bar (where "Common Name" is the Common Name that you assigned to the certificate; this could be your IP address, node name, or domain name).
3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. You can now access the machine using HTTPS.



### Related Information

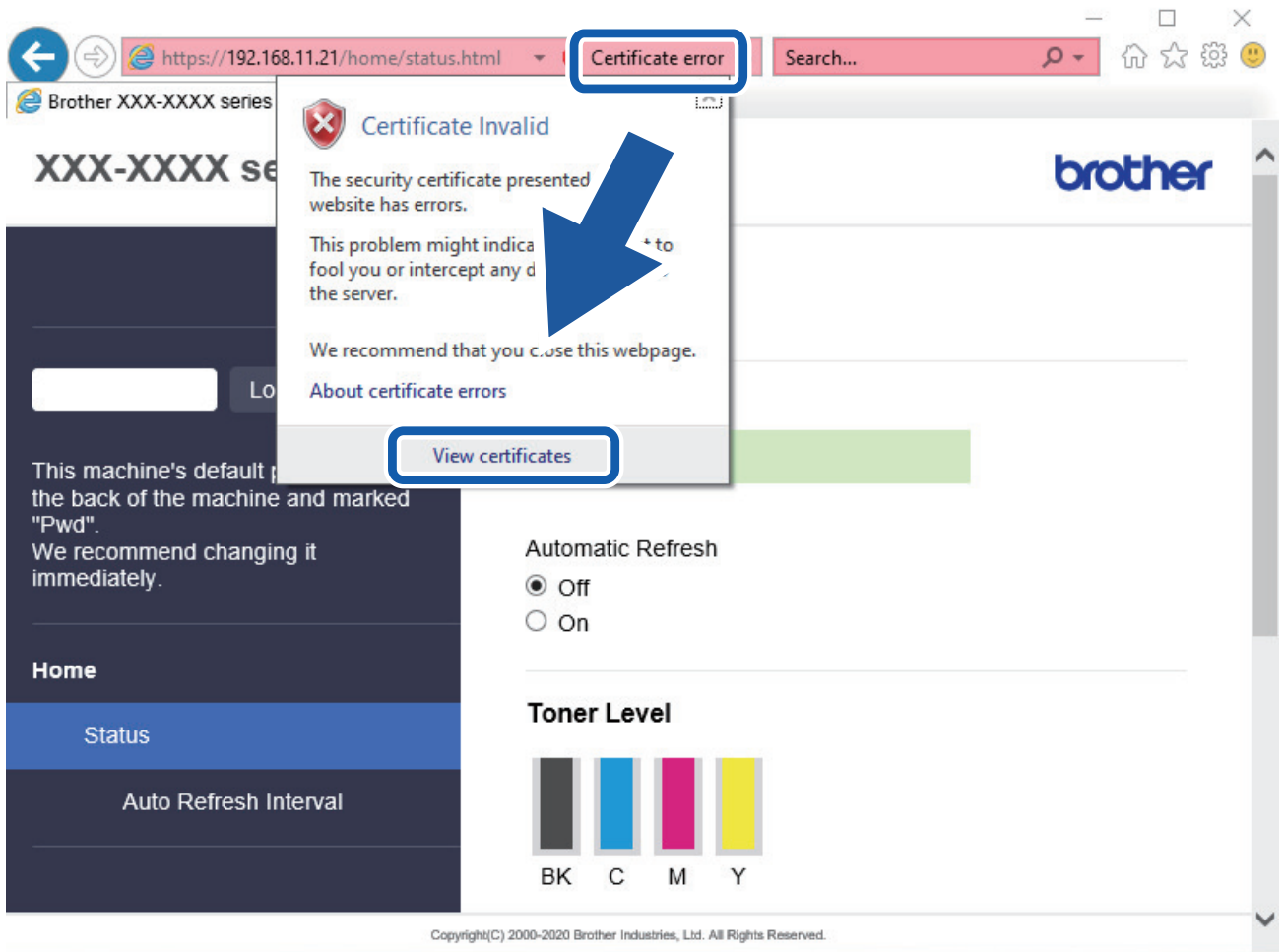
- [Manage Your Network Machine Securely Using SSL/TLS](#)

## Install the Self-signed Certificate for Windows users with Administrator Rights

The following steps are for Microsoft Internet Explorer. If you use another web browser, consult the documentation for your web browser to get help with installing certificates.

1. Do one of the following:
  - Windows 10, Windows Server 2016, and Windows Server 2019  
Click  > **Windows Accessories**.
  - Windows 8.1  
Right-click the  (**Internet Explorer**) icon on the taskbar.
  - Windows Server 2012 and Windows Server 2012 R2  
Click  (**Internet Explorer**), and then right-click the  (**Internet Explorer**) icon that appears on the taskbar.
  - Windows 7 and Windows Server 2008  
Click  (**Start**) > **All Programs**.
2. Right-click **Internet Explorer**, and then click **Run as administrator**.  
 If the **More** option appears, click **More**.  
If the **User Account Control** screen appears, click **Yes**.
3. Type "https://machine's IP address" in your browser's address bar to access your machine (where "machine's IP address" is the machine's IP address or the node name that you assigned for the certificate).
4. Click **More information**.
5. Click **Go on to the webpage (not recommended)**.

6. Click **Certificate error**, and then click **View certificate**.



7. Click **Install Certificate...**
8. When the **Certificate Import Wizard** appears, click **Next**.
9. Select **Place all certificates in the following store**, and then click **Browse....**
10. Select **Trusted Root Certification Authorities**, and then click **OK**.
11. Click **Next**.
12. Click **Finish**.
13. Click **Yes**, if the fingerprint (thumbprint) is correct.
14. Click **OK**.

### ✓ Related Information

- [Manage Your Network Machine Securely Using SSL/TLS](#)

## Print Documents Securely Using SSL/TLS

- [Print Documents Using SSL/TLS](#)
- [Configure a Certificate for SSL/TLS and Available Protocols](#)
- [Configure Certificates for Device Security](#)

## Print Documents Using SSL/TLS

To print documents securely with IPP protocol, use the IPPS protocol.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Network > Protocol**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Make sure the **IPP** check box is selected.



If the **IPP** check box is not selected, select the **IPP** check box, and then click **Submit**.

Restart your machine to activate the configuration.

After the machine restarts, return to the machine's web page, type the password, go to the navigation menu, and then click **Network > Network > Protocol**.

6. Click **HTTP Server Settings**.
7. Select the **HTTPS(Port 443)** check box in the **IPP** area, and then click **Submit**.
8. Restart your machine to activate the configuration.

Communication using IPPS cannot prevent unauthorised access to the print server.



### Related Information

- [Print Documents Securely Using SSL/TLS](#)

## Use SNMPv3

- [Manage Your Network Machine Securely Using SNMPv3](#)

## Manage Your Network Machine Securely Using SNMPv3

The Simple Network Management Protocol version 3 (SNMPv3) provides user authentication and data encryption to manage network devices securely.


1. Start your web browser.
2. Type "https://Common Name" in your browser's address bar (where "Common Name" is the Common Name that you assigned to the certificate; this could be your IP address, node name, or domain name).
3. If required, type the password in the **Login** field, and then click **Login**.





The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Network > Protocol**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Make sure the **SNMP** setting is enabled, and then click **Advanced Setting**.
6. Configure the SNMP settings.

Option	Description
<b>SNMP v1/v2c read-write access</b>	The print server uses version 1 and version 2c of the SNMP protocol. You can use all of your machine's applications in this mode. However, it is not secure since it will not authenticate the user and data will not be encrypted.
<b>SNMPv3 read-write access and v1/v2c read-only access</b>	<p>The print server uses the read-write access of version 3 and the read-only access of version 1 and version 2c of the SNMP protocol.</p> <p> When you use the <b>SNMPv3 read-write access and v1/v2c read-only access</b> mode, some of your machine's applications that access the print server do not work correctly since they authorize the read-only access of version 1 and version 2c. If you want to use all applications, we recommend using the <b>SNMP v1/v2c read-write access</b> mode.</p>
<b>SNMPv3 read-write access</b>	<p>The print server uses version 3 of the SNMP protocol. If you want to manage the print server securely, use this mode.</p> <p> When you use the <b>SNMPv3 read-write access</b> mode, note the following: Except for BRAdmin Professional, all applications that use SNMPv1/v2c will be restricted. To allow the use of SNMPv1/v2c applications, use the <b>SNMPv3 read-write access and v1/v2c read-only access</b> or <b>SNMP v1/v2c read-write access</b> mode.</p>

7. Click **Submit**.



### Related Information

- [Use SNMPv3](#)



## Use IPsec

- [Introduction to IPsec](#)
- [Configure IPsec Using Web Based Management](#)
- [Configure an IPsec Address Template Using Web Based Management](#)
- [Configure an IPsec Template Using Web Based Management](#)

## Introduction to IPsec

IPsec (Internet Protocol Security) is a security protocol that uses an optional Internet Protocol function to prevent data manipulation and ensure the confidentiality of data transmitted as IP packets. IPsec encrypts data carried over the network, such as print data sent from computers to a printer. Because the data is encrypted at the network layer, applications that employ a higher-level protocol use IPsec even if the user is not aware of its use.

IPsec supports the following functions:

- IPsec transmissions

According to the IPsec setting conditions, the network-connected computer sends data to and receives data from the specified device using IPsec. When the devices start communicating using IPsec, keys are exchanged using Internet Key Exchange (IKE) first, and then the encrypted data is transmitted using the keys.

In addition, IPsec has two operation modes: the Transport mode and Tunnel mode. The Transport mode is used mainly for communication between devices and the Tunnel mode is used in environments such as a Virtual Private Network (VPN).



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For IPsec transmissions, the following conditions are necessary:

- A computer that can communicate using IPsec is connected to the network.
  - Your machine is configured for IPsec communication.
  - The computer connected to your machine is configured for IPsec connections.
- 

- IPsec settings

The settings that are necessary for connections using IPsec. These settings can be configured using Web Based Management.



---

To configure the IPsec settings, you must use the browser on a computer that is connected to the network.

---



### Related Information

- [Use IPsec](#)
-

## Configure IPsec Using Web Based Management

The IPsec connection conditions comprise two **Template** types: **Address** and **IPsec**. You can configure up to 10 connection conditions.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > IPsec**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Configure the settings.

Option	Description
<b>Status</b>	Enable or disable IPsec.
<b>Negotiation Mode</b>	Select <b>Negotiation Mode</b> for IKE Phase 1. IKE is a protocol that is used to exchange encryption keys in order to carry out encrypted communication using IPsec.  In the <b>Main</b> mode, the processing speed is slow, but the security is high. In the <b>Aggressive</b> mode, the processing speed is faster than in the <b>Main</b> mode, but the security is lower.
<b>All Non-IPsec Traffic</b>	Select the action to be taken for non-IPsec packets. When using Web Services, you must select <b>Allow</b> for <b>All Non-IPsec Traffic</b> . If you select <b>Drop</b> , Web Services cannot be used.
<b>Broadcast/Multicast Bypass</b>	Select <b>Enabled</b> or <b>Disabled</b> .
<b>Protocol Bypass</b>	Select the check boxes for the option or options you want.
<b>Rules</b>	Select the <b>Enabled</b> check box to activate the template. When you select multiple check boxes, the lower numbered check boxes have priority if the settings for the selected check boxes conflict.  Click the corresponding drop-down list to select the <b>Address Template</b> that is used for the IPsec connection conditions. To add an <b>Address Template</b> , click <b>Add Template</b> .  Click the corresponding drop-down list to select the <b>IPsec Template</b> that is used for the IPsec connection conditions. To add an <b>IPsec Template</b> , click <b>Add Template</b> .

6. Click **Submit**.

If the machine must be restarted to register the new settings, the restart confirmation screen will appear.

If there is a blank item in the template you enabled in the **Rules** table, an error message appears. Confirm your choices and click **Submit** again.



### Related Information

- [Use IPsec](#)

#### Related Topics:

- [Configure Certificates for Device Security](#)

## Configure an IPsec Address Template Using Web Based Management

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > IPsec Address Template**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Click the **Delete** button to delete an **Address Template**. When an **Address Template** is in use, it cannot be deleted.
6. Click the **Address Template** that you want to create. The **IPsec Address Template** appears.
7. Configure the settings.

Option	Description
<b>Template Name</b>	Type a name for the template (up to 16 characters).
<b>Local IP Address</b>	<ul style="list-style-type: none"> <li>• <b>IP Address</b> Specify the IP address. Select <b>ALL IPv4 Address</b>, <b>ALL IPv6 Address</b>, <b>ALL Link Local IPv6</b>, or <b>Custom</b> from the drop-down list. If you select <b>Custom</b> from the drop-down list, type the IP address (IPv4 or IPv6) in the text box.</li> <li>• <b>IP Address Range</b> Type the starting and ending IP addresses for the IP address range in the text boxes. If the starting and ending IP addresses are not standardised to IPv4 or IPv6, or the ending IP address is smaller than the starting address, an error will occur.</li> <li>• <b>IP Address / Prefix</b> Specify the IP address using CIDR notation. For example: 192.168.1.1/24 Because the prefix is specified in the form of a 24-bit subnet mask (255.255.255.0) for 192.168.1.1, the addresses 192.168.1.xxx are valid.</li> </ul>
<b>Remote IP Address</b>	<ul style="list-style-type: none"> <li>• <b>Any</b> If you select <b>Any</b>, all IP addresses are enabled.</li> <li>• <b>IP Address</b> Type the specified IP address (IPv4 or IPv6) in the text box.</li> <li>• <b>IP Address Range</b> Type the starting and ending IP addresses for the IP address range. If the starting and ending IP addresses are not standardised to IPv4 or IPv6, or the ending IP address is smaller than the starting address, an error will occur.</li> <li>• <b>IP Address / Prefix</b> Specify the IP address using CIDR notation. For example: 192.168.1.1/24</li> </ul>

---

Option	Description
	Because the prefix is specified in the form of a 24-bit subnet mask (255.255.255.0) for 192.168.1.1, the addresses 192.168.1.xxx are valid.

8. Click **Submit**.



---

When you change the settings for the template currently in use, restart your machine to activate the configuration.

---



### Related Information

- [Use IPsec](#)
-

## Configure an IPsec Template Using Web Based Management

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Security > IPsec Template**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.


5. Click the **Delete** button to delete an **IPsec Template**. When an **IPsec Template** is in use, it cannot be deleted.
6. Click the **IPsec Template** that you want to create. The **IPsec Template** screen appears. The configuration fields differ based on the **Use Prefixed Template** and **Internet Key Exchange (IKE)** settings you select.
7. In the **Template Name** field, type a name for the template (up to 16 characters).
8. If you selected **Custom** in the **Use Prefixed Template** drop-down list, select the **Internet Key Exchange (IKE)** options, and then change the settings if needed.
9. Click **Submit**.





### Related Information

- [Use IPsec](#)
  - [IKEv1 Settings for an IPsec Template](#)
  - [IKEv2 Settings for an IPsec Template](#)
  - [Manual Settings for an IPsec Template](#)

## IKEv1 Settings for an IPsec Template

Option	Description
Template Name	Type a name for the template (up to 16 characters).
Use Prefixed Template	Select <b>Custom</b> , <b>IKEv1 High Security</b> or <b>IKEv1 Medium Security</b> . The setting items are different depending on the selected template.
Internet Key Exchange (IKE)	<p>IKE is a communication protocol that is used to exchange encryption keys in order to carry out encrypted communication using IPsec. To carry out encrypted communication for that time only, the encryption algorithm that is necessary for IPsec is determined and the encryption keys are shared. For IKE, the encryption keys are exchanged using the Diffie-Hellman key exchange method, and encrypted communication that is limited to IKE is carried out.</p> <p>If you selected <b>Custom</b> in <b>Use Prefixed Template</b>, select <b>IKEv1</b>.</p>
Authentication Type	<ul style="list-style-type: none"> <li>• <b>Diffie-Hellman Group</b> <p>This key exchange method allows secret keys to be securely exchanged over an unprotected network. The Diffie-Hellman key exchange method uses a discrete logarithm problem, not the secret key, to send and receive open information that was generated using a random number and the secret key.</p> <p>Select <b>Group1</b>, <b>Group2</b>, <b>Group5</b>, or <b>Group14</b>.</p> </li> <li>• <b>Encryption</b> <p>Select <b>DES</b>, <b>3DES</b>, <b>AES-CBC 128</b>, or <b>AES-CBC 256</b>.</p> </li> <li>• <b>Hash</b> <p>Select <b>MD5</b>, <b>SHA1</b>, <b>SHA256</b>, <b>SHA384</b> or <b>SHA512</b>.</p> </li> <li>• <b>SA Lifetime</b> <p>Specify the IKE SA lifetime.</p> <p>Type the time (seconds) and number of kilobytes (KByte).</p> </li> </ul>
Encapsulating Security	<ul style="list-style-type: none"> <li>• <b>Protocol</b> <p>Select <b>ESP</b>, <b>AH</b>, or <b>AH+ESP</b>.</p> <hr/> <ul style="list-style-type: none"> <li>-  ESP is a protocol for carrying out encrypted communication using IPsec. ESP encrypts the payload (communicated contents) and adds additional information. The IP packet comprises the header and the encrypted payload, which follows the header. In addition to the encrypted data, the IP packet also includes information regarding the encryption method and encryption key, the authentication data, and so on.</li> <li>- AH is part of the IPsec protocol that authenticates the sender and prevents manipulation (ensures the completeness) of the data. In the IP packet, the data is inserted immediately after the header. In addition, the packets include hash values, which are calculated using an equation from the communicated contents, secret key, and so on, in order to prevent the falsification of the sender and manipulation of the data. Unlike ESP, the communicated contents are not encrypted, and the data is sent and received as plain text.</li> </ul> <hr/> </li> <li>• <b>Encryption</b> <p>Select <b>DES</b>, <b>3DES</b>, <b>AES-CBC 128</b>, or <b>AES-CBC 256</b>.</p> </li> <li>• <b>Hash</b> <p>Select <b>None</b>, <b>MD5</b>, <b>SHA1</b>, <b>SHA256</b>, <b>SHA384</b> or <b>SHA512</b>.</p> </li> </ul>


Option	Description
	<ul style="list-style-type: none"> <li>• <b>SA Lifetime</b> Specify the IKE SA lifetime. Type the time (seconds) and number of kilobytes (KByte).</li> <li>• <b>Encapsulation Mode</b> Select <b>Transport</b> or <b>Tunnel</b>.</li> <li>• <b>Remote Router IP-Address</b> Type the IP address (IPv4 or IPv6) of the remote router. Enter this information only when the <b>Tunnel</b> mode is selected.</li> </ul> <hr/>  SA (Security Association) is an encrypted communication method using IPsec or IPv6 that exchanges and shares information, such as the encryption method and encryption key, in order to establish a secure communication channel before communication begins. SA may also refer to a virtual encrypted communication channel that has been established. The SA used for IPsec establishes the encryption method, exchanges the keys, and carries out mutual authentication according to the IKE (Internet Key Exchange) standard procedure. In addition, the SA is updated periodically.
<b>Perfect Forward Secrecy (PFS)</b>	<p>PFS does not derive keys from previous keys that were used to encrypt messages. In addition, if a key that is used to encrypt a message was derived from a parent key, that parent key is not used to derive other keys. Therefore, even if a key is compromised, the damage will be limited only to the messages that were encrypted using that key.</p> <p>Select <b>Enabled</b> or <b>Disabled</b>.</p>
<b>Authentication Method</b>	<p>Select the authentication method. Select <b>Pre-Shared Key</b> or <b>Certificates</b>.</p>
<b>Pre-Shared Key</b>	<p>When encrypting communication, the encryption key is exchanged and shared beforehand using another channel.</p> <p>If you selected <b>Pre-Shared Key</b> for the <b>Authentication Method</b>, type the <b>Pre-Shared Key</b> (up to 32 characters).</p> <ul style="list-style-type: none"> <li>• <b>Local/ID Type/ID</b> Select the sender's ID type, and then type the ID. Select <b>IPv4 Address</b>, <b>IPv6 Address</b>, <b>FQDN</b>, <b>E-mail Address</b>, or <b>Certificate</b> for the type. If you select <b>Certificate</b>, type the common name of the certificate in the <b>ID</b> field.</li> <li>• <b>Remote/ID Type/ID</b> Select the recipient's ID type, and then type the ID. Select <b>IPv4 Address</b>, <b>IPv6 Address</b>, <b>FQDN</b>, <b>E-mail Address</b>, or <b>Certificate</b> for the type. If you select <b>Certificate</b>, type the common name of the certificate in the <b>ID</b> field.</li> </ul>
<b>Certificate</b>	<p>If you selected <b>Certificates</b> for <b>Authentication Method</b>, select the certificate.</p> <hr/>  You can select only the certificates that were created using the <b>Certificate</b> page of Web Based Management's Security configuration screen.



## ✓ Related Information

- [Configure an IPsec Template Using Web Based Management](#)



## IKEv2 Settings for an IPsec Template

Option	Description
<b>Template Name</b>	Type a name for the template (up to 16 characters).
<b>Use Prefixed Template</b>	Select <b>Custom</b> , <b>IKEv2 High Security</b> , or <b>IKEv2 Medium Security</b> . The setting items are different depending on the selected template.
<b>Internet Key Exchange (IKE)</b>	IKE is a communication protocol that is used to exchange encryption keys in order to carry out encrypted communication using IPsec. To carry out encrypted communication for that time only, the encryption algorithm that is necessary for IPsec is determined and the encryption keys are shared. For IKE, the encryption keys are exchanged using the Diffie-Hellman key exchange method, and encrypted communication that is limited to IKE is carried out. If you selected <b>Custom</b> in <b>Use Prefixed Template</b> , select <b>IKEv2</b> .
<b>Authentication Type</b>	<ul style="list-style-type: none"> <li>• <b>Diffie-Hellman Group</b> This key exchange method allows secret keys to be securely exchanged over an unprotected network. The Diffie-Hellman key exchange method uses a discrete logarithm problem, not the secret key, to send and receive open information that was generated using a random number and the secret key. Select <b>Group1</b>, <b>Group2</b>, <b>Group5</b>, or <b>Group14</b>.</li> <li>• <b>Encryption</b> Select <b>DES</b>, <b>3DES</b>, <b>AES-CBC 128</b>, or <b>AES-CBC 256</b>.</li> <li>• <b>Hash</b> Select <b>MD5</b>, <b>SHA1</b>, <b>SHA256</b>, <b>SHA384</b> or <b>SHA512</b>.</li> <li>• <b>SA Lifetime</b> Specify the IKE SA lifetime. Type the time (seconds) and number of kilobytes (KByte).</li> </ul>
<b>Encapsulating Security</b>	<ul style="list-style-type: none"> <li>• <b>Protocol</b> Select <b>ESP</b>.   ESP is a protocol for carrying out encrypted communication using IPsec. ESP encrypts the payload (communicated contents) and adds additional information. The IP packet comprises the header and the encrypted payload, which follows the header. In addition to the encrypted data, the IP packet also includes information regarding the encryption method and encryption key, the authentication data, and so on.</li> <li>• <b>Encryption</b> Select <b>DES</b>, <b>3DES</b>, <b>AES-CBC 128</b>, or <b>AES-CBC 256</b>.</li> <li>• <b>Hash</b> Select <b>MD5</b>, <b>SHA1</b>, <b>SHA256</b>, <b>SHA384</b>, or <b>SHA512</b>.</li> <li>• <b>SA Lifetime</b> Specify the IKE SA lifetime. Type the time (seconds) and number of kilobytes (KByte).</li> <li>• <b>Encapsulation Mode</b> Select <b>Transport</b> or <b>Tunnel</b>.</li> <li>• <b>Remote Router IP-Address</b> Type the IP address (IPv4 or IPv6) of the remote router. Enter this information only when the <b>Tunnel</b> mode is selected.</li> </ul>

Option	Description
	 <p>SA (Security Association) is an encrypted communication method using IPsec or IPv6 that exchanges and shares information, such as the encryption method and encryption key, in order to establish a secure communication channel before communication begins. SA may also refer to a virtual encrypted communication channel that has been established. The SA used for IPsec establishes the encryption method, exchanges the keys, and carries out mutual authentication according to the IKE (Internet Key Exchange) standard procedure. In addition, the SA is updated periodically.</p>
<b>Perfect Forward Secrecy (PFS)</b>	<p>PFS does not derive keys from previous keys that were used to encrypt messages. In addition, if a key that is used to encrypt a message was derived from a parent key, that parent key is not used to derive other keys. Therefore, even if a key is compromised, the damage will be limited only to the messages that were encrypted using that key.</p> <p>Select <b>Enabled</b> or <b>Disabled</b>.</p>
<b>Authentication Method</b>	<p>Select the authentication method. Select <b>Pre-Shared Key</b>, <b>Certificates</b>, <b>EAP - MD5</b>, or <b>EAP - MS-CHAPv2</b>.</p>  <p>EAP is an authentication protocol that is an extension of PPP. By using EAP with IEEE802.1x, a different key is used for user authentication during each session.</p> <p>The following settings are necessary only when <b>EAP - MD5</b> or <b>EAP - MS-CHAPv2</b> is selected in <b>Authentication Method</b>:</p> <ul style="list-style-type: none"> <li>• <b>Mode</b> Select <b>Server-Mode</b> or <b>Client-Mode</b>.</li> <li>• <b>Certificate</b> Select the certificate.</li> <li>• <b>User Name</b> Type the user name (up to 32 characters).</li> <li>• <b>Password</b> Type the password (up to 32 characters). The password must be entered two times for confirmation.</li> </ul>
<b>Pre-Shared Key</b>	<p>When encrypting communication, the encryption key is exchanged and shared beforehand using another channel.</p> <p>If you selected <b>Pre-Shared Key</b> for the <b>Authentication Method</b>, type the <b>Pre-Shared Key</b> (up to 32 characters).</p> <ul style="list-style-type: none"> <li>• <b>Local/ID Type/ID</b> Select the sender's ID type, and then type the ID. Select <b>IPv4 Address</b>, <b>IPv6 Address</b>, <b>FQDN</b>, <b>E-mail Address</b>, or <b>Certificate</b> for the type. If you select <b>Certificate</b>, type the common name of the certificate in the <b>ID</b> field.</li> <li>• <b>Remote/ID Type/ID</b> Select the recipient's ID type, and then type the ID. Select <b>IPv4 Address</b>, <b>IPv6 Address</b>, <b>FQDN</b>, <b>E-mail Address</b>, or <b>Certificate</b> for the type. If you select <b>Certificate</b>, type the common name of the certificate in the <b>ID</b> field.</li> </ul>
<b>Certificate</b>	<p>If you selected <b>Certificates</b> for <b>Authentication Method</b>, select the certificate.</p>

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Option	Description
	 You can select only the certificates that were created using the <b>Certificate</b> page of Web Based Management's Security configuration screen.






### Related Information

- [Configure an IPsec Template Using Web Based Management](#)
-

## Manual Settings for an IPsec Template

Option	Description
<b>Template Name</b>	Type a name for the template (up to 16 characters).
<b>Use Prefixed Template</b>	Select <b>Custom</b> .
<b>Internet Key Exchange (IKE)</b>	<p>IKE is a communication protocol that is used to exchange encryption keys in order to carry out encrypted communication using IPsec. To carry out encrypted communication for that time only, the encryption algorithm that is necessary for IPsec is determined and the encryption keys are shared. For IKE, the encryption keys are exchanged using the Diffie-Hellman key exchange method, and encrypted communication that is limited to IKE is carried out.</p> <p>Select <b>Manual</b>.</p>
<b>Authentication Key (ESP, AH)</b>	<p>Type the <b>In/Out</b> values.</p> <p>These settings are necessary when <b>Custom</b> is selected for <b>Use Prefixed Template</b>, <b>Manual</b> is selected for <b>Internet Key Exchange (IKE)</b>, and a setting other than <b>None</b> is selected for <b>Hash</b> for <b>Encapsulating Security</b> section.</p> <hr/> <p> The number of characters you can set differs depending on the setting you chose for <b>Hash</b> in the <b>Encapsulating Security</b> section.</p> <p>If the length of the specified authentication key is different than the selected hash algorithm, an error will occur.</p> <ul style="list-style-type: none"> <li>• <b>MD5</b>: 128 bits (16 bytes)</li> <li>• <b>SHA1</b>: 160 bits (20 bytes)</li> <li>• <b>SHA256</b>: 256 bits (32 bytes)</li> <li>• <b>SHA384</b>: 384 bits (48 bytes)</li> <li>• <b>SHA512</b>: 512 bits (64 bytes)</li> </ul> <p>When you specify the key in ASCII Code, enclose the characters in double quotation marks (").</p> <hr/>
<b>Code key (ESP)</b>	<p>Type the <b>In/Out</b> values.</p> <p>These settings are necessary when <b>Custom</b> is selected in <b>Use Prefixed Template</b>, <b>Manual</b> is selected in <b>Internet Key Exchange (IKE)</b>, and <b>ESP</b> is selected in <b>Protocol</b> in <b>Encapsulating Security</b>.</p> <hr/> <p> The number of characters you can set differs depending on the setting you chose for <b>Encryption</b> in the <b>Encapsulating Security</b> section.</p> <p>If the length of the specified code key is different than the selected encryption algorithm, an error will occur.</p> <ul style="list-style-type: none"> <li>• <b>DES</b>: 64 bits (8 bytes)</li> <li>• <b>3DES</b>: 192 bits (24 bytes)</li> <li>• <b>AES-CBC 128</b>: 128 bits (16 bytes)</li> <li>• <b>AES-CBC 256</b>: 256 bits (32 bytes)</li> </ul> <p>When you specify the key in ASCII Code, enclose the characters in double quotation marks (").</p> <hr/>
<b>SPI</b>	<p>These parameters are used to identify security information. Generally, a host has multiple Security Associations (SAs) for several types of IPsec communication. Therefore, it is necessary to identify the applicable SA when an IPsec packet is received. The SPI parameter, which identifies the SA, is included in the Authentication Header (AH) and Encapsulating Security Payload (ESP) header.</p>

Option	Description
	<p>These settings are necessary when <b>Custom</b> is selected for <b>Use Prefixed Template</b>, and <b>Manual</b> is selected for <b>Internet Key Exchange (IKE)</b>.</p> <p>Enter the <b>In/Out</b> values. (3-10 characters)</p>
<p><b>Encapsulating Security</b></p>	<ul style="list-style-type: none"> <li>• <b>Protocol</b> Select <b>ESP</b> or <b>AH</b>.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>  <ul style="list-style-type: none"> <li>- ESP is a protocol for carrying out encrypted communication using IPsec. ESP encrypts the payload (communicated contents) and adds additional information. The IP packet comprises the header and the encrypted payload, which follows the header. In addition to the encrypted data, the IP packet also includes information regarding the encryption method and encryption key, the authentication data, and so on.</li> <li>- AH is part of the IPsec protocol that authenticates the sender and prevents manipulation of the data (ensures the completeness of the data). In the IP packet, the data is inserted immediately after the header. In addition, the packets include hash values, which are calculated using an equation from the communicated contents, secret key, and so on, in order to prevent the falsification of the sender and manipulation of the data. Unlike ESP, the communicated contents are not encrypted, and the data is sent and received as plain text.</li> </ul> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Encryption</b> Select <b>DES</b>, <b>3DES</b>, <b>AES-CBC 128</b>, or <b>AES-CBC 256</b>.</li> <li>• <b>Hash</b> Select <b>None</b>, <b>MD5</b>, <b>SHA1</b>, <b>SHA256</b>, <b>SHA384</b>, or <b>SHA512</b>. <b>None</b> can be selected only when <b>ESP</b> is selected in <b>Protocol</b>.</li> <li>• <b>SA Lifetime</b> Specify the IKE SA lifetime. Type the time (seconds) and number of kilobytes (KByte).</li> <li>• <b>Encapsulation Mode</b> Select <b>Transport</b> or <b>Tunnel</b>.</li> <li>• <b>Remote Router IP-Address</b> Type the IP address (IPv4 or IPv6) of the remote router. Enter this information only when the <b>Tunnel</b> mode is selected.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>  <p>SA (Security Association) is an encrypted communication method using IPsec or IPv6 that exchanges and shares information, such as the encryption method and encryption key, in order to establish a secure communication channel before communication begins. SA may also refer to a virtual encrypted communication channel that has been established. The SA used for IPsec establishes the encryption method, exchanges the keys, and carries out mutual authentication according to the IKE (Internet Key Exchange) standard procedure. In addition, the SA is updated periodically.</p> </li> </ul>

 **Related Information**

- [Configure an IPsec Template Using Web Based Management](#)

## Use IEEE 802.1x Authentication for a Wired or a Wireless Network

- [What Is IEEE 802.1x Authentication?](#)
- [Configure IEEE 802.1x Authentication for a Wired or Wireless Network Using Web Based Management \(Web Browser\)](#)
- [IEEE 802.1x Authentication Methods](#)

## What Is IEEE 802.1x Authentication?

IEEE 802.1x is an IEEE standard for wired and wireless networks that limits access from unauthorised network devices. Your Brother machine (supplicant) sends an authentication request to a RADIUS server (Authentication server) through your access point or hub. After your request has been verified by the RADIUS server, your machine can access the network.



### Related Information

- [Use IEEE 802.1x Authentication for a Wired or a Wireless Network](#)
-

## Configure IEEE 802.1x Authentication for a Wired or Wireless Network Using Web Based Management (Web Browser)

- If you configure your machine using EAP-TLS authentication, you must install the client certificate issued by a CA before you start configuration. Contact your network administrator about the client certificate. If you have installed more than one certificate, we recommend writing down the certificate name you want to use.
- Before you verify the server certificate, you must import the CA certificate issued by the CA that signed the server certificate. Contact your network administrator or your Internet Service Provider (ISP) to confirm whether a CA certificate import is necessary.



You can also configure IEEE 802.1x authentication using Wireless setup wizard from the control panel (Wireless network).

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Do one of the following:
  - For the wired network  
Click **Wired** > **Wired 802.1x Authentication**.
  - For the wireless network  
Click **Wireless** > **Wireless (Enterprise)**.
6. Configure the IEEE 802.1x authentication settings.





- To enable IEEE 802.1x authentication for wired networks, select **Enabled** for **Wired 802.1x status** on the **Wired 802.1x Authentication** page.
- If you are using **EAP-TLS** authentication, you must select the client certificate installed (shown with certificate name) for verification from the **Client Certificate** drop-down list.
- If you select **EAP-FAST**, **PEAP**, **EAP-TTLS**, or **EAP-TLS** authentication, select the verification method from the **Server Certificate Verification** drop-down list. Verify the server certificate using the CA certificate, imported to the machine in advance, issued by the CA that signed the server certificate.

Select one of the following verification methods from the **Server Certificate Verification** drop-down list:

Option	Description
<b>No Verification</b>	The server certificate can always be trusted. The verification is not performed.
<b>CA Cert.</b>	The verification method to check the CA reliability of the server certificate, using the CA certificate issued by the CA that signed the server certificate.
<b>CA Cert. + ServerID</b>	The verification method to check the common name <sup>1</sup> value of the server certificate, in addition to the CA reliability of the server certificate.

7. When finished with configuration, click **Submit**.

For wired networks: After configuring, connect your machine to the IEEE 802.1x supported network. After a few minutes, print the Network Configuration Report to check the **<Wired IEEE 802.1x>** status.

Option	Description
<b>Success</b>	The wired IEEE 802.1x function is enabled and the authentication was successful.
<b>Failed</b>	The wired IEEE 802.1x function is enabled; however, the authentication failed.
<b>Off</b>	The wired IEEE 802.1x function is not available.



## Related Information

- [Use IEEE 802.1x Authentication for a Wired or a Wireless Network](#)

### Related Topics:

- [Configure Certificates for Device Security](#)

<sup>1</sup> The common name verification compares the common name of the server certificate to the character string configured for the **Server ID**. Before you use this method, contact your system administrator about the server certificate's common name and then configure **Server ID**.

## IEEE 802.1x Authentication Methods

### EAP-FAST

Extensible Authentication Protocol-Flexible Authentication via Secured Tunneling (EAP-FAST) has been developed by Cisco Systems, Inc., which uses a user ID and password for authentication, and symmetric key algorithms to achieve a tunnelled authentication process.

The Brother machine supports the following inner authentication methods:

- EAP-FAST/NONE
- EAP-FAST/MS-CHAPv2
- EAP-FAST/GTC

### EAP-MD5 (Wired network)

Extensible Authentication Protocol-Message Digest Algorithm 5 (EAP-MD5) uses a user ID and password for challenge-response authentication.

### PEAP

Protected Extensible Authentication Protocol (PEAP) is a version of EAP method developed by Cisco Systems, Inc., Microsoft Corporation and RSA Security. PEAP creates an encrypted Secure Sockets Layer (SSL)/Transport Layer Security (TLS) tunnel between a client and an authentication server, for sending a user ID and password. PEAP provides mutual authentication between the server and the client.

The Brother machine supports the following inner authentications:

- PEAP/MS-CHAPv2
- PEAP/GTC

### EAP-TTLS

Extensible Authentication Protocol-Tunneled Transport Layer Security (EAP-TTLS) has been developed by Funk Software and Certicom. EAP-TTLS creates a similar encrypted SSL tunnel to PEAP, between a client and an authentication server, for sending a user ID and password. EAP-TTLS provides mutual authentication between the server and the client.

The Brother machine supports the following inner authentications:

- EAP-TTLS/CHAP
- EAP-TTLS/MS-CHAP
- EAP-TTLS/MS-CHAPv2
- EAP-TTLS/PAP

### EAP-TLS

Extensible Authentication Protocol-Transport Layer Security (EAP-TLS) requires digital certificate authentication both at a client and an authentication server.



### Related Information

- [Use IEEE 802.1x Authentication for a Wired or a Wireless Network](#)

## Use Active Directory Authentication

- [Introduction to Active Directory Authentication](#)
- [Configure Active Directory Authentication Using Web Based Management](#)
- [Log On to Change the Machine Settings Using the Machine's Control Panel \(Active Directory Authentication\)](#)

## Introduction to Active Directory Authentication

Active Directory Authentication restricts the use of your machine. If Active Directory Authentication is enabled, the machine's control panel will be locked. You cannot change the machine's settings until you enter a User ID and password.

Active Directory Authentication offers the following feature:

Stores incoming print data

You can change the Active Directory Authentication settings using Web Based Management.



### Related Information

- [Use Active Directory Authentication](#)
-

## Configure Active Directory Authentication Using Web Based Management

Active Directory authentication supports Kerberos authentication and NTLMv2 authentication. You must configure the SNTP protocol (network time server) and DNS server configuration for authentication.


1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).  
For example:  
https://192.168.1.2
3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > User Restriction Function**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Select **Active Directory Authentication**.
6. Click **Submit**.
7. Select the **Active Directory Authentication** menu.
8. Configure the following settings:

Option	Description
<b>Remember User ID</b>	Select this option to save your User ID.
<b>Active Directory Server Address</b>	Type the IP address or the server name (for example: ad.example.com) of the Active Directory Server.
<b>Active Directory Domain Name</b>	Type the Active Directory domain name.
<b>Protocol &amp; Authentication Method</b>	Select the protocol and authentication method.
<b>LDAP Server Port</b>	Type the port number to connect the Active Directory server via LDAP (available only for <b>LDAP + kerberos</b> authentication method).

9. Click **Submit**.



### Related Information

- [Use Active Directory Authentication](#)

## Log On to Change the Machine Settings Using the Machine's Control Panel (Active Directory Authentication)

When Active Directory Authentication is enabled, the machine's control panel will be locked until you enter your User ID and password on the machine's control panel.

1. On the machine's control panel, enter your User ID.
2. Press [OK].
3. Enter your password.
4. Press [OK].
5. Press [OK] again.
6. When authentication is successful, the machine's control panel will be unlocked.



### Related Information

- [Use Active Directory Authentication](#)

## Use LDAP Authentication

- [Introduction to LDAP Authentication](#)
- [Configure LDAP Authentication Using Web Based Management](#)
- [Log On to Change the Machine Settings Using the Machine's Control Panel \(LDAP Authentication\)](#)

## Introduction to LDAP Authentication

LDAP Authentication restricts the use of your machine. If LDAP Authentication is enabled, the machine's control panel will be locked. You cannot change the machine's settings until you enter a User ID and password.

LDAP Authentication offers the following feature:

Stores incoming print data

You can change the LDAP Authentication settings using Web Based Management.



### Related Information

- [Use LDAP Authentication](#)
-



## Configure LDAP Authentication Using Web Based Management

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > User Restriction Function**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Select **LDAP Authentication**.
6. Click **Submit**.
7. Click the **LDAP Authentication** menu.
8. Configure the following settings:

Option	Description
<b>Remember User ID</b>	Select this option to save your User ID.
<b>LDAP Server Address</b>	Type the IP address or the server name (for example: ldap.example.com) of the LDAP server.
<b>LDAP Server Port</b>	Type the LDAP server port number.

9. Click **Submit**.



### Related Information

- [Use LDAP Authentication](#)

## Log On to Change the Machine Settings Using the Machine's Control Panel (LDAP Authentication)

When LDAP Authentication is enabled, the machine's control panel will be locked until you enter your User ID and password on the machine's control panel.

1. On the machine's control panel, enter your User ID and Password.
2. Press [OK].
3. When authentication is successful, the machine's control panel will be unlocked.



### Related Information

- [Use LDAP Authentication](#)

## Use Secure Function Lock 3.0

Secure Function Lock 3.0 increases security by restricting the functions available on your machine.

- [Before Using Secure Function Lock 3.0](#)
- [Configure Secure Function Lock 3.0 Using Web Based Management](#)
- [Configure Public Mode for Secure Function Lock 3.0](#)
- [Additional Secure Function Lock 3.0 Features](#)
- [Register a new ID Card Using the Machine's Control Panel](#)

## Before Using Secure Function Lock 3.0

Use Secure Function Lock to configure passwords, set specific user page limits, and grant access to some or all of the functions listed here.

You can configure and change the following Secure Function Lock 3.0 settings using Web Based Management:

- **Print**

Print includes print jobs sent via AirPrint, Brother iPrint&Scan, and Brother Mobile Connect.

If you register user login names in advance, the users do not need to enter their passwords when they use the print function.

- **Color Print**

- USB Direct Print

- **Page Limits**

- **Page Counters**

- **Card ID (NFC ID)** (supported models only)

If you register users' Card IDs in advance, registered users can activate the machine by touching their registered cards to the machines' NFC symbol.



### Related Information

- [Use Secure Function Lock 3.0](#)

## Configure Secure Function Lock 3.0 Using Web Based Management

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > Restriction Management** or **User Restriction Function**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. Select **Secure Function Lock**.
6. Click **Submit**.
7. Click the **Restricted Functions** menu.
8. In the **User List / Restricted Functions** field, type a group name or user name.
9. In the **Print** and the other columns, select a checkbox to allow, or clear a checkbox to restrict, the function listed.
10. To configure the maximum page count, select the **On** checkbox in the **Page Limits** column, and then type the maximum number in the **Max. Pages** field.
11. Click **Submit**.
12. Click the **User List** menu.
13. In the **User List** field, type the user name.
14. In the **Password** field, type a password.



The number of characters you can set differs depending on the model.

15. To register the user's Card ID, type the card number in the **Card ID (NFC ID)** field .
16. Click the **Output** drop-down list, and then select the output tray for each user (available only for certain models).
17. Select **User List / Restricted Functions** from the drop-down list for each user.
18. Click **Submit**.



You can also change the user list lockout settings in the **Secure Function Lock** menu.



### Related Information

- [Use Secure Function Lock 3.0](#)

## Configure Public Mode for Secure Function Lock 3.0

Use the Secure Function Lock screen to set up Public Mode, which limits the functions available to public users. Public users will not need to enter a password to access the features made available through Public Mode settings.



Public Mode includes print jobs sent via Brother iPrint&Scan and Brother Mobile Connect.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator** > **Restriction Management** or **User Restriction Function**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Select **Secure Function Lock**.
6. Click **Submit**.
7. Click the **Restricted Functions** menu.
8. In the **Public Mode** row, select a check box to allow, or clear a check box to restrict, the function listed.
9. Click **Submit**.



### Related Information

- [Use Secure Function Lock 3.0](#)

## Additional Secure Function Lock 3.0 Features

Configure the following features in the Secure Function Lock screen:

### All Counter Reset

Click **All Counter Reset**, in the **Page Counters** column, to reset the page counter.

### Export to CSV file

Click **Export to CSV file**, to export the current and last page counter including **User List / Restricted Functions** information as a CSV file.

### Card ID (NFC ID) (supported models only)

Click the **User List** menu, and then type a user's Card ID in the **Card ID (NFC ID)** field. You can use your IC card for authentication.

### Output (available models only)

When the Mailbox unit is installed on your machine, select the output tray for each user from the drop-down list.

### Last Counter Record

Click **Last Counter Record** if you want the machine to retain the page count after the counter has been reset.



### Related Information

- [Use Secure Function Lock 3.0](#)

## Register a new ID Card Using the Machine's Control Panel

1. Touch the Near-Field Communication (NFC) symbol on the machine's control panel with a registered Integrated Circuit Card (IC Card).
2. Press your login name.
3. Press [Register Card].
4. Touch a new IC Card to the NFC symbol.
5. Press [OK].

The new IC Card's number is then registered to the machine.



For the supported IC Card types, visit [support.brother.com](http://support.brother.com) to see the **FAQs & Troubleshooting** page.



### Related Information

- [Use Secure Function Lock 3.0](#)



## Send an Email Securely

- [Configure Email Sending Using Web Based Management](#)
- [Send an Email with User Authentication](#)
- [Send an Email Securely Using SSL/TLS](#)

## Configure Email Sending Using Web Based Management

We recommend using Web Based Management to configure secured email sending with user authentication, or email sending using SSL/TLS.


1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).  
For example:  
https://192.168.1.2
3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Network > Network > Protocol**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. In the **SMTP Client** field, click **Advanced Setting** and make sure the status of **SMTP Client** is **Enabled**.
6. Configure the **SMTP Client** settings.
  - Confirm that the email settings are correct after configuration by sending a test email.
  - If you do not know the SMTP server settings, contact your network administrator or Internet Service Provider (ISP).
7. When finished, click **Submit**.  
The **Test Send E-mail Configuration** dialog box appears.
8. Follow the instructions in the dialog box to test the current settings.



### Related Information

- [Send an Email Securely](#)

## Send an Email with User Authentication

Your machine supports the SMTP-AUTH method to send email via an email server that requires user authentication. This method prevents unauthorised users from accessing the email server.

You can use the SMTP-AUTH method for email notification and email reports.



We recommend using Web Based Management to configure the SMTP authentication.

### Email Server Settings

You must configure your machine's SMTP authentication method to match the method used by your email server. For details about your email server settings, contact your network administrator or Internet Service Provider (ISP).



To enable SMTP server authentication, in the Web Based Management **SMTP Client** screen, under **Server Authentication Method**, you must select **SMTP-AUTH**.



### Related Information

- [Send an Email Securely](#)

## Send an Email Securely Using SSL/TLS

Your machine supports SSL/TLS communication methods. To use an email server that is using SSL/TLS communication, you must configure the following settings.



We recommend using Web Based Management to configure SSL/TLS.

### Verify Server Certificate

Under **SSL/TLS**, if you choose **SSL** or **TLS**, the **Verify Server Certificate** check box will be selected automatically.



- Before you verify the server certificate, you must import the CA certificate issued by the CA that signed the server certificate. Contact your network administrator or your Internet Service Provider (ISP) to confirm if importing a CA certificate is necessary.
- If you do not need to verify the server certificate, clear the **Verify Server Certificate** check box.

### Port Number

If you select **SSL**, or **TLS**, the **Port** value will be changed to match the protocol. To change the port number manually, type the port number after you select **SSL/TLS** settings.

You must configure your machine's communication method to match the method used by your email server. For details about your email server settings, contact your network administrator or your ISP.

In most cases, the secured webmail services require the following settings:

SMTP	<b>Port</b>	25
	<b>Server Authentication Method</b>	<b>SMTP-AUTH</b>
	<b>SSL/TLS</b>	<b>TLS</b>



### Related Information

- [Send an Email Securely](#)

#### Related Topics:

- [Configure Certificates for Device Security](#)

## Store Print Log to Network

- [Store Print Log to Network Overview](#)
- [Configure the Store Print Log to Network Settings Using Web Based Management](#)
- [Use the Store Print Log to Network's Error Detection Setting](#)

## Store Print Log to Network Overview

The Store Print Log to Network feature allows you to save the print log file from your machine to a network server using the Common Internet File System (CIFS) protocol. You can record the ID, type of print job, job name, user name, date, time and the number of printed pages for every print job. CIFS is a protocol that runs over TCP/IP, allowing computers on a network to share files over an intranet or the Internet.

The following print functions are recorded in the print log:

- Print jobs from your computer
- USB Direct Print



- The Store Print Log to Network feature supports Kerberos authentication and NTLMv2 authentication. You must configure the SNTP protocol (network time server) for Authentication.
- You can set the file type to TXT or CSV when storing a file to the server.



### Related Information

- [Store Print Log to Network](#)

## Configure the Store Print Log to Network Settings Using Web Based Management

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.





The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > Store Print Log to Network**.



Start from ☰, if the navigation menu is not shown on the left side of the screen.

5. In the **Print Log** field, click **On**.
6. Configure the following settings:

Option	Description
<b>Network Folder Path</b>	Type the destination folder where your print log will be stored on the CIFS server (for example: \\ComputerName\SharedFolder).
<b>File Name</b>	Type the file name you want to use for the print log (up to 32 characters).
<b>File Type</b>	Select the <b>TXT</b> or <b>CSV</b> option for the Print Log file type.
<b>Time Source for Log</b>	Select the time source for the print log.
<b>Auth. Method</b>	Select the authentication method required for access to the CIFS server: <b>Auto</b> , <b>Kerberos</b> , or <b>NTLMv2</b> . Kerberos is an authentication protocol which allows devices or individuals to securely prove their identity to network servers using a single sign-on. NTLMv2 is the authentication method used by Windows to log into servers. <ul style="list-style-type: none"><li>• <b>Auto</b>: If you select <b>Auto</b>, NTLMv2 will be used to the authentication method.</li><li>• <b>Kerberos</b>: Select the <b>Kerberos</b> option to use Kerberos authentication only.</li><li>• <b>NTLMv2</b>: Select the <b>NTLMv2</b> option to use NTLMv2 authentication only.</li></ul>
	 For the <b>Kerberos</b> and <b>NTLMv2</b> authentication, you must also configure the <b>Date&amp;Time</b> settings or the SNTP protocol (network time server) and DNS server.
<b>Username</b>	Type the user name for the authentication (up to 96 characters).  If the user name is part of a domain, enter the user name in one of the following styles: user@domain or domain\user.
<b>Password</b>	Type the password for the authentication (up to 32 characters).
<b>Kerberos Server Address (if needed)</b>	Type the Key Distribution Center (KDC) host address (for example: kerberos.example.com; up to 64 characters) or the IP address (for example: 192.168.56.189).

---

Option	Description
<b>Error Detection Setting</b>	Choose what action should be taken when the Print Log cannot be stored to the server due to a network error.

---

- In the **Connection Status** field, confirm the last log status.



You can also confirm the error status on the LCD of your machine.

- Click **Submit** to display the **Test Print Log to Network** page.  
To test your settings, click **Yes** and then go to the next step.  
To skip the test, click **No**. Your settings will be submitted automatically.
- The machine will test your settings.
- If your settings are accepted, **Test OK** appears on the screen.  
If **Test Error** appears, check all settings, and then click **Submit** to display the Test page again.



### Related Information

- [Store Print Log to Network](#)
-



## Use the Store Print Log to Network's Error Detection Setting

Use Error Detection Settings to determine the action that is taken when the print log cannot be stored to the server due to a network error.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > Store Print Log to Network**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. In the **Error Detection Setting** section, select the **Cancel Print** or **Ignore Log & Print** option.

Option	Description
<b>Cancel Print</b>	If you select the <b>Cancel Print</b> option, the print jobs are cancelled when the print log cannot be stored to the server.
<b>Ignore Log &amp; Print</b>	If you select the <b>Ignore Log &amp; Print</b> option, the machine prints the documentation even if the print log cannot be stored to the server.

When the store print log function has recovered, the print log is recorded as follows:

```
|Id,Type,Job Name,User Name,Date,Time,Print Pages,Color Pages
1,Print(USB),"test(PDF).pdf","User",11/11/2020,19:53:14,4,0
2,Print(Network),"test(PDF).pdf","User",11/11/2020,19:54:38,4,0
3,Print(Network),"test(PDF).pdf","User",11/11/2020,20:18:57,?,?
4,Print(Network),"test(PDF).pdf","User",11/11/2020,20:19:40,1,0
5,<ERROR>?,?,?,?,?,?
6,Print(Network),"test(PDF).pdf","User",11/11/2020,20:21:04,1,0
```

- a. If the log cannot be stored at the end of printing, the number of printed pages will not be recorded.
- b. If the print log cannot be stored at the beginning and the end of printing, the print log of the job will not be recorded. When the function has recovered, the error is reflected in the log.

6. Click **Submit** to display the **Test Print Log to Network** page.  
To test your settings, click **Yes** and then go to the next step.  
To skip the test, click **No**. Your settings will be submitted automatically.
7. The machine will test your settings.
8. If your settings are accepted, **Test OK** appears on the screen.  
If **Test Error** appears, check all settings, and then click **Submit** to display the Test page again.



### Related Information

- [Store Print Log to Network](#)

## Lock the Machine Settings from the Control Panel

Before turning on the machine's Setting Lock, make a careful note of your password. If you forget the password, you must reset all passwords stored in the machine by contacting your administrator or Brother customer service.

- [Setting Lock Overview](#)



## Setting Lock Overview

Use the Setting Lock feature to block unauthorised access to machine settings.

When Setting Lock is set to On, you cannot access the machine settings without entering the password.

- [Set the Setting Lock Password](#)
- [Change the Setting Lock Password](#)
- [Turn Setting Lock On](#)



## Set the Setting Lock Password

1. Press  [Settings] > [All Settings] > [General Setup] > [Setting Lock].
2. Enter a four-digit number for the password.
3. Press [OK].
4. When the LCD displays [Verify], re-enter the new password.
5. Press [OK].
6. Press .

### Related Information

- [Setting Lock Overview](#)

## Change the Setting Lock Password


1. Press  [Settings] > [All Settings] > [General Setup] > [Setting Lock] > [Set Password].
2. Enter the current four-digit password.
3. Press [OK].
4. Enter a new four-digit password.
5. Press [OK].
6. When the LCD displays [Verify], re-enter the new password.
7. Press [OK].
8. Press .



### Related Information

- [Setting Lock Overview](#)

## Turn Setting Lock On

1. Press  [Settings] > [All Settings] > [General Setup] > [Setting Lock] > [Lock Off⇒On].
2. Enter the current four-digit password.
3. Press [OK].



### Related Information

- [Setting Lock Overview](#)
-

## Administrator

- [Network Features](#)
- [Security Features](#)
- [Brother Management Tools](#)

## Network Features

- [Change Machine Settings Using Web Based Management](#)
- [Print the Network Configuration Report](#)
- [Synchronise Time with the SNTP Server Using Web Based Management](#)
- [Store Print Log to Network](#)



## Security Features

Your machine employs some of the latest network security and encryption protocols available today. These network features can be integrated into your overall network security plan to help protect your data and prevent unauthorised access to the machine.

- [Network Security](#)
- [User Authentication](#)

## Network Security

- [Disable Unnecessary Protocols](#)
- [Configure Certificates for Device Security](#)
- [Use SSL/TLS](#)
- [Use SNMPv3](#)
- [Use IPsec](#)
- [Use IEEE 802.1x Authentication for a Wired or a Wireless Network](#)

## Disable Unnecessary Protocols

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2

3. If required, type the password in the **Login** field, and then click **Login**.



---

The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

---

4. Go to the navigation menu, and then click **Network > Network > Protocol**.



---

Start from ☰, if the navigation menu is not shown on the left side of the screen.

---

5. Clear an unnecessary protocol's checkbox to disable the protocol.
6. Click **Submit**.
7. Restart your Brother machine to activate the configuration.



### Related Information

- [Network Security](#)

## User Authentication

- [Use Active Directory Authentication](#)
- [Use LDAP Authentication](#)
- [Use Secure Function Lock 3.0](#)

## Brother Management Tools

Use one of Brother's management tools to configure your Brother machine's network settings. Go to your model's **Downloads** page at [support.brother.com](http://support.brother.com) to download the tools.



### Related Information

- [Administrator](#)
-

## Mobile Connect

- [AirPrint](#)
- [Mopria® Print Service](#)
- [Brother Mobile Connect](#)
- [Register an External IC Card Reader](#)

## AirPrint

- [AirPrint Overview](#)
- [Before Using AirPrint \(macOS\)](#)
- [Print Using AirPrint](#)

## AirPrint Overview

AirPrint is a printing solution for Apple operating systems that allows you to wirelessly print photos, email, web pages, and documents from your iPad, iPhone, iPod touch, and Mac computer without the need to install a driver.

For more information, visit Apple's website.

Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.



### ✓ Related Information

- [AirPrint](#)

#### Related Topics:

- [AirPrint Problems](#)



## Before Using AirPrint (macOS)

Before printing using macOS, add your machine to the printer list on your Mac computer.

1. Select **System Preferences** from the Apple menu.
2. Click **Printers & Scanners**.
3. Click the + icon below the Printers pane on the left.  
The **Add** screen appears.
4. Select your machine, and then select **AirPrint** from the **Use** pop-up menu.
5. Click **Add**.



### Related Information



- [AirPrint](#)
-

## Print Using AirPrint

- [Print from iPad, iPhone, or iPod touch](#)
- [Print Using AirPrint \(macOS\)](#)
- [Clear Paper Jams](#)

## Print from iPad, iPhone, or iPod touch

The procedure used to print may vary by application. Safari is used in the example below.

1. Make sure your machine is turned on.
2. Load the paper in the paper tray and change the paper tray settings on your machine, if necessary.
3. Use Safari to open the page that you want to print.
4. Tap  or .
5. Tap **Print**.
6. Make sure your machine is selected.
7. If a different machine (or no machine) is selected, tap **Printer**.  
A list of available machines appears.
8. Tap your machine's name in the list.
9. Select the options you want, such as the number of pages to print and 2-sided printing (if supported by your machine).
10. Tap **Print**.



### Related Information

- [Print Using AirPrint](#)

## Print Using AirPrint (macOS)

The procedure used to print may vary by application. Safari is used in the example below. Before printing, make sure your machine is in the printer list on your Mac computer.

1. Make sure your machine is turned on.
2. Load the paper in the paper tray and change the paper tray settings on your machine, if necessary.
3. On your Mac computer, use Safari to open the page that you want to print.
4. Click the **File** menu, and then select **Print**.
5. Make sure your machine is selected. If a different machine (or no machine) is selected, click the **Printer** pop-up menu, and then select your machine.
6. Select the desired options, such as the number of pages to print and 2-sided printing (if supported by your machine).
7. Click **Print**.



### Related Information

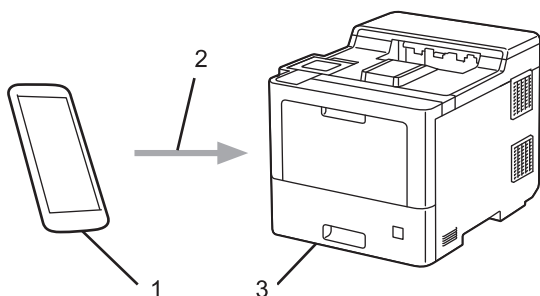
- [Print Using AirPrint](#)

#### Related Topics:

- [Before Using AirPrint \(macOS\)](#)

## Mopria® Print Service

Mopria® Print Service is a print feature on Android™ mobile devices developed by the Mopria® Alliance. With this service, you can connect to the same network as your machine and print without additional setup.



1. Android™ Mobile Device
2. Wi-Fi® Connection
3. Your Machine

The Mopria® Print Service must be downloaded from a search engine and installed on your Android™ device.

### Related Information

- [Mobile Connect](#)

## Brother Mobile Connect

Use Brother Mobile Connect to print from your mobile device.

- For Android™ devices:

Brother Mobile Connect allows you to use your Brother machine's features directly from your Android™ device.

Go to your model's **Downloads** page at [support.brother.com](http://support.brother.com) to download Brother Mobile Connect.

- For all iOS or iPadOS supported devices including iPhone, iPad, and iPod touch:

Brother Mobile Connect allows you to use your Brother machine's features directly from your iOS or iPadOS device.

Download and install Brother Mobile Connect from the App Store.



### Related Information

- [Mobile Connect](#)

#### Related Topics:

- [Brother iPrint&Scan Overview for Windows and Mac](#)
-

## Register an External IC Card Reader

When you connect an external IC card reader, use Web Based Management to register the card reader. Your machine supports HID class driver supported external IC card readers.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator** > **External Card Reader**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Enter the necessary information.
6. Click **Submit**.
7. Restart your Brother machine to activate the configuration.



### Related Information

- [Mobile Connect](#)

## Brother iPrint&Scan

- [Brother iPrint&Scan Overview for Windows and Mac](#)

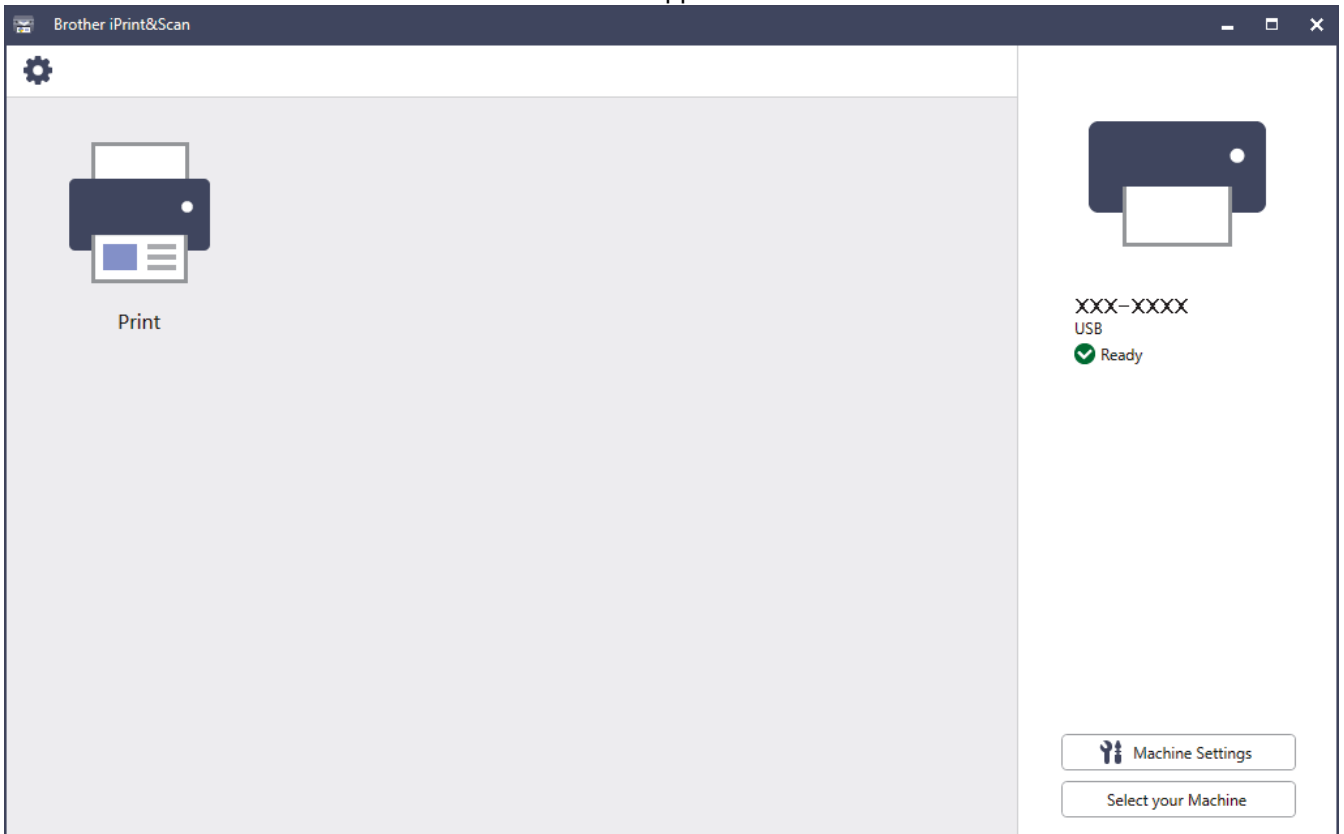


## Brother iPrint&Scan Overview for Windows and Mac

Use Brother iPrint&Scan for Windows and Mac to print from your computer.

The following screen shows an example of Brother iPrint&Scan for Windows. The actual screen may differ depending on the version of the application.

- For Windows  
Go to your model's **Downloads** page at [support.brother.com](http://support.brother.com) to download the latest application.
- For Mac  
Download and install Brother iPrint&Scan from the App Store.



If prompted, install the driver and software necessary to use your machine. Download the installer from your model's **Downloads** page at [support.brother.com](http://support.brother.com).

### ✓ Related Information

- [Brother iPrint&Scan](#)

#### Related Topics:

- [Brother Mobile Connect](#)

## Troubleshooting

Use this section to resolve typical problems you may encounter when using your machine. You can correct most problems yourself.

### IMPORTANT

For technical help, you must call Brother customer service or your local Brother dealer.

Using non-Brother supplies may affect the print quality, hardware performance, and machine reliability.



If you need additional help, visit [support.brother.com](http://support.brother.com).

First, check the following:

- The machine's power cord is connected correctly and the machine's power is on. See the *Quick Setup Guide*.
- All of the protective materials have been removed. See the *Quick Setup Guide*.
- Paper is loaded correctly in the paper tray.
- The interface cables are securely connected to the machine and the computer, or the wireless connection is set up on both the machine and your computer.
- Error and maintenance messages

If you did not solve the problem with the checks, identify the problem and then see *Related Information*.



### Related Information



- [Error and Maintenance Messages](#)
- [Paper Jams](#)
- [Printing Problems](#)
- [Improve the Print Quality](#)
- [Network Problems](#)
- [AirPrint Problems](#)
- [Other Problems](#)
- [Check the Machine Information](#)
- [Reset Functions](#)

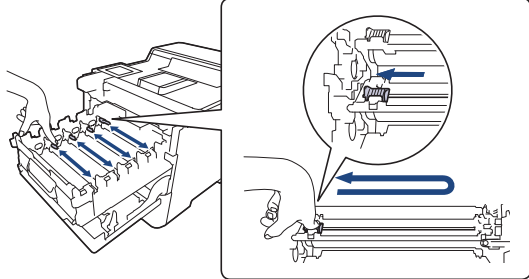
## Error and Maintenance Messages

As with any sophisticated office product, errors may occur and supply items may have to be replaced. If this happens, your machine identifies the error or required routine maintenance and shows the appropriate message. The most common error and maintenance messages are shown in the table.





Follow the instructions in the **Action** column to solve the error and remove the message.




You can correct most errors and perform routine maintenance by yourself. If you need more tips: Visit [support.brother.com](http://support.brother.com), and click the **FAQs & Troubleshooting** page.


Error Message	Cause	Action
2-sided Disabled	The back cover of the machine is not closed completely.	Close the back cover of the machine until it locks in the closed position.
Access Denied	The function you want to use is restricted by Secure Function Lock 3.0.	Ask your administrator to check your Secure Function Lock Settings.
Belt Error	The belt unit is not installed correctly.	Remove the belt unit from your machine, and put the belt unit back into the machine.
Calibration	Calibration failed.	<ul style="list-style-type: none"> <li>Press and hold down  to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour correction again using the LCD.</li> <li>Install a new belt unit.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Cannot Detect	Your machine cannot detect the toner cartridge for the colour indicated on the LCD.	Remove the toner cartridge for the colour indicated on the LCD from the drum unit, and put the toner cartridge back into the drum unit.
	Your machine cannot detect the belt unit.	Remove the belt unit from your machine, and put the belt unit back into the machine.
	Your machine cannot detect the drum unit.	Remove the drum unit from your machine, and put the drum unit back into the machine.
Cannot Print ###	The machine has a mechanical problem.	<ul style="list-style-type: none"> <li>Press and hold  to turn the machine off, wait a few minutes, and then turn it on again.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Cartridge Error	The toner cartridge is not installed correctly.	Pull out the drum unit, remove the toner cartridge for the colour that is indicated on the LCD, and place it back in the drum unit. Install the drum unit in the machine again. If the problem continues, contact Brother customer service or your local Brother dealer.
Condensation	Condensation may have formed inside the machine after a room temperature change.	Leave the machine turned on. Wait for 30 minutes with the front cover in the open position. Then turn off the machine and close the cover. Turn it on again.
Cooling Down	The temperature inside the machine is too high. The machine pauses its current print job and goes into cooling down mode.	Wait until the machine has finished cooling down. Make sure all vents on the machine are clear of obstructions. When the machine has cooled down, it will resume printing.

Error Message	Cause	Action
Cover is Open	The front cover is not completely closed.	Open and then firmly close the front cover of the machine.
Cover is Open	The fuser cover is not completely closed.	Close the fuser cover located under the back cover of the machine.
Cover is Open	The Mailbox (optional) back cover is not completely closed.	Close the Mailbox (optional) back cover.
Drum !	The corona wires on the drum unit must be cleaned.	<p>Clean the corona wires on the drum unit.</p>  <p>See <i>Related Information: Clean the Corona Wires.</i></p> <p>If the problem continues, replace the drum unit with a new one.</p>
	The drum unit or the toner cartridge and the drum unit assembly is not installed correctly.	Remove the drum unit, remove the toner cartridges from the drum unit, and put the toner cartridges back into the drum unit. Reinstall the drum unit in the machine.
Drum Error	The drum unit is not installed correctly.	Remove the drum unit from your machine, and put the drum unit back into the machine.
Drum Stop	It is time to replace the drum unit.	<p>Replace the drum unit.</p> <p>See <i>Related Information: Replace the Drum Unit.</i></p>
Jam 2-sided	The paper is jammed in the paper tray or the 2-sided tray.	Remove the paper tray and the 2-sided tray to remove all jammed paper.
Jam Inside	The paper is jammed inside the machine.	Open the front cover, remove the toner cartridges and the drum unit assembly, and pull out all jammed paper. Reinstall the toner cartridges and the drum unit assembly into the machine. Close the front cover.
Jam Mailbox	The paper is jammed in the Mailbox (optional) unit.	Remove all jammed paper from the Mailbox (optional) unit as shown on the LCD.
Jam MP Tray	The paper is jammed in the MP tray.	Remove all jammed paper from in and around the MP tray. Press <b>Retry</b> .
Jam Rear	The paper is jammed in the back of the machine.	Open the back cover, the fuser cover and the cover 2 (if equipped). Remove all jammed paper. Close the covers. Press <b>Retry</b> .
Jam Tray1 Jam Tray2 Jam Tray3 Jam Tray4	The paper is jammed in the indicated paper tray.	Pull out the paper tray and remove all jammed paper as shown in the animation on the LCD.
Limit Exceeded	The print limit set in Secure Function Lock 3.0 was reached.	Ask your administrator to check your Secure Function Lock Settings.
Many Output Trays	Either bin 2 tray or bin 4 tray was removed from the Mailbox (optional) unit.	<p>To use the Mailbox (optional) unit in 2-bin mode, remove both bin 2 tray and bin 4 tray.</p> <p>To use the Mailbox (optional) unit in 4-bin mode, install both bin 2 tray and bin 4 tray.</p>

Error Message	Cause	Action
Media Type Mismatch	The media type specified in the printer driver differs from the paper type specified in the machine's menu.	Load the correct type of paper in the tray indicated on the LCD, and then select the correct media type in the Paper Type setting on the machine.
No 2-sided Tray	The 2-sided tray is not installed or not installed correctly.	Reinstall the 2-sided tray.
No Belt	The belt unit is not installed or not installed correctly.	Reinstall the belt unit. <i>See Related Information: Replace the Belt Unit.</i>
No Drum	The drum unit is not installed correctly.	Reinstall the toner cartridges and the drum unit assembly. <i>See Related Information: Replace the Drum Unit.</i>
No Drum Unit	The drum unit is not installed correctly.	Reinstall the toner cartridges and the drum unit assembly. <i>See Related Information: Replace the Drum Unit.</i>
No HUB Support	A USB hub device is connected to the USB host connector.	Disconnect the USB hub device from the USB host connector.
No Paper	The machine is out of paper, or paper is not loaded correctly in the paper tray.	<ul style="list-style-type: none"> <li>• Refill paper in the paper tray. Make sure the paper guides are set to the correct size.</li> <li>• If paper is in the tray, remove it and load it again. Make sure the paper guides are set to the correct size.</li> <li>• Do not overfill the paper tray.</li> </ul>
No Paper Fed Tray1 No Paper Fed Tray2 No Paper Fed Tray3 No Paper Fed Tray4	The machine failed to feed paper from the indicated paper tray.	Pull out the paper tray indicated on the LCD and gently remove all jammed paper.
No Paper MP Tray	The MP tray is out of paper, or paper is not loaded correctly in the MP tray.	Do one of the following: <ul style="list-style-type: none"> <li>• Refill paper in the MP tray. Make sure the paper guides are set to the correct size.</li> <li>• If paper is in the MP tray, remove it and load it again. Make sure the paper guides are set to the correct size.</li> </ul>
No Paper Tray1 No Paper Tray2 No Paper Tray3 No Paper Tray4	The machine failed to feed paper from the indicated paper tray.	Do one of the following: <ul style="list-style-type: none"> <li>• Refill paper in the paper tray indicated on the LCD. Make sure the paper guides are set to the correct size.</li> <li>• If paper is in the tray, remove it and load it again. Make sure the paper guides are set to the correct size.</li> <li>• Do not overfill the paper tray.</li> </ul>
No Toner	The toner cartridge for the colour indicated on the LCD is not installed or not installed correctly.	Remove the toner cartridge for the colour indicated on the LCD from the drum unit, and put the toner cartridge back into the drum unit. If the problem continues, replace the toner cartridge. <i>See Related Information: Replace the Toner Cartridge.</i>

Error Message	Cause	Action
No Tray1 No Tray2 No Tray3 No Tray4	The paper tray is not installed or not installed correctly.	Reinstall the paper tray indicated on the LCD.
No Waste Toner	The waste toner box is not installed or not installed correctly.	Reinstall the waste toner box.
Out of Memory	The machine's memory is full.	Press  and reduce the print resolution.
Output Tray Full	The output paper tray is full.	Remove printed paper from the output tray indicated on the LCD.
Paper Low Paper Low Tray 1 Paper Low Tray 2 Paper Low Tray 3 Paper Low Tray 4	The paper tray is nearly empty.	Refill the paper in the paper tray indicated on the LCD.
Print Data Full	The machine's memory is full.	Press  and delete the previously stored secure print data.
Registration	Registration failed.	<ul style="list-style-type: none"> <li>Press and hold down  to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour correction again using the LCD.</li> <li>Install a new belt unit.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Replace Toner	The toner cartridge is at the end of its life. The machine stops all print operations.	Replace the toner cartridge for the colour indicated on the LCD. <i>See Related Information: Replace the Toner Cartridge.</i>
Replace WT Box	It is time to replace the waste toner box.	Replace the waste toner box with a new one. <i>See Related Information: Replace the Waste Toner Box.</i>
Screen Init. Fail	The touchscreen was pressed before the power on initialisation was completed.	Make sure nothing is touching the touchscreen.
	Debris may be stuck between the lower part of the touchscreen and its frame.	Insert a piece of stiff paper between the lower part of the touchscreen and its frame and slide it back and forth to push out any debris.
Self-Diagnostic	The temperature of the fuser unit does not rise to a specified temperature within the specified time.	Press and hold  to turn the machine off, wait a few seconds, and then turn it on again. Leave the machine idle for 15 minutes with the power on.
	The fuser unit is too hot.	
Short paper	The length of the paper in the tray is too short for the machine to deliver it to the Face down output tray.	Open the back cover (Face up output tray) to let the printed page exit onto the Face up output tray. Remove the printed pages, and then press <i>Retry</i> .
Size Error	The paper size defined in the printer driver is not supported by the defined tray.	Choose a paper size supported by the defined tray.

Error Message	Cause	Action
Size Error 2-sided	The paper size specified in the machine's paper size setting is not available for automatic 2-sided printing.	Press  (if required). Load the correct size of paper in the tray and set the tray for that paper size.
	The paper in the tray is not the correct size and is not available for automatic 2-sided printing.	Choose a paper size supported by 2-sided printing. Paper sizes available for automatic 2-sided printing are A4, Letter, Legal, Mexico Legal, India Legal and Folio.
Size Mismatch	The paper in the tray is not the correct size.	Load the correct size of paper in the tray indicated on the LCD and set the size of paper for the tray. Press <b>Retry</b> .
Storage device not recognized	The USB flash drive is unavailable for use.	Press <b>Close</b> , and then press and hold  to turn the machine off. Wait a few minutes, and then turn it on again. If the error message remains, change the Job Save Location setting to the machine's memory. <i>See Related Information: Secure Print Using a USB Flash Drive</i> <i>Replace the Toner Cartridge.</i>
Storage Full	The USB flash memory drive you are using does not have enough free space to store secure print data.	Press  and delete the previously stored secure print data.
Supplies Belt End Soon	The belt unit is near the end of its life.	Order a new belt unit before the LCD displays <b>Replace Belt</b> .
Supplies Drum End Soon	The drum unit is near the end of its life.	Order a new drum unit before the LCD displays <b>Replace Drum</b> .
Supplies Replace Belt	It is time to replace the belt unit.	Replace the belt unit with a new one.
Supplies Replace Drum	It is time to replace the drum unit.	Replace the drum unit with a new one. <i>See Related Information: Replace the Drum Unit.</i>
Supplies Toner Low: X (X indicates the toner cartridge or drum unit colour that is near the end of its life. BK=Black, C=Cyan, M=Magenta, Y=Yellow.)	If the LCD displays this message, you can still print. The toner cartridge is near the end of its life.	Order a new toner cartridge before the LCD displays <b>Replace Toner</b> .
Supplies WT Box End	The waste toner box is at the end of its life.	Replace the waste toner box. <i>See Related Information: Replace the Waste Toner Box.</i>
Supplies WT Box End Soon	The waste toner box is almost full.	Order a new waste toner box before the LCD displays <b>Replace WT Box</b> .
Toner Error	One or more toner cartridges are not installed or not installed correctly.	Pull out the drum unit. Remove all the toner cartridges, and then put them back into the drum unit.
Too Many Trays	The number of installed Optional Trays exceeds the maximum number.	Reduce the number of Optional Trays.
Tray 2 Error Tray 3 Error	The optional lower tray is not installed correctly.	Reinstall the lower tray.

Error Message	Cause	Action
Unusable Device	An unsupported USB device has been connected to the USB host connector.	Unplug the device from the USB host connector. <ul style="list-style-type: none"> <li>Unplug the device from the USB direct interface.</li> <li>Press and hold  to turn the machine off, and then turn it on again.</li> </ul>
	A defective USB device or a high power consumption USB device has been connected to the USB direct interface.	
USB flash drive not detected	A USB flash drive was not connected to the USB port (Rear).	Connect a USB flash drive to the USB port (Rear).
Wrong Belt	The belt unit is not correct for your machine.	Remove the belt unit, and put a belt unit with the correct supply model name.
Wrong Drum	The drum unit is not correct for your machine.	Remove the drum unit, and put a drum unit with the correct supply model name.
Wrong Toner Cartridge	The toner cartridge for the colour indicated on the LCD is not the correct toner cartridge for your machine.	Remove the toner cartridge for the colour indicated on the LCD from the drum unit, and put a toner cartridge with the correct supply model name.



## Related Information

- [Troubleshooting](#)

### Related Topics:

- [Clean the Corona Wires](#)
- [Replace the Toner Cartridge](#)
- [Replace the Drum Unit](#)
- [Replace the Belt Unit](#)
- [Replace the Waste Toner Box](#)
- [Secure Print Using a USB Flash Drive](#)



## Paper Jams

Always remove the remaining paper from the paper tray and straighten the stack when you are adding new paper. This helps prevent multiple sheets of paper from feeding through the machine at one time and prevents paper jams.

- [Clear Paper Jams](#)
- [Paper is Jammed in the MP tray](#)
- [Paper is Jammed in the Paper Tray](#)
- [Paper is Jammed in the Back of the Machine](#)
- [Paper is Jammed Inside the Machine](#)
- [Paper is Jammed in the 2-sided Tray](#)
- [Paper is Jammed in the Mailbox Unit](#)

## Clear Paper Jams

If paper is jammed or multiple sheets of paper are fed together frequently, do the following:

- Clean the paper pick-up rollers and the separator pad of paper trays.  
*See Related Information: Clean the Paper Pick-up Rollers.*
- Load paper correctly in the tray.  
*See Related Information: Load Paper.*
- Set the correct paper size and paper type on your machine.  
*See Related Information: Paper Settings.*
- Set the correct paper size and paper type on your computer.  
*See Related Information: Print a Document (Windows).*  
*See Related Information: Print Using AirPrint.*
- Use the recommended paper.  
*See Related Information: Using Special Paper.*  
*See Related Information: Recommended Print Media.*



### Related Information

- [Paper Jams](#)

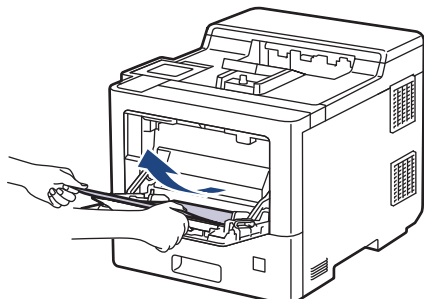
#### Related Topics:

- [Clean the Paper Pick-up Rollers](#)
- [Load Paper](#)
- [Paper Settings](#)
- [Print a Document \(Windows\)](#)
- [Print Using AirPrint](#)
- [Using Special Paper](#)
- [Recommended Print Media](#)

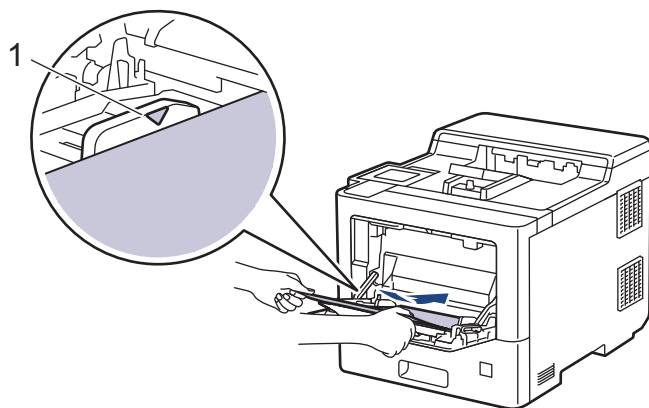
## Paper is Jammed in the MP tray

If the machine's control panel or the Status Monitor indicates that there is a jam in the machine's MP tray, follow these steps:

1. Remove the paper from the MP tray.
2. Slowly remove any jammed paper from in and around the MP tray.



3. Fan the paper stack, and then put it back in the MP tray.
4. Reload paper in the MP tray and make sure the paper stays under the maximum paper height guides (1) on both sides of the tray.



5. Follow the instructions on the machine's LCD.

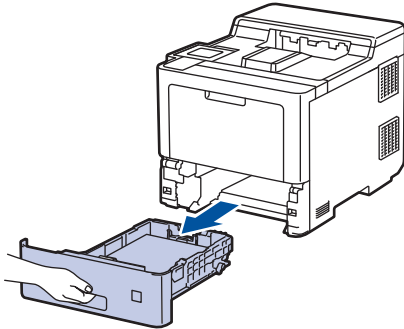
### ✓ Related Information

- [Paper Jams](#)

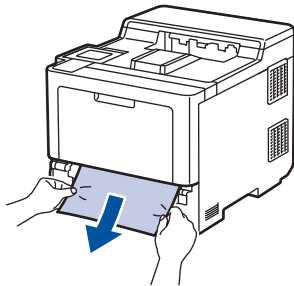
## Paper is Jammed in the Paper Tray

If the machine's control panel or the Status Monitor indicates that there is a jam in the paper tray, follow these steps:

1. Pull the paper tray completely out of the machine.

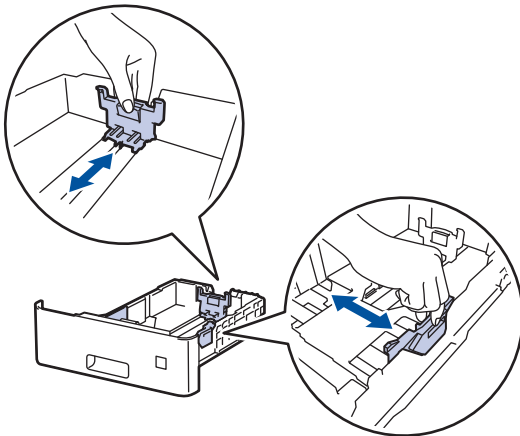


2. Slowly pull out the jammed paper.

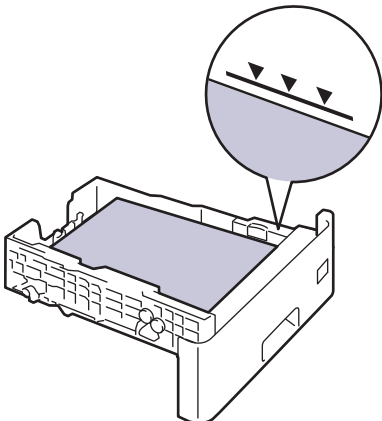


Pulling the jammed paper downwards using both hands allows you to remove the paper more easily.

3. Fan the stack of paper to prevent further jams, and slide the paper guides to fit the paper size. Load paper in the paper tray.



4. Make sure the paper is below the maximum paper mark (▼▼▼).



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5. Put the paper tray firmly back in the machine.



### **Related Information**

- [Paper Jams](#)
-

## Paper is Jammed in the Back of the Machine

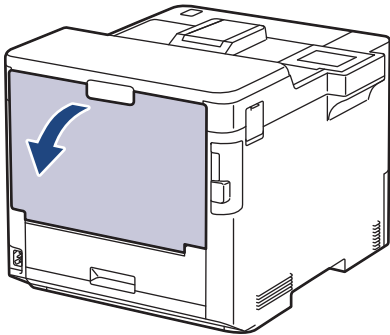
If the machine's control panel or the Status Monitor indicates that there is a jam in the back of the machine (Jam Rear), do the following:



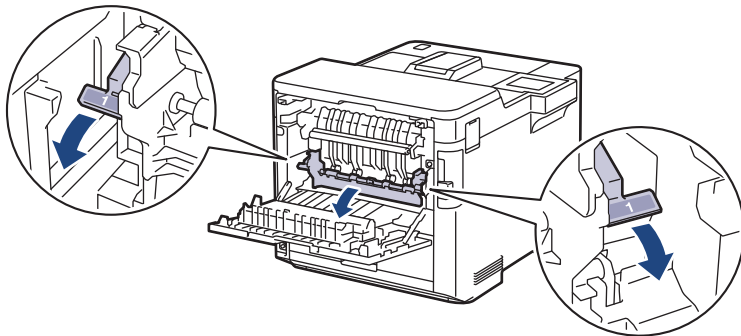
This procedure intentionally includes the opening and closing procedure of all related parts to paper jams in the back of the machine. Depending on the condition of the paper jam, the machine will inform you on the LCD which parts need to be opened in order to clear the paper jam.

Follow the instruction shown on the LCD to clear the paper jam.

1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Open the back cover.



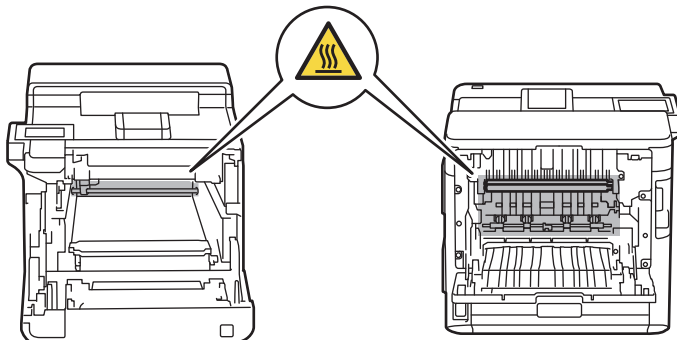
3. Pull the tabs labeled "1" at the left and right sides towards you to release the fuser cover.



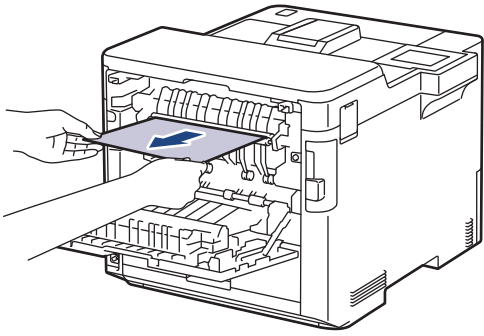
### **WARNING**

#### HOT SURFACE

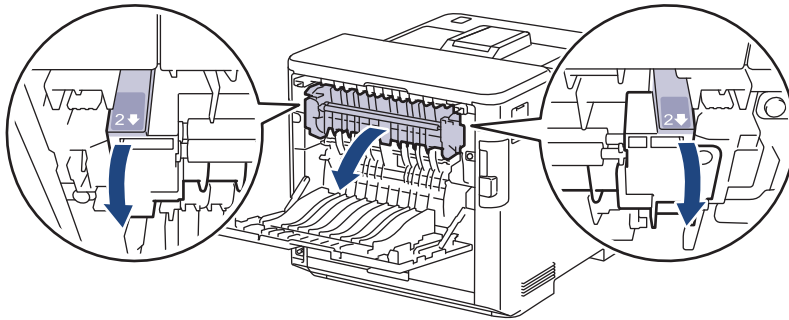
The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



- 
4. Use both hands to gently pull the jammed paper out of the machine.



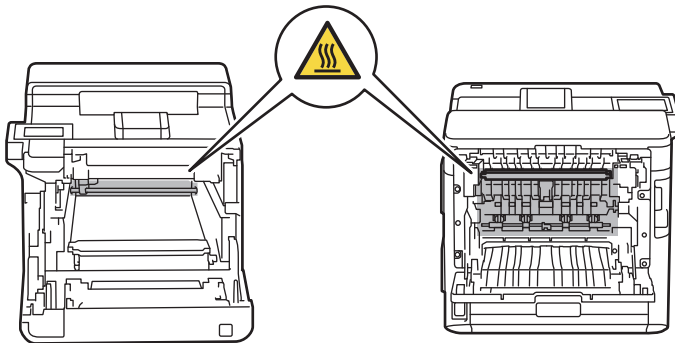
5. Pull the tabs labeled "2" at the left and right sides towards you to release the Rear Cover 2 (available only for certain models).



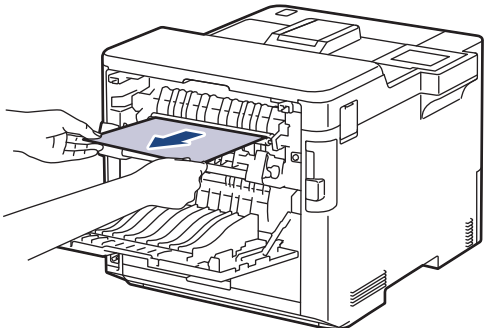
## **WARNING**

### HOT SURFACE

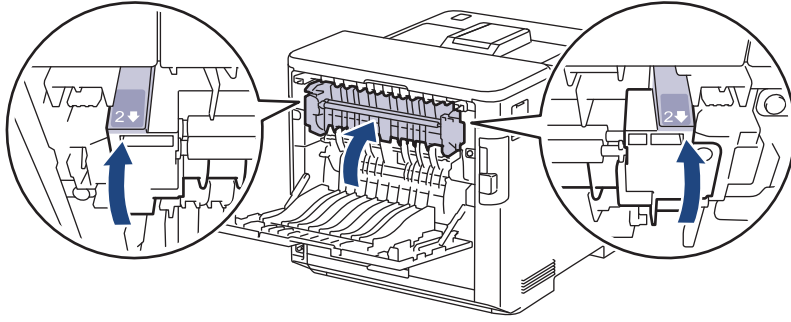
The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



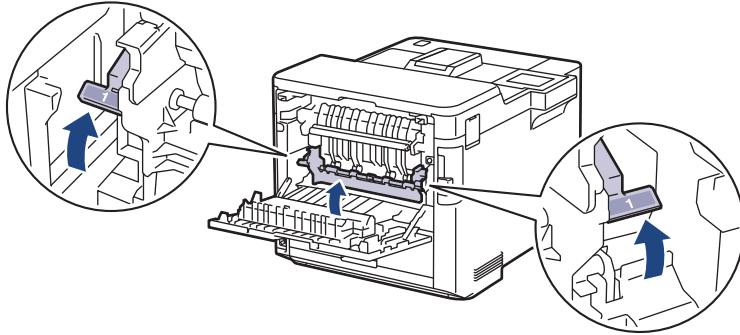
- 
6. Use both hands to gently pull the jammed paper out of the machine. (for certain models only)



- 
7. Close the cover 2. Make sure the tabs labeled "2" at the left and right sides lock into place (available only for certain models).



8. Close the fuser cover. Make sure the tabs labeled "1" at the left and right sides lock into place.



9. Close the back cover until it locks in the closed position.



## Related Information

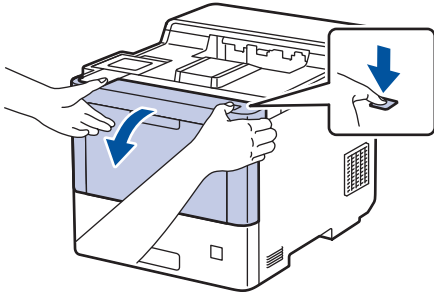
- [Paper Jams](#)
-



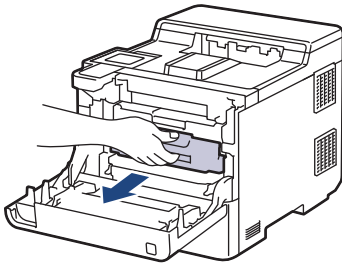
## Paper is Jammed Inside the Machine

If the machine's control panel or the Status Monitor indicates that there is a jam inside the machine, follow these steps:

1. Press the front cover release button and open the front cover.



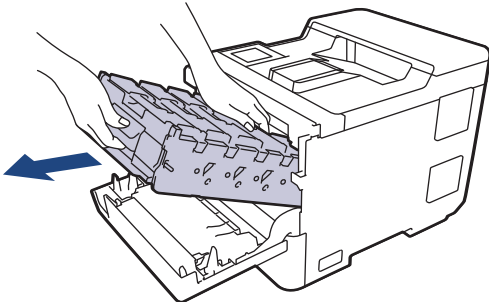
2. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



### CAUTION

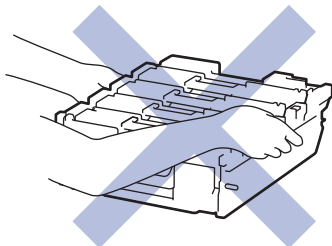
We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

3. Holding the green labeled handles of the drum unit, lift the front of the drum unit and remove it from the machine.

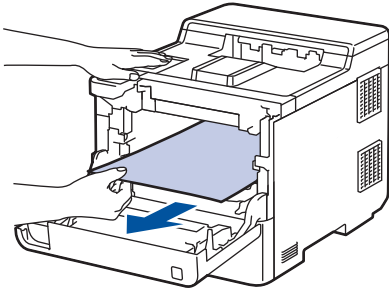


### IMPORTANT

Hold the handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.

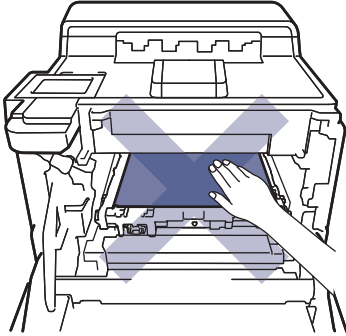


- 
- Slowly remove the jammed paper.

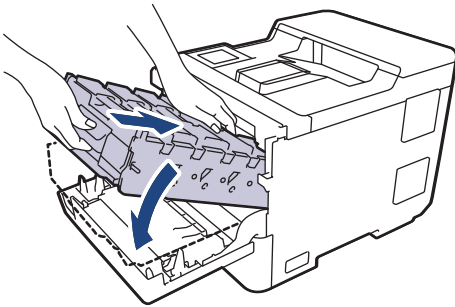


## NOTE

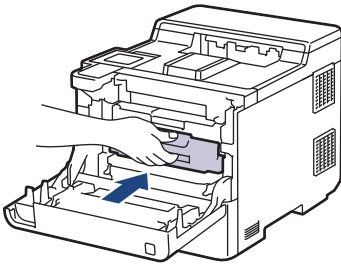
To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.



- 
- Gently slide the drum unit into the machine until it stops.



- Using the green labeled handle, push the drum unit back into the machine until it locks in place.



- Close the machine's front cover.



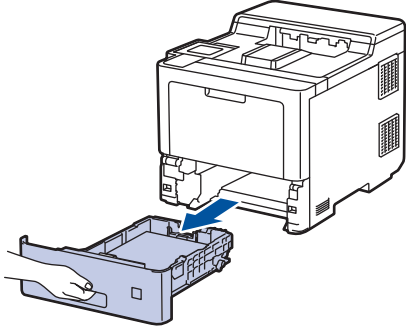
## Related Information

- [Paper Jams](#)
-

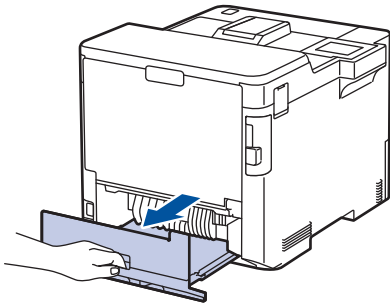
## Paper is Jammed in the 2-sided Tray

If the machine's control panel or the Status Monitor indicates that there is a jam in the 2-sided paper tray, follow these steps:

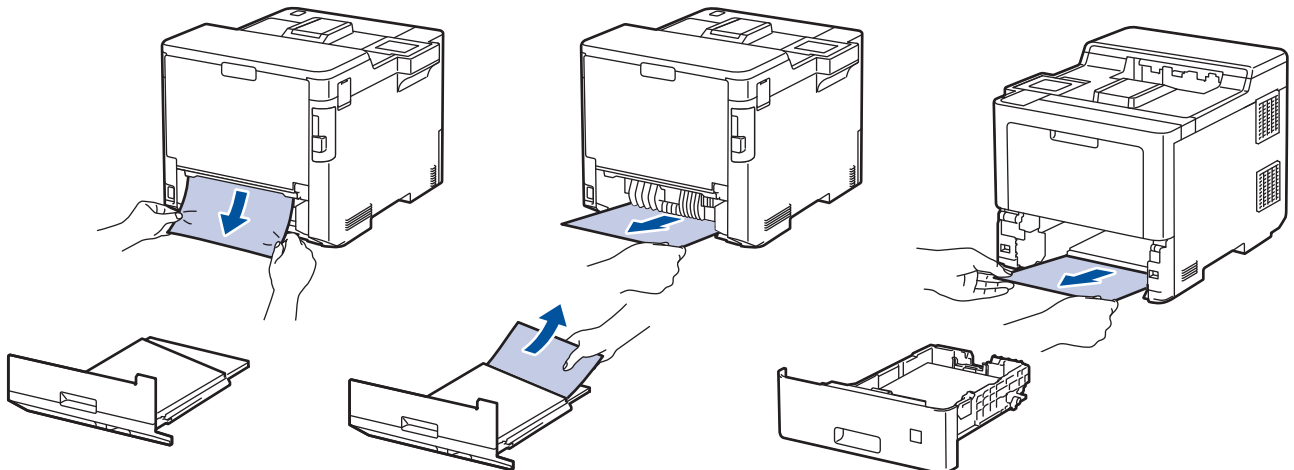
1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Pull the paper tray completely out of the machine.



3. At the back of the machine, pull the 2-sided tray completely out of the machine.



4. Slowly remove the jammed paper out of the machine, out of the 2-sided tray, or out of the paper tray.



5. Put the 2-sided tray firmly back in the rear of the machine.
6. Put the paper tray firmly back in the front of the machine.

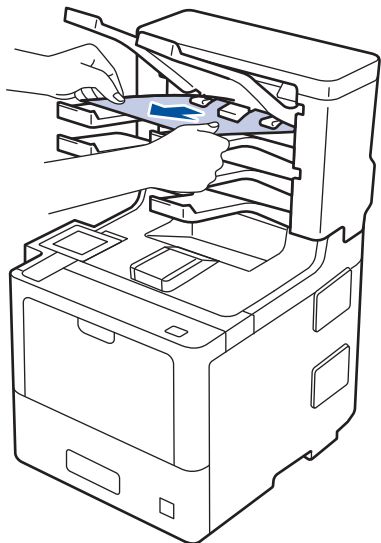
### ✓ Related Information

- [Paper Jams](#)

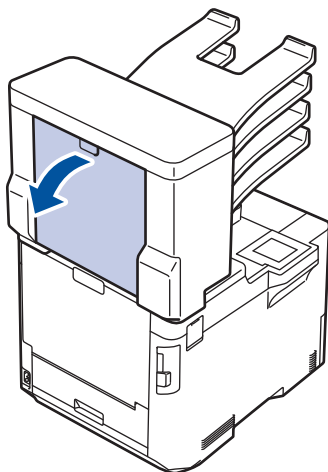
## Paper is Jammed in the Mailbox Unit

If the machine's control panel or the Status Monitor indicates that there is a jam in the Mailbox unit, follow these steps:

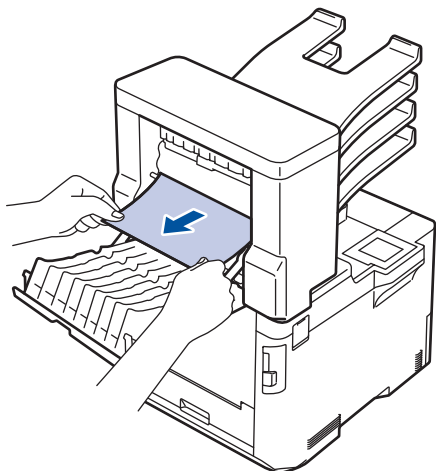
1. Slowly remove the jammed paper out of the Mailbox bin indicated on the LCD.



2. If the error continues, open the Mailbox's back cover.



3. Slowly remove the jammed paper out of the Mailbox unit.



4. Close the Mailbox's back cover until it locks in the closed position.








## Related Information

- [Paper Jams](#)
-

## Printing Problems

If, after reading this table, you still need help, see the latest troubleshooting tips at [support.brother.com](http://support.brother.com).

Difficulties	Suggestions
No printout	<p>Check the machine is not in Power Off mode.</p> <p>If the machine is in Power Off mode, press , and then send the print data again.</p> <hr/> <p>Check that the correct printer driver has been installed and selected.</p> <hr/> <p>Check to see if the Status Monitor or the machine's control panel displays an error status.</p> <hr/> <p>Check that the machine is online:</p> <ul style="list-style-type: none"> <li>• Windows 10, Windows Server 2016 and Windows Server 2019           <p>Click  &gt; <b>Windows System &gt; Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>. Right-click the <b>Brother XXX-XXXX</b>. Click <b>See what's printing</b>. If printer driver options appear, select your printer driver. Click <b>Printer</b> in the menu bar and make sure that <b>Use Printer Offline</b> is not selected.</p> </li> <li>• Windows Server 2012 R2           <p>Click <b>Control Panel</b> on the <b>Start</b> screen. In the <b>Hardware</b> group, click <b>View devices and printers</b>. Right-click the <b>Brother XXX-XXXX</b>. Click <b>See what's printing</b>. If printer driver options appear, select your printer driver. Click <b>Printer</b> in the menu bar and make sure <b>Use Printer Offline</b> is not selected.</p> </li> <li>• Windows 8.1 and Windows Server 2012           <p>Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings &gt; Control Panel &gt; Hardware and Sound &gt; View devices and printers</b>. Right-click the <b>Brother XXX-XXXX</b>. Click <b>See what's printing</b>. If printer driver options appear, select your printer driver. Click <b>Printer</b> in the menu bar and make sure that <b>Use Printer Offline</b> is not selected.</p> </li> <li>• Windows7 and Windows Server 2008 R2           <p>Click  (<b>Start</b>) &gt; <b>Devices and Printers</b>. Right-click <b>Brother XXX-XXXX</b> and click <b>See what's printing</b>. Click <b>Printer</b> in the menu bar. Make sure <b>Use Printer Offline</b> is not selected.</p> </li> <li>• Windows Server 2008           <p>Click  (<b>Start</b>) &gt; <b>Control Panel &gt; Hardware and Sound &gt; Printers</b>. Right-click <b>Brother XXX-XXXX</b>. Make sure <b>Use Printer Online</b> is not listed. If it is listed, click this option to set the machine online.</p> </li> </ul> <p>Mac</p> <p>Click the <b>System Preferences</b> menu, and then select the <b>Printers &amp; Scanners</b> option. When the machine is offline, delete it using the  button, and then add it using the  button.</p>

Difficulties	Suggestions
The machine is not printing or has stopped printing.	Cancel the print job and clear it from the machine's memory. The printout may be incomplete. Send the print data again. <i>See Related Information:Cancel a Print Job.</i>
The headers or footers appear when the document displays on the screen but they do not show up when it is printed.	There is an unprintable area on the top and bottom of the page. Adjust the top and bottom margins in your document to allow for this.
The machine prints unexpectedly or it prints garbage.	Cancel the print job and clear it from the machine's memory. The printout may be incomplete. Send the print data again. <i>See Related Information:Cancel a Print Job.</i>
	Check the settings in your application to make sure they are set up to work with your machine.
	Confirm that the Brother printer driver is selected in your application's Print window.
The machine prints the first couple of pages correctly, then some pages have missing text.	Check the settings in your application to make sure they are set up to work with your machine.
	Your machine is not receiving all of the data sent from the computer. Make sure you connected the interface cable correctly.
The machine does not print on both sides of the paper even though the printer driver setting is 2-sided and the machine supports automatic 2-sided printing.	Check the paper size setting in the printer driver. You must select A4, Letter, Legal, Folio, Mexico Legal, India Legal paper and A4 Short (270mm Paper). Supported paper weight is 60 to 230g/m <sup>2</sup>
Print speed is too slow.	Try changing the printer driver settings. The highest resolution needs longer data processing, sending, and printing time.
	If you have enabled Quiet Mode, disable it in the printer driver or the machine's menu.
The machine does not feed paper.	If there is paper in the paper tray, make sure it is straight. If the paper is curled, straighten it. Sometimes it is helpful to remove the paper, turn the stack over and place it back in the paper tray.
	Fan the stack of paper well and place it back to the paper tray.
	Reduce the amount of paper in the paper tray, and then try again.
	(For models with MP Tray)Make sure <b>MP Tray</b> is not selected for <b>Paper Source</b> in the printer driver.
	Clean the paper pick-up rollers.
The machine does not feed paper from the MP tray. (For models with MP Tray)	Fan the paper well and place it back in the MP tray firmly.
	Make sure <b>MP Tray</b> is selected as <b>Paper Source</b> in the printer driver.
The machine does not feed envelopes.	(For models with MP Tray)Load envelopes in the MP tray. Your application must be set to print the envelope size you are using. This is usually done in the Page Setup or Document Setup menu of your application.
Print position is misaligned with the letterhead or preprinted objects.	Adjust the print position using the Print Position setting for each paper tray.



## Related Information

- [Troubleshooting](#)

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**Related Topics:**

- [Monitor the Status of the Machine from Your Computer \(Windows\)](#)
  - [Cancel a Print Job](#)
  - [Load and Print Using the Paper Tray](#)
  - [Clean the Paper Pick-up Rollers](#)
  - [Load and Print Using the Multi-purpose Tray \(MP Tray\)](#)
-



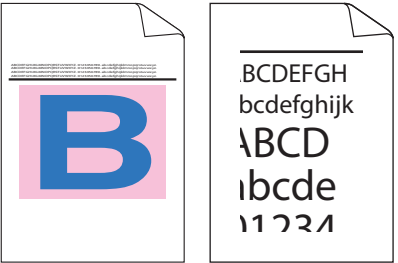

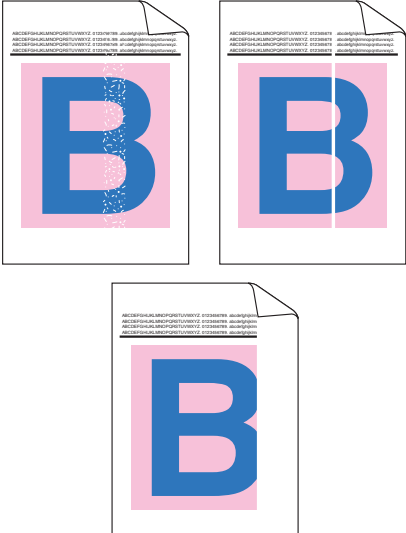
## Improve the Print Quality

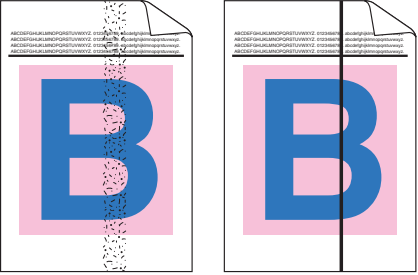
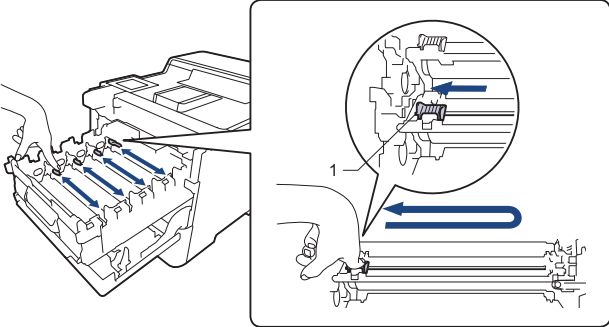
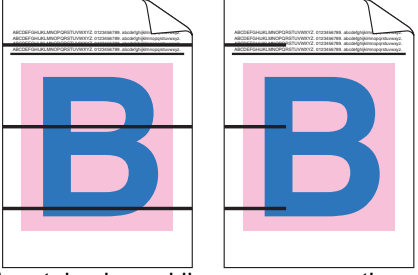

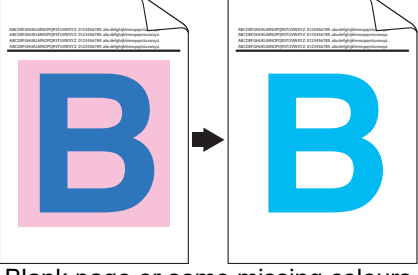
If you have a print quality problem, print a test page first. If the printout looks good, the problem is probably not the machine. Check the interface cable connections and try printing a different document. If the printout or test page printed from the machine has a quality problem, check the examples of poor print quality and follow the recommendations in the table.

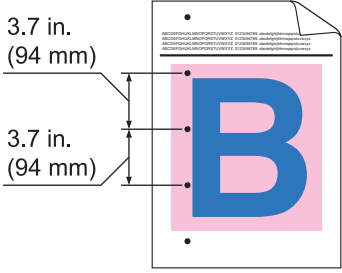
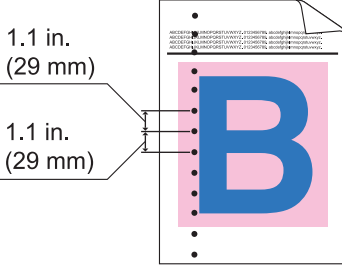

### IMPORTANT

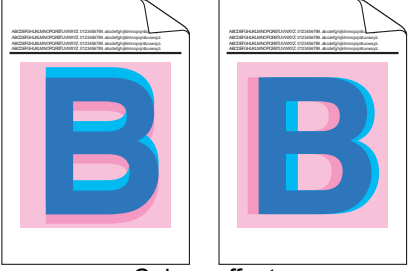

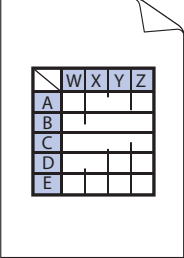
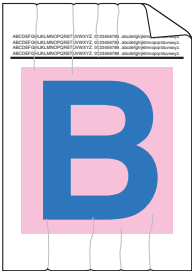
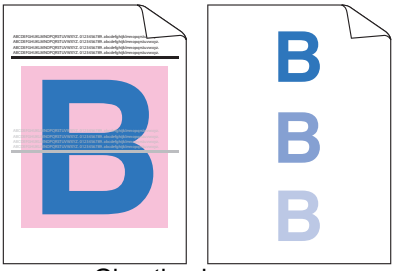
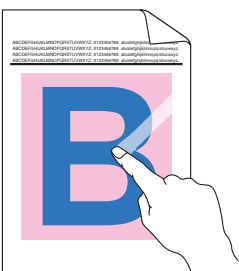
Using non-genuine supplies may affect the print quality, hardware performance, and machine reliability.

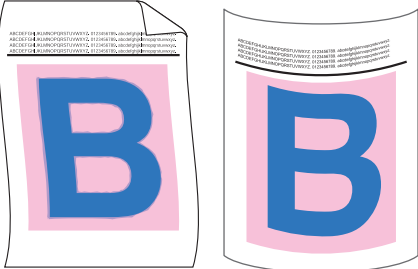
1. To get the best print quality, we suggest using recommended print media. Make sure you use paper that meets our specifications.
2. Check that the drum unit and toner cartridges are installed correctly.

Examples of poor print quality	Recommendation
 <p>Printed pages are compressed, horizontal stripes appear, or characters in the top, bottom, left, or right margins are cut off</p>	<p>Adjust the print margins in your document's application and reprint the job.</p>
 <p>Colours are light or faint on the whole page</p>	<ul style="list-style-type: none"> <li>• Use the machine's LCD to perform calibration. See <i>Related Information: Correct the Colour Printing</i>.</li> <li>• Make sure Toner Save mode is off on the LCD or in the printer driver. See <i>Related Information: Reduce Toner Consumption</i>.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Shake all four toner cartridges gently.</li> <li>• Wipe the laser scanner windows with a dry, soft lint-free cloth. See <i>Related Information: Clean the Laser Scanner Windows</i>.</li> </ul>
	<ul style="list-style-type: none"> <li>• Wipe the laser scanner windows with a dry, soft lint-free cloth. See <i>Related Information: Clean the Laser Scanner Windows</i>.</li> <li>• Make sure foreign material, such as a torn piece of paper, sticky notes, or dust is not inside the machine and around the drum unit and toner cartridges.</li> </ul>

Examples of poor print quality	Recommendation
<p data-bbox="188 170 762 203">Vertical white streaks or bands appear on the page</p>  <p data-bbox="169 528 782 562">Vertical coloured streaks or bands appear on the page</p>	<ul data-bbox="818 219 1442 338" style="list-style-type: none"> <li>• Clean all four corona wires (one for each colour) inside the drum unit by sliding the green tab. Make sure the green tab of the corona wire is in the home position (1).</li> </ul>  <ul data-bbox="818 685 1469 965" style="list-style-type: none"> <li>• Replace the toner cartridge that matches the colour of the streak or band. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> and view the <b>FAQs &amp; Troubleshooting</b> page for your model. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="220 1252 730 1285">Horizontal coloured lines appear on the page</p>	<ul data-bbox="818 987 1465 1267" style="list-style-type: none"> <li>• Identify the colour causing the problem and replace the toner cartridge that matches the colour of the line. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="408 1574 547 1608">White spots</p>	<ul data-bbox="818 1301 1469 1704" style="list-style-type: none"> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Check the machine's environment. Conditions such as high humidity and high temperatures may cause this print quality problem.</li> <li>• If the problem is not solved after printing a few pages, the drum may have foreign material, such as glue from a label, stuck on the drum surface. Clean the drum unit. <i>See Related Information: Clean the Drum Unit.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="268 2000 683 2033">Blank page or some missing colours</p>	<ul data-bbox="818 1727 1465 2007" style="list-style-type: none"> <li>• Identify the colour causing the problem and install a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>

Examples of poor print quality	Recommendation
 <p>3.7 in. (94 mm)</p> <p>3.7 in. (94 mm)</p> <p>Coloured spots at 94 mm</p>	<ul style="list-style-type: none"> <li>If the problem is not solved after printing a few pages, the drum may have foreign material, such as glue from a label, stuck on the drum surface. Clean the drum unit. <i>See Related Information: Clean the Drum Unit.</i></li> <li>Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p>1.1 in. (29 mm)</p> <p>1.1 in. (29 mm)</p> <p>Coloured spots at 29 mm</p>	<p>Identify the colour causing the problem and install a new toner cartridge.</p> <p>To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></p>
 <p>Toner scatter or toner stain</p>	<ul style="list-style-type: none"> <li>Check the machine's environment. Conditions such as high humidity and high temperatures may cause this print quality problem.</li> <li>Identify the colour causing the problem and put in a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
<p>The colour of your printouts is not what you expected</p>	<ul style="list-style-type: none"> <li>To improve the colour density, perform the colour correction using the LCD.</li> <li>To adjust the print position of colours for sharper edges, perform the colour correction using the LCD.</li> <li>Make sure Toner Save mode is off on the LCD or in the printer driver.</li> <li>If the print quality of the black portion is not what you expected, select the <b>Enhance Black Printing</b> checkbox in the printer driver.</li> <li>Clear the <b>Improve Grey Colour</b> checkbox in the printer driver.</li> <li>Identify the colour causing the problem and put in a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>

Examples of poor print quality	Recommendation
 <p data-bbox="400 439 555 465">Colour offset</p>	<ul data-bbox="818 170 1422 398" style="list-style-type: none"> <li>• Make sure the machine is on a solid level surface.</li> <li>• Perform the colour correction using the LCD.</li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> <li>• Install a new belt unit. <i>See Related Information: Replace the Belt Unit.</i></li> </ul>
 <p data-bbox="252 752 699 779">Uneven colour density across the page</p>	<ul data-bbox="818 483 1437 869" style="list-style-type: none"> <li>• Perform the colour correction using the LCD.</li> <li>• Clear the <b>Improve Grey Colour</b> checkbox in the printer driver.</li> <li>• Identify the colour causing the problem and put in a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com">support.brother.com</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="320 1144 632 1171">Missing thin lines in images</p>	<ul data-bbox="818 887 1437 1055" style="list-style-type: none"> <li>• Make sure Toner Save mode is off on the LCD or in the printer driver.</li> <li>• Change the print resolution.</li> <li>• If you use a Windows printer driver, select <b>Improve Pattern Printing</b> in Print Setting of the <b>Basic</b> tab.</li> </ul>
 <p data-bbox="379 1458 571 1485">Wrinkled printout</p>	<ul data-bbox="818 1189 1453 1335" style="list-style-type: none"> <li>• Check the paper type and quality.</li> <li>• Make sure the back cover is closed correctly.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> </ul>
 <p data-bbox="379 1783 571 1809">Ghosting images</p>	<ul data-bbox="818 1503 1469 1742" style="list-style-type: none"> <li>• Check the machine's environment. Conditions such as low humidity and low temperatures may cause this print quality problem.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
	<ul data-bbox="818 1816 1453 2085" style="list-style-type: none"> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Select <b>Improve Toner Fixing</b> mode in the printer driver. If this selection does not provide enough improvement, change the printer driver setting in <b>Media Type</b> to a thick setting. If you are printing an envelope, select <b>Env. Thick</b> in the media type setting.</li> </ul>

Examples of poor print quality	Recommendation
<p data-bbox="363 170 587 197" style="text-align: center;">Toner smears easily</p> <div data-bbox="268 215 687 483" style="text-align: center;">  </div> <p data-bbox="352 488 598 515" style="text-align: center;">Curled or wavy image</p>	<ul style="list-style-type: none"> <li data-bbox="820 215 1461 315">• Select <b>Reduce Paper Curl</b> mode in the printer driver. If the problem is not solved, select <b>Plain Paper</b> in the media type setting.</li> <li data-bbox="820 327 1469 383">• If you are printing an envelope, select <b>Env. Thin</b> in the Media Type Setting of the printer driver.</li> <li data-bbox="820 394 1465 517">• If you do not use the machine often, the paper may have been in the paper tray too long. Turn over the stack of paper in the paper tray. Also, fan the paper stack and then rotate the paper 180° in the paper tray.</li> <li data-bbox="820 528 1437 584">• Store the paper where it will not be exposed to high temperatures and high humidity.</li> <li data-bbox="820 595 1442 651">• Open the back cover (Face up output tray) to let the printed paper exit onto the Face up output tray.</li> </ul>



### Related Information

- [Troubleshooting](#)

#### Related Topics:

- [Correct the Colour Printing](#)
- [Test Print](#)
- [Replace the Toner Cartridge](#)
- [Reduce Toner Consumption](#)
- [Replace the Drum Unit](#)
- [Replace the Belt Unit](#)
- [Clean the Drum Unit](#)
- [Clean the Laser Scanner Windows](#)

## Network Problems

- [Error Messages](#)
- [Use the Network Connection Repair Tool \(Windows\)](#)
- [Check Your Machine's Network Settings](#)
- [If You Are Having Difficulty with Your Machine's Network](#)

## Error Messages

The most common error messages are shown in the table.

Error Messages	Cause	Action
The maximum number of devices are already connected using Wi-Fi Direct. Press [OK].	Four mobile devices are already connected to the Wi-Fi Direct network when the Brother machine is the Group Owner.	After the current connection between your Brother machine and another mobile device has shut down, try to configure the Wi-Fi Direct settings again. You can confirm the connection status by printing the Network Configuration Report. <i>See Related Information: Print the Network Configuration Report.</i>
Authentication error, contact your administrator.	Your authentication setting for the Store Print Log to Network feature is not correct.	<ul style="list-style-type: none"> <li>Make sure the <b>Username</b> and <b>Password</b> in <b>Authentication Setting</b> are correct. If the username is part of a domain, enter the username in one of the following styles: user@domain or domain\user.</li> <li>Make sure the SNTP time server settings are configured correctly so the time matches the time used for authentication by Kerberos or NTLMv2.</li> </ul>
Check User ID and Password.	The Kerberos Authentication error.	Make sure you have entered a correct user name and a password for the Kerberos server. For more information on the Kerberos server settings, contact your network administrator.
	The DNS server configuration is not correct.	Contact your network administrator for the information on the DNS server settings.
	The Brother machine cannot connect to the Kerberos server.	Contact your network administrator for the information on the Kerberos server settings.
Connection Error	Other devices are trying to connect to the Wi-Fi Direct network at the same time.	Make sure there are no other devices trying to connect to the Wi-Fi Direct network, and then try to configure the Wi-Fi Direct settings again.
Connection Failed	The Brother machine and your mobile device cannot communicate during the Wi-Fi Direct network configuration.	<ul style="list-style-type: none"> <li>Move the mobile device closer to your Brother machine.</li> <li>Move your Brother machine and the mobile device to an obstruction-free area.</li> </ul>
File access error, contact your administrator.	The Brother machine cannot access the destination folder for the Store Print Log to Network feature.	<ul style="list-style-type: none"> <li>Make sure the stored directory name is correct.</li> <li>Make sure the stored directory is write-enabled.</li> <li>Make sure the file is not locked.</li> </ul>
Log Access Error	In Web Based Management, you have selected the <b>Cancel Print</b> option in the <b>Error Detection Setting of Store Print Log to Network</b> .	Wait for about 60 seconds until this message disappears from the LCD.
No Device	When configuring the Wi-Fi Direct network, the Brother machine cannot find your mobile device.	<ul style="list-style-type: none"> <li>Make sure your machine and mobile device are in the Wi-Fi Direct mode.</li> <li>Move the mobile device closer to your Brother machine.</li> <li>Move your Brother machine and the mobile device to an obstruction-free area.</li> <li>If you are manually configuring the Wi-Fi Direct network, make sure you have entered the correct password.</li> <li>If your mobile device has a configuration page for how to obtain an IP address, make sure the IP address of your mobile device has been configured via DHCP.</li> </ul>

Error Messages	Cause	Action
Server timeout, contact your administrator.	The Brother machine cannot connect to the server for the Store Print Log to Network feature.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
Server Timeout	The Brother machine cannot connect to the LDAP server.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
	The Brother machine cannot connect to the Active Directory server.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
Wrong Date & Time, contact your administrator.	The Brother machine does not obtain the time from the SNTP time server.	Make sure the settings to access the SNTP time server are configured correctly in Web Based Management.
Internal Error	The Brother machine's LDAP protocol is disabled.	Confirm your authentication method, and then enable the necessary protocol setting in the Web Based Management.
	The Brother machine's CIFS protocol is disabled.	



## Related Information

- [Network Problems](#)

### Related Topics:


- [Print the Network Configuration Report](#)



## Use the Network Connection Repair Tool (Windows)

Use the Network Connection Repair Tool to fix the Brother machine's network settings. It will assign the correct IP address and Subnet Mask.

Make sure your machine is turned on and is connected to the same network as your computer.

1. Launch  (**Brother Utilities**), and then click the drop-down list and select your model name (if not already selected).
2. Click **Tools** in the left navigation bar, and then click **Network Connection Repair Tool**.
3. Follow the on-screen instructions.
4. Check the diagnosis by printing the Network Configuration Report or the Printer Settings page.



The Network Connection Repair Tool will start automatically if you select the **Enable Connection Repair Tool** option in the Status Monitor. Right-click the Status Monitor screen, and then click **Other Settings > Enable Connection Repair Tool**. This is not recommended when your network administrator has set the IP address to Static, since it will automatically change the IP address.

If the correct IP address and the Subnet Mask are still not assigned even after using the Network Connection Repair Tool, ask your network administrator for this information.



### Related Information

- [Network Problems](#)

#### Related Topics:

- [Print the Network Configuration Report](#)
- [My Machine Cannot Print over the Network](#)
- [I Want to Check that My Network Devices are Working Correctly](#)

## Check Your Machine's Network Settings

- [Print the Network Configuration Report](#)
- [Change Machine Settings from Your Computer](#)

## If You Are Having Difficulty with Your Machine's Network

If you think there is a problem with your machine's network environment, check the following topics. You can correct most problems yourself.

If you need additional help, visit [support.brother.com](http://support.brother.com) and click the **FAQs & Troubleshooting** page.

- [I Cannot Complete the Wireless Network Setup Configuration](#)
- [My Machine Cannot Print over the Network](#)
- [I Want to Check that My Network Devices are Working Correctly](#)

## I Cannot Complete the Wireless Network Setup Configuration

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Turn your wireless router off and back on. Then, try to configure the wireless settings again. If you are unable to resolve the problem, follow the instructions below:

Investigate the problem using the WLAN Report.

Cause	Action	Interface
Your security settings (SSID/ Network Key) are not correct.	<p>Confirm the security settings using <b>Wireless Setup Helper</b> (Windows). For more information and to download the utility, go to your model's <b>Downloads</b> page at <a href="http://support.brother.com">support.brother.com</a>.</p> <p>Select and confirm that you are using the correct security settings.</p> <ul style="list-style-type: none"> <li>- See the instructions supplied with your wireless LAN access point/router for information on how to find the security settings.</li> <li>- The manufacturer's name or model number of the wireless LAN access point/router may be used as the default security settings.</li> <li>- Consult with the access point/router manufacturer, your Internet provider, or network administrator.</li> </ul>	Wireless
Your Brother machine's MAC address is not allowed.	<p>Confirm that the Brother machine's MAC Address is allowed in the filter.</p> <p>You can find the MAC Address on your Brother machine's control panel.</p>	Wireless
Your wireless LAN access point/router is in stealth mode (not broadcasting the SSID).	<ul style="list-style-type: none"> <li>• Enter the correct SSID or Network Key manually.</li> <li>• Check the SSID or the Network Key in the instructions supplied with your wireless LAN access point/router and reconfigure the wireless network setup.</li> </ul>	Wireless
Your security settings (SSID/ password) are not correct.	<p>Confirm the SSID and password.</p> <p>When you are configuring the network manually, the SSID and password are displayed on your Brother machine. If your mobile device supports the manual configuration, the SSID and password will be displayed on your mobile device's screen.</p>	Wi-Fi Direct
You are using Android™ 4.0.	<p>If your mobile device disconnects (approximately six minutes after using Wi-Fi Direct), try the one-push configuration using WPS (recommended) and set the Brother machine as a Group Owner.</p>	Wi-Fi Direct
Your Brother machine is placed too far from your mobile device.	<p>Move your Brother machine within about 3.3 feet (1 metre) of the mobile device when you configure the Wi-Fi Direct network settings.</p>	Wi-Fi Direct
There are some obstructions (walls or furniture, for example) between your machine and the mobile device.	<p>Move your Brother machine to an obstruction-free area.</p>	Wi-Fi Direct
There is a wireless computer, Bluetooth®-supported device, microwave oven, or digital cordless phone near the Brother machine or the mobile device.	<p>Move other devices away from the Brother machine or the mobile device.</p>	Wi-Fi Direct

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Cause	Action	Interface
You have checked and tried all of the above, but your Brother machine still cannot complete the Wi-Fi Direct configuration.	<ul style="list-style-type: none"><li>• Turn your Brother machine off and back on. Then, try to configure the Wi-Fi Direct settings again.</li><li>• If you are using your Brother machine as a client, confirm how many devices are allowed in the current Wi-Fi Direct network, and then check how many devices are connected.</li></ul>	Wi-Fi Direct

#### For Windows

If your wireless connection has been interrupted, and you have checked and tried all of the above, we recommend using the Network Connection Repair Tool.



#### Related Information

- [If You Are Having Difficulty with Your Machine's Network](#)



#### Related Topics:

- [Configure Your Machine for a Wireless Network When the SSID Is Not Broadcast](#)
-

## My Machine Cannot Print over the Network

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Cause	Action	Interface
Your security software blocks your machine's access to the network.	Some security software might block access without showing a security alert dialog box even after successful installation. To allow access, see the instructions for your security software or ask the software manufacturer.	Wired/Wireless
Your Brother machine was not assigned an available IP address.	<ul style="list-style-type: none"> <li>Confirm the IP address and the Subnet Mask. Verify that both the IP addresses and Subnet Masks of your computer and the Brother machine are correct and located on the same network. For more information about how to verify the IP address and the Subnet Mask, ask your network administrator.</li> <li>Windows Confirm the IP address and the Subnet Mask using the Network Connection Repair Tool.</li> </ul>	Wired/Wireless
The failed print job is still in your computer's print queue.	<ul style="list-style-type: none"> <li>If the failed print job is still in your computer's print queue, delete it.</li> <li>Otherwise, double-click the printer icon in the following folder and cancel all documents: <ul style="list-style-type: none"> <li>Windows 10, Windows Server 2016, and Windows Server 2019 Click  &gt; <b>Windows System</b> &gt; <b>Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>Windows 8.1 Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings</b> &gt; <b>Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>Windows Server 2012 R2 Click <b>Control Panel</b> on the <b>Start</b> screen. In the <b>Hardware</b> group, click <b>View devices and printers</b>.</li> <li>Windows Server 2012 Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings</b> &gt; <b>Control Panel</b>. In the <b>Hardware</b> group, click <b>View devices and printers</b> &gt; <b>Printers</b>.</li> <li>Windows 7 Click  (<b>Start</b>) &gt; <b>Devices and Printers</b>.</li> <li>Windows Server 2008 Click <b>Start</b> &gt; <b>Control Panel</b> &gt; <b>Printers</b>.</li> <li>Mac Click <b>System Preferences</b> &gt; <b>Printers &amp; Scanners</b>.</li> </ul> </li> </ul>	Wired/Wireless
Your machine is not connected to the wireless network.	Print the WLAN Report to check the error code on the printed report. See <i>Related Information: Print the WLAN Report</i> .	Wireless

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If you have checked and tried all of the above, but your machine still cannot print, uninstall the driver (Windows) and reinstall it.



## Related Information

- [If You Are Having Difficulty with Your Machine's Network](#)

### Related Topics:

- [Print the WLAN Report](#)
  - [Wireless LAN Report Error Codes](#)
  - [Use the Network Connection Repair Tool \(Windows\)](#)
  - [I Want to Check that My Network Devices are Working Correctly](#)
-

## I Want to Check that My Network Devices are Working Correctly

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Check	Action	Interface
Check that your Brother machine, access point/router, or network hub is turned on.	<b>Check the following:</b> <ul style="list-style-type: none"> <li>The power cord is connected correctly and the Brother machine is turned on.</li> <li>The access point/router or hub is turned on and its link LED is blinking.</li> <li>All protective packaging has been removed from the machine.</li> <li>The toner cartridge and drum unit are installed correctly.</li> <li>The machine's cover is fully closed.</li> <li>Paper is inserted correctly in the paper tray.</li> <li>(For wired networks) A network cable is securely connected to the Brother machine and to the router or hub.</li> </ul>	Wired/Wireless
Check the <b>Link Status</b> in the Network Configuration Report or the Printer Settings page.	Print the Network Configuration Report and check that <b>Ethernet Link Status</b> or <b>Wireless Link Status</b> is <b>Link OK</b> .	Wired/Wireless
Check that you can "ping" the Brother machine from your computer.	Ping the Brother machine from your computer using the IP address or the node name in the Windows command prompt or Mac Terminal application: ping <ipaddress> or <nodename>. <ul style="list-style-type: none"> <li>Successful: Your Brother machine is working correctly and connected to the same network as your computer.</li> <li>Unsuccessful: Your Brother machine is not connected to the same network as your computer.</li> </ul> Windows: Ask your administrator about the IP address and the subnet mask, and then use the Network Connection Repair Tool. Mac: Confirm that the IP address and the Subnet Mask are set correctly.	Wired/Wireless
Check that your Brother machine is connected to the wireless network.	Print the WLAN Report to check the error code on the printed report. <i>See Related Information: Print the WLAN Report.</i>	Wireless

If you have checked and tried all of the above but you are still having problems, see the instructions supplied with your wireless access point/router to find the SSID (Network Name) and the Network Key (Password) information and set them correctly.

### ✓ Related Information

- [If You Are Having Difficulty with Your Machine's Network](#)

#### Related Topics:

- [Print the Network Configuration Report](#)
- [Print the WLAN Report](#)
- [Wireless LAN Report Error Codes](#)



- 
- Use the Network Connection Repair Tool (Windows)
  - My Machine Cannot Print over the Network
-

## AirPrint Problems

### NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

Difficulty	Suggestions
My machine is not displayed in the printer list.	Make sure your machine is turned on.
	Make sure your machine and your mobile device or Mac are connected to the same network.
	Move the mobile device closer to the wireless access point/router, or to your machine.
I cannot print.	Make sure your machine is turned on.
	Make sure your machine and your mobile device or Mac are connected to the same network.
I am trying to print a multiple-page document from an iOS device, but ONLY the first page is printing.	Make sure you are running the latest OS version.







### Related Information

- [Troubleshooting](#)

#### Related Topics:

- [AirPrint Overview](#)

## Other Problems

Difficulties	Suggestions
<p>The machine will not turn on.</p>	<p>Adverse conditions on the power connection (such as lightning or a power surge) may have triggered the machine's internal safety mechanisms. Unplug the power cord. Wait for ten minutes, then plug in the power cord and press  to turn on the machine.</p> <p>If the problem is not solved and you are using a power breaker, disconnect it to make sure it is not the problem. Plug the machine's power cord directly into a different known working wall electrical socket. If there is still no power, try a different power cable.</p>
<p>The machine cannot print EPS data that includes binary with the BR-Script3 printer driver.</p>	<p><b>(Windows)</b></p> <p>To print EPS data, do the following:</p> <ol style="list-style-type: none"> <li>For Windows 10, Windows Server 2016 and Windows Server 2019: Click  &gt; <b>Windows System</b> &gt; <b>Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>For Windows 8.1 and Windows Server 2012: Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings</b> &gt; <b>Control Panel</b>. In the <b>Hardware and Sound</b><sup>1</sup> group, click <b>View devices and printers</b>.</li> <li>For Windows Server 2012 R2: Click <b>Control Panel</b> on the <b>Start</b> screen. In the <b>Hardware</b> group, click <b>View devices and printers</b>.</li> <li>For Windows 7 and Windows Server 2008 R2: Click the  <b>Start</b> button &gt; <b>Devices and Printers</b>.</li> <li>For Windows Server 2008: Click the  (<b>Start</b>) button &gt; <b>Control Panel</b> &gt; <b>Hardware and Sound</b> &gt; <b>Printers</b>.</li> </ol> <ol style="list-style-type: none"> <li>Right-click the <b>Brother XXX-XXXX BR-Script3</b> icon, select <b>Printer properties</b>.</li> <li>From the <b>Device Settings</b> tab, choose TBCP (Tagged binary communication protocol) in <b>Output Protocol</b>.</li> </ol>
<p>The Brother software cannot be installed.</p>	<p><b>(Windows)</b></p> <p>If the Security Software warning appears on the computer screen during the installation, change the Security Software settings to permit the Brother product setup program or other program to run.</p> <p><b>(Mac)</b></p> <p>If you are using a firewall function of anti-spyware or antivirus security software, temporarily disable it and then install the Brother software.</p>


<sup>1</sup> For Windows Server 2012: **Hardware and Sound**

### Related Information

- [Troubleshooting](#)

## Check the Machine Information

Follow these instructions to check your machine's serial number and firmware version.

1. Press  [Settings] > [All Settings] > [Machine Information].
2. Press one of the following options:

Option	Description
Serial No.	Check your machine's serial number.
Firmware Version	Check your machine's firmware version.
Firmware Update	Update your machine to the latest firmware.
Firmware Auto Check	View firmware information on the Home screen.
Page Counter	Check the total number of pages the machine has printed.
Parts Life	Check the percentage of the supplies' life that remains available.

3. Press .

### Related Information

- [Troubleshooting](#)


## Reset Functions

- [Machine Reset](#)
- [Network Reset](#)
- [Factory Reset](#)

## Machine Reset

Use the Machine Reset function to reset the machine's settings to the factory settings.

The network settings and the security settings will not be reset by the Machine Reset function.

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset] > [Machine Reset].
2. You will be asked to reboot the machine. Press the option in the table to reboot the machine or to exit the process.

Option	Description
Press <b>Yes</b> for 2 seconds	Reboot the machine. The machine will begin the reset.
No	The machine will exit without rebooting.



If you do not reboot your machine, the reset process will not finish and your settings will remain unchanged.




### Related Information

- [Reset Functions](#)

## Network Reset

Use the Network Reset function to restore the machine's network settings, such as password and IP address, back to the factory settings.

Unplug all the interface cables before you perform a Network Reset.

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset] > [Network Reset].
2. You will be asked to reboot the machine. Press the option in the table to reboot the machine or to exit the process.

Option	Description
Press <b>Yes</b> for 2 seconds	Reboot the machine. The machine will begin the reset.
No	The machine will exit without rebooting.



If you do not reboot your machine, the reset process will not finish and your settings will remain unchanged.




### Related Information

- [Reset Functions](#)

## Factory Reset

Use the Factory Reset function to restore all settings back to the factory settings.

Unplug all the interface cables before you perform a Factory Reset.

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset] > [Factory Reset].
2. You will be asked to reboot the machine. Press the option in the table to reboot the machine or to exit the process.

Option	Description
Press <b>Yes</b> for 2 seconds	Reboot the machine. The machine will begin the reset.
No	The machine will exit without rebooting.



If you do not reboot your machine, the reset process will not finish and your settings will remain unchanged.



### Related Information

- [Reset Functions](#)



## **Routine Maintenance**

- [Replace Supplies](#)
- [Clean the Machine](#)
- [Correct the Colour Printing](#)
- [Check the Remaining Part Life](#)
- [Pack and Ship Your Machine](#)
- [Replace Periodic Maintenance Parts](#)

## Replace Supplies

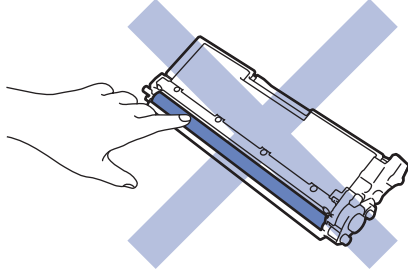
You must replace supplies when the machine indicates that the life of the supply is over.

Using non-Brother supplies may affect the print quality, hardware performance, machine reliability, and may void the machine's warranty. The toner cartridge and drum unit are two separate supplies. Make sure both are installed as an assembly. The model name of supplies may vary depending on the country.

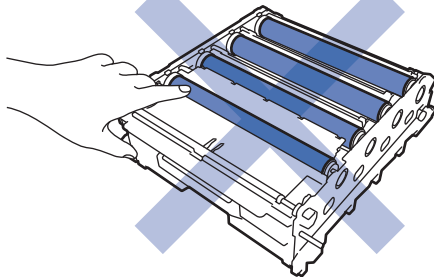
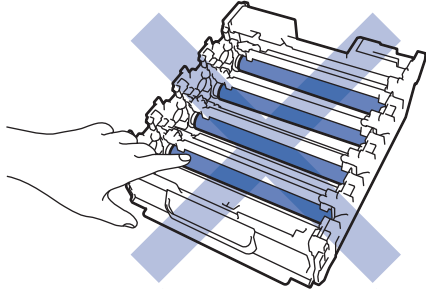
### IMPORTANT

To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.

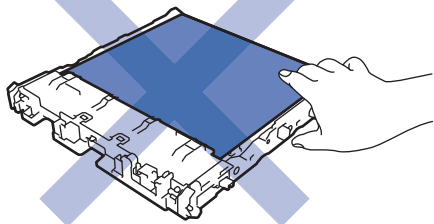
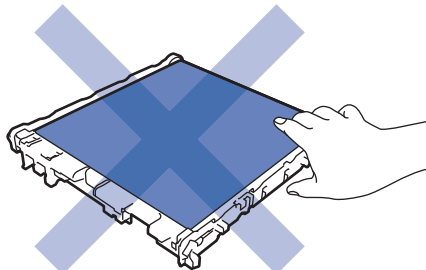
#### Toner Cartridge



#### Drum Unit

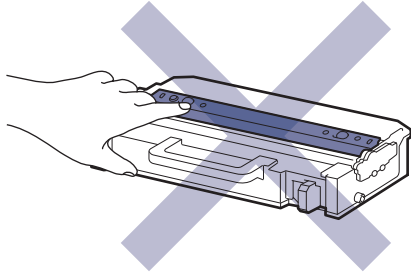


#### Belt Unit



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## Waste Toner Box



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## NOTE

- Be sure to seal the used supplies tightly in a bag so that toner powder does not spill out of the cartridge.
- Discard used consumable items according to local regulations, keeping it separate from domestic waste. If you have questions, call your local waste disposal office. Be sure to reseal the consumable items tightly so that the material inside does not spill.
- We recommend placing both the new and the used supplies on a piece of paper to prevent accidentally spilling or scattering the contents.
- Using paper that is not a direct equivalent for a recommended print media, may reduce the life of supplies and machine parts.
- The projected life for each of the toner cartridges is based on ISO/IEC 19798. Frequency of replacement will vary depending on the print volume, percentage of coverage, types of media used, and powering on/off the machine.
- Frequency of replacing supplies except toner cartridges will vary depending on the print volume, types of media used, and powering on/off the machine.
- Handle the toner cartridge carefully. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.



DO NOT touch the IC chip surface of the toner cartridge and the belt unit. Contamination and damage may interfere with the detection of each unit.

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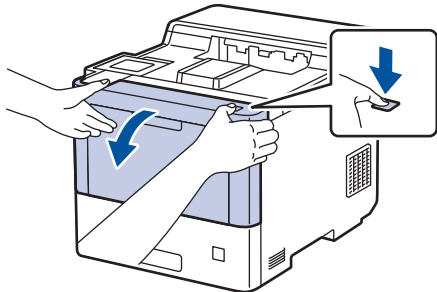
## Related Information

- [Routine Maintenance](#)
    - [Replace the Toner Cartridge](#)
    - [Replace the Drum Unit](#)
    - [Replace the Belt Unit](#)
    - [Replace the Waste Toner Box](#)
-

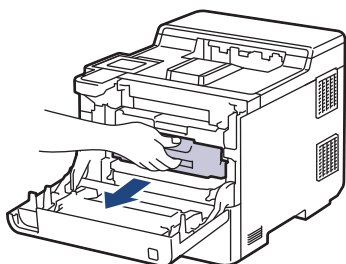
## Replace the Toner Cartridge

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

1. Make sure the machine is turned on.
2. Press the front cover release button and open the front cover.



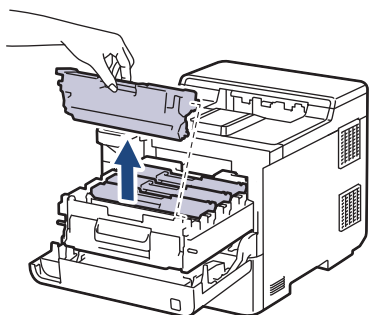
3. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



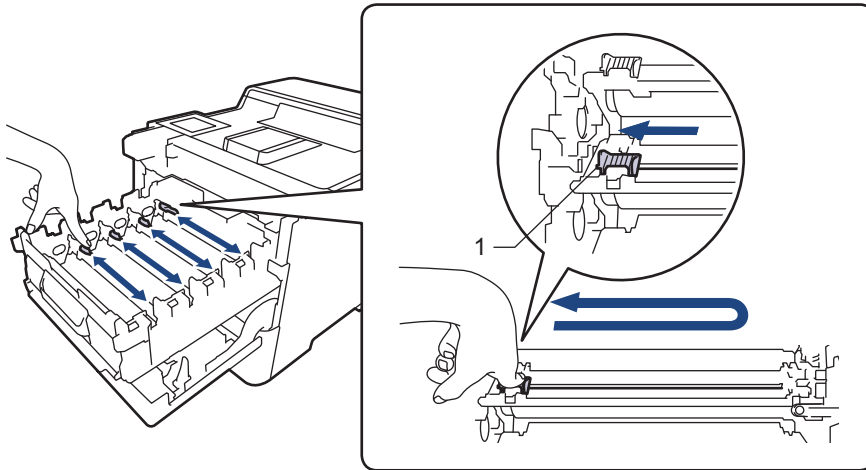
### CAUTION

We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

4. Hold the handle of the toner cartridge and pull the toner cartridge up and out of the drum unit. Repeat this for all toner cartridges.

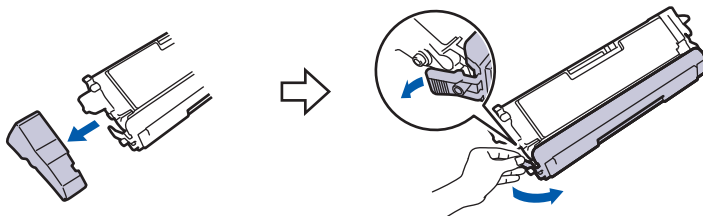


5. Clean the corona wire inside the drum unit by gently sliding the green tab from left to right and right to left several times. Repeat this for all the corona wires.

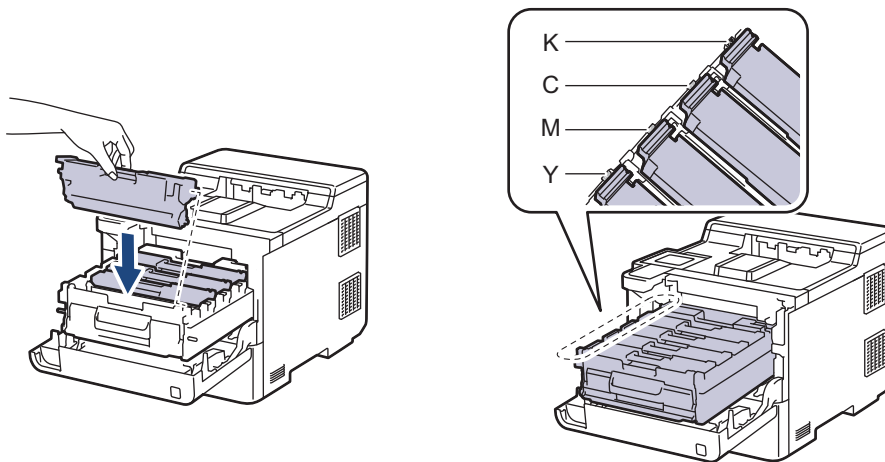


To avoid poor print quality, be sure to lock the green tab into the home position (1), flush left with the left side of the drum.

6. Unpack the new toner cartridge.  
7. Remove the protective materials.



8. Insert the toner cartridge into the drum unit. Make sure that you match the toner cartridge colour to the same colour label on the drum unit. Repeat this for all toner cartridges.



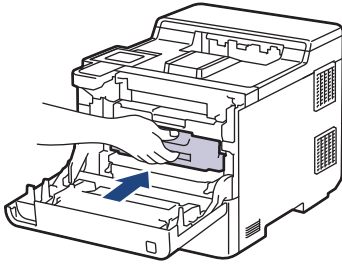
- K: Black
- C: Cyan
- M: Magenta
- Y: Yellow



Make sure you put the toner cartridge in correctly or it may separate from the drum unit.

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9. Using the green labeled handle, push the drum unit back into the machine until it locks in place.



10. Close the machine's front cover.



- After replacing a toner cartridge, DO NOT turn the machine off or open the front cover until the machine's display returns to Ready Mode.
- The toner cartridge that comes with your Brother machine is an Inbox toner cartridge.
- We recommend keeping a new toner cartridge ready for use when you see the Toner Low warning.
- To ensure high quality printing, we recommend using only Brother Original toner cartridges. When you want to buy toner cartridges, contact Brother customer service or your local Brother dealer.
- DO NOT unpack the new toner cartridge until you are ready to install it.
- If a toner cartridge is left unpacked for a long time, the toner life will be shortened.
- We strongly recommend you DO NOT refill the toner cartridge provided with your machine. We also strongly recommend you continue to use only Brother Original replacement toner cartridges. Use or attempted use of third-party toner and/or cartridges in the Brother machine may cause damage to the machine and/or may result in unsatisfactory print quality. Our limited warranty coverage does not apply to any problem that is caused by the use of third party toner and/or cartridges. To protect your investment and obtain premium performance from your machine, we strongly recommend the use of Brother Original Supplies.



## Related Information

- [Replace Supplies](#)

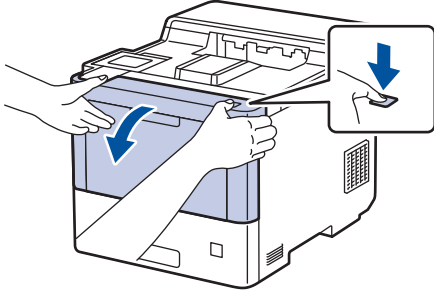
### Related Topics:

- [Improve the Print Quality](#)
  - [Error and Maintenance Messages](#)
-

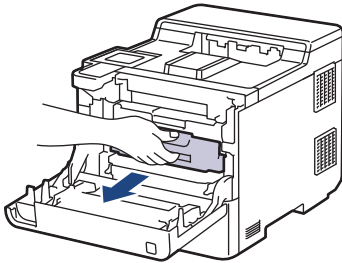
## Replace the Drum Unit

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

1. Make sure the machine is turned on.
2. Press the front cover release button and open the front cover.



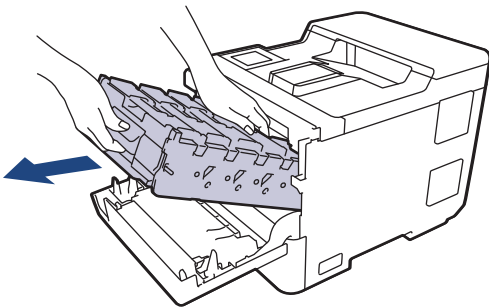
3. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



### CAUTION

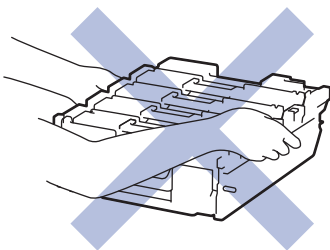
We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

4. Holding the green labeled handles of the drum unit, lift the front of the drum unit and remove it from the machine.



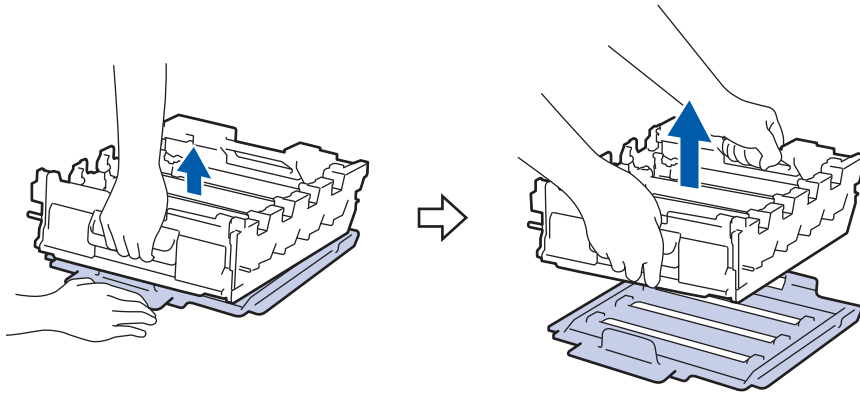
### IMPORTANT

Hold the handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.

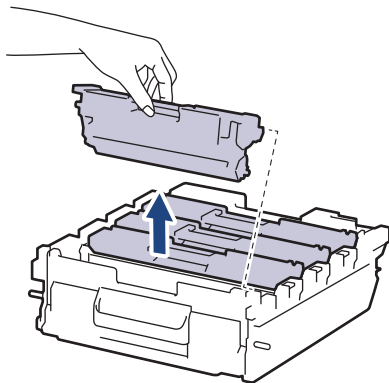


5. Unpack the new drum unit.

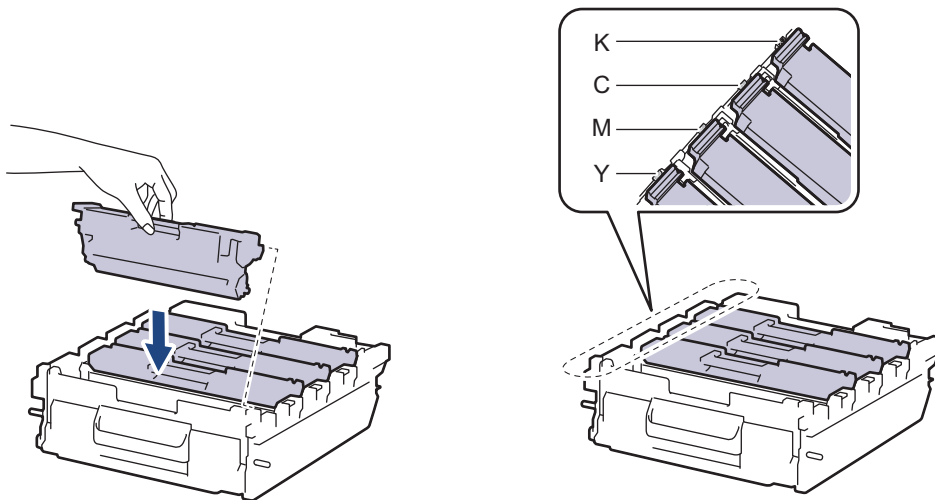
6. Remove the protective cover.



7. Hold the handle of the toner cartridge and pull the toner cartridge up and out of the drum unit. Repeat this for all toner cartridges.



8. Reinsert the toner cartridge into the new drum unit. Make sure that you match the toner cartridge colour to the same colour label on the drum unit. Repeat this for all toner cartridges.



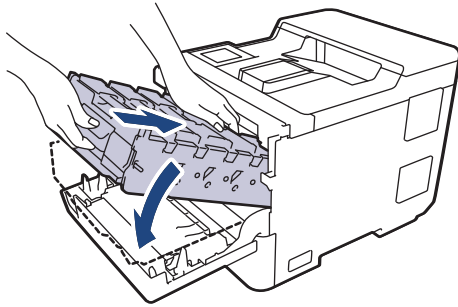
- K: Black
- C: Cyan
- M: Magenta
- Y: Yellow



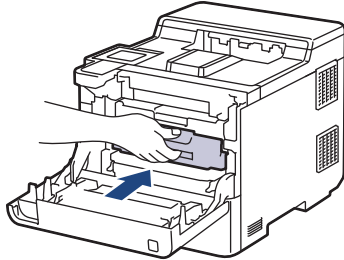
Make sure you put the toner cartridge in correctly or it may separate from the drum unit.



9. Gently slide the drum unit into the machine until it stops.



10. Using the green labeled handle, push the drum unit back into the machine until it locks in place.



11. Close the machine's front cover.

## NOTE

- Drum wear and tear occurs due to use and rotation of the drum and interaction with paper, toner, and other materials in the paper path. In designing this product, Brother decided to use the number of rotations of the drum as a reasonable determinant of the drum life. When a drum reaches the factory-established rotation limit corresponding to the rated page yield, the product's LCD will advise you to replace the drum. The product will continue to function; however, print quality may not be optimal.
- If an unpacked drum unit is placed in direct sunlight (or artificial light for long periods of time), the unit may be damaged.
- There are many factors that determine the actual drum life, such as the temperature, humidity, type of paper, type of toner used and so on. Under ideal conditions, the average drum life is estimated at approximately 100,000 pages based on three pages per job (A4/letter single-sided pages). The number of pages may be affected due to a variety of factors including but not limited to media type and media size.

Because we have no control over the many factors that determine the actual drum life, we cannot guarantee a minimum number of pages that will be printed by your drum.

- For best performance, use only Brother Original toner.
- The machine should be used only in a clean, dust-free environment with adequate ventilation.

Printing with a non-Brother drum unit may reduce not only the print quality but also the quality and life of the machine itself. Warranty coverage does not apply to problems caused by the use of a non-Brother drum unit.

## ✓ Related Information

- [Replace Supplies](#)

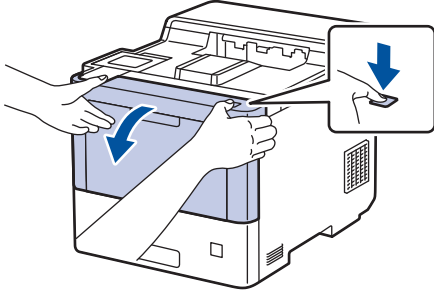
### Related Topics:

- [Improve the Print Quality](#)
- [Error and Maintenance Messages](#)

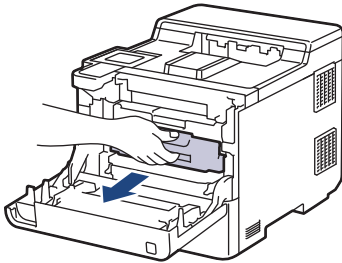
## Replace the Belt Unit

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

1. Make sure the machine is turned on.
2. Press the front cover release button and open the front cover.



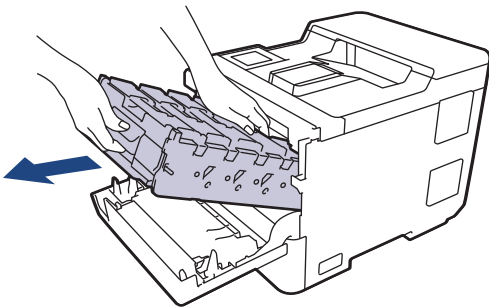
3. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



### CAUTION

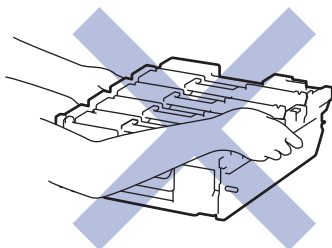
We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

4. Holding the green labeled handles of the drum unit, lift the front of the drum unit and remove it from the machine.

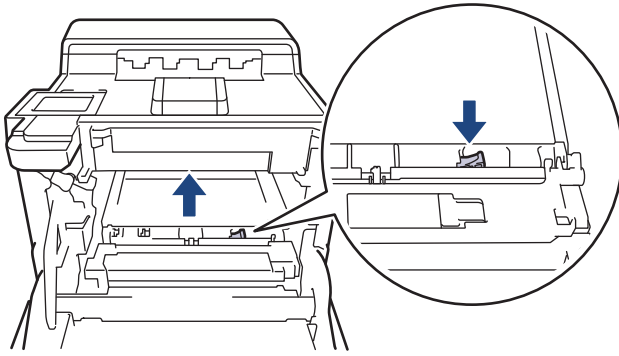


### IMPORTANT

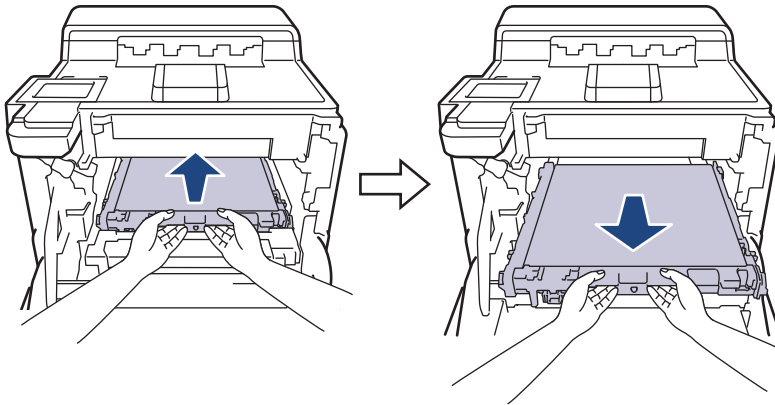
Hold the handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



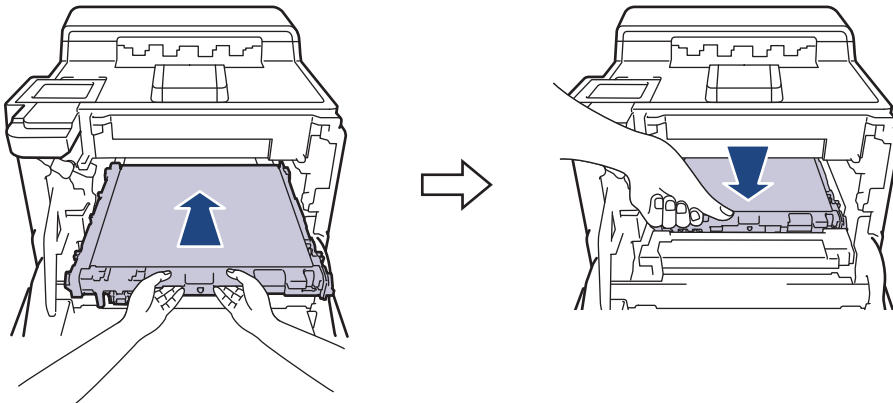
5. Push down the belt unit release lever to lift the belt unit up.



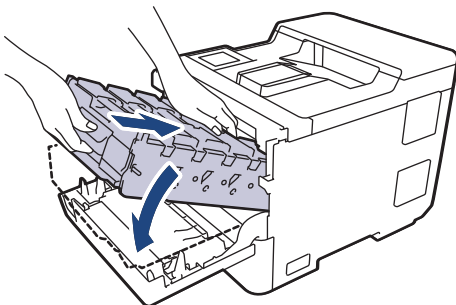
6. Hold the handle of the belt unit with both hands and lift the belt unit up, then pull it out.



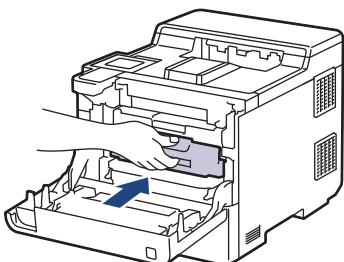
7. Unpack the new belt unit and install it in the machine. Make sure the belt unit is level and fits firmly into place until the belt unit release lever is secured.



8. Gently slide the drum unit into the machine until it stops.



9. Using the green labeled handle, push the drum unit back into the machine until it locks in place.



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10. Close the machine's front cover.



### **Related Information**

- [Replace Supplies](#)

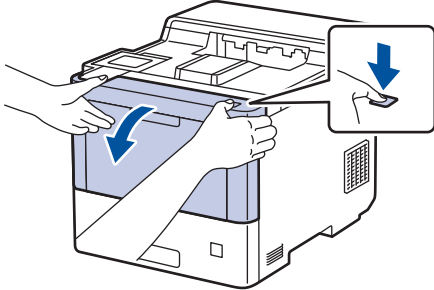
#### **Related Topics:**

- [Improve the Print Quality](#)
  - [Error and Maintenance Messages](#)
-

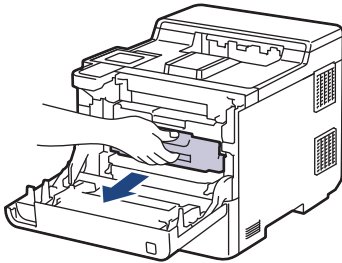
## Replace the Waste Toner Box

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

1. Make sure the machine is turned on.
2. Press the front cover release button and open the front cover.



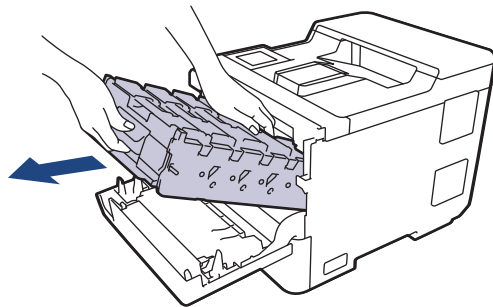
3. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



### CAUTION

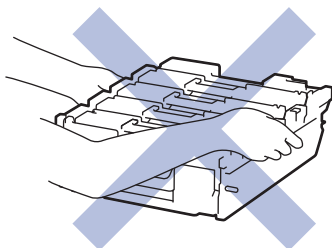
We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

4. Holding the green labeled handles of the drum unit, lift the front of the drum unit and remove it from the machine.

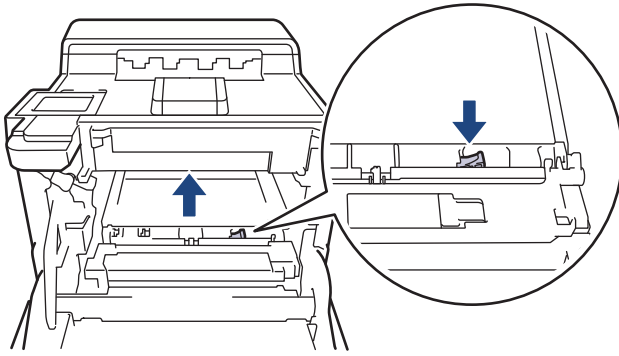


### IMPORTANT

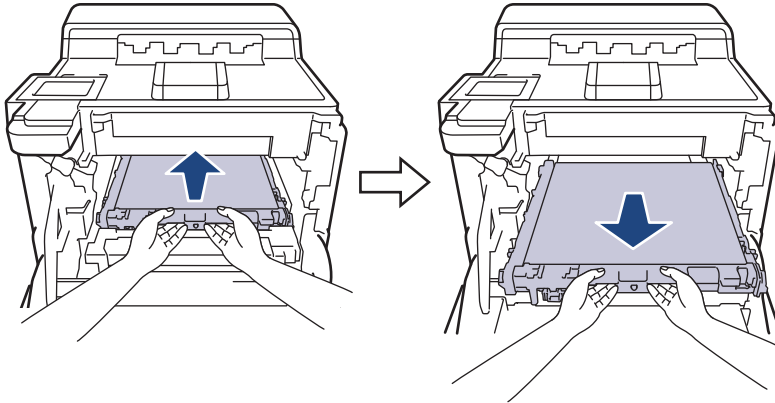
Hold the handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



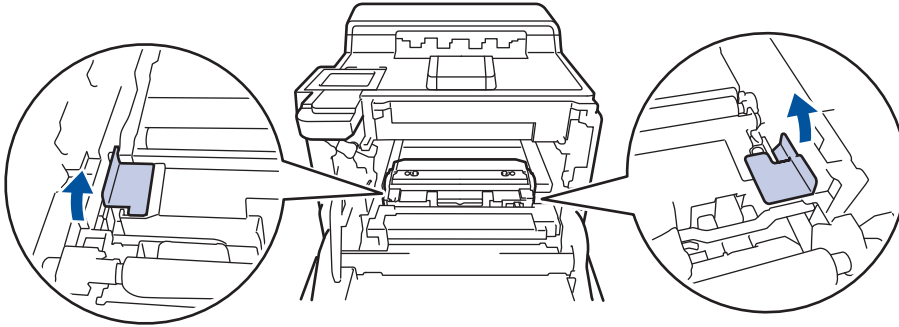
5. Push down the belt unit release lever to lift the belt unit up.



6. Hold the handle of the belt unit with both hands and lift the belt unit up, then pull it out.

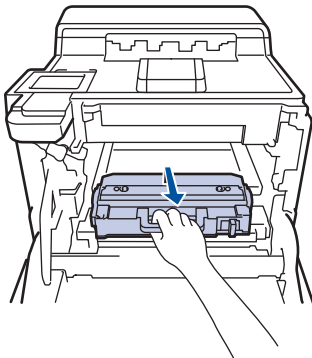


7. Remove the two pieces of orange packing material and discard them.



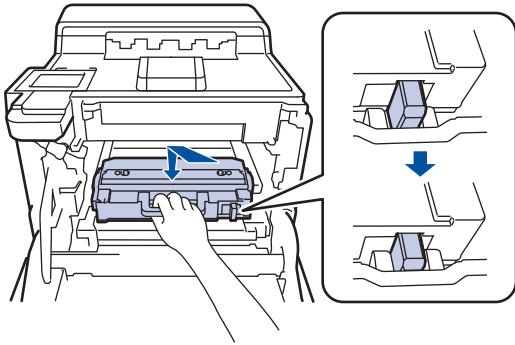
This step is only necessary when you are replacing the waste toner box for the first time, and is not required for the replacement waste toner box. The orange packing pieces are installed at the factory to protect your machine during shipment.

8. Hold the green handle of the waste toner box and remove the waste toner box from the machine.

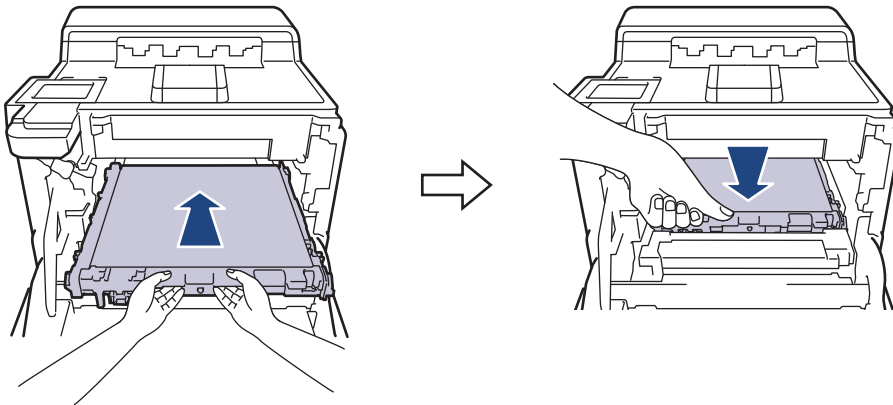


**DO NOT** reuse the waste toner box.

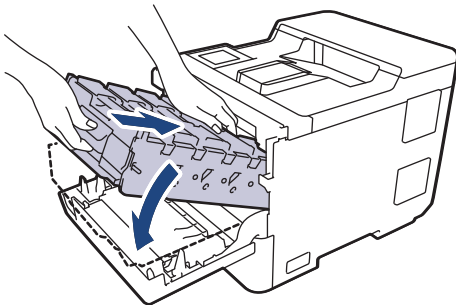
9. Unpack the new waste toner box and install the new waste toner box in the machine using the green handle. Make sure the waste toner box is level and fits firmly into place.



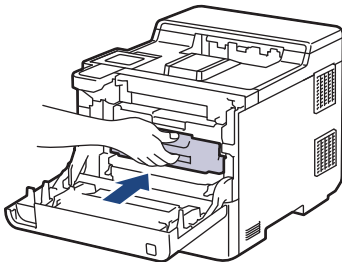
10. Slide the belt unit back into the machine. Make sure the belt unit is level and fits firmly into place, and the belt unit release lever is secured.



11. Gently slide the drum unit into the machine until it stops.



12. Using the green labeled handle, push the drum unit back into the machine until it locks in place.



13. Close the machine's front cover.

### ✓ Related Information

- [Replace Supplies](#)

#### Related Topics:

- [Error and Maintenance Messages](#)

## Clean the Machine

Clean the outside and inside of the machine regularly with a dry, lint-free cloth.

When you replace the toner cartridge or the drum unit, make sure you clean the inside of the machine. If printed pages are stained with toner, clean the inside of the machine with a dry, lint-free cloth.

### WARNING

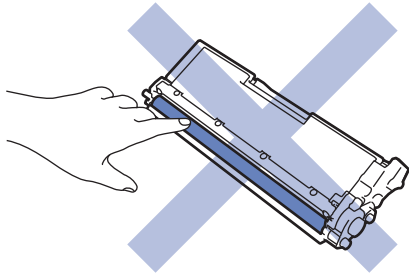
DO NOT use flammable substances, any type of spray, or an organic solvent/liquid containing alcohol or ammonia to clean the inside or outside of the product. Doing so could cause a fire. Instead, use only a dry, lint-free cloth.



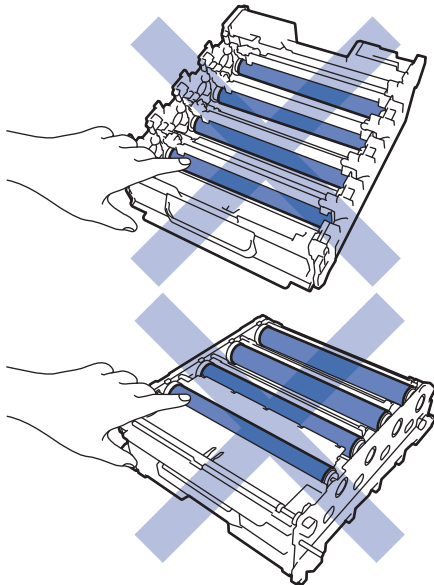
### IMPORTANT

- DO NOT use isopropyl alcohol to remove dirt from the control panel. It may crack the panel.
- To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.

#### Toner Cartridge



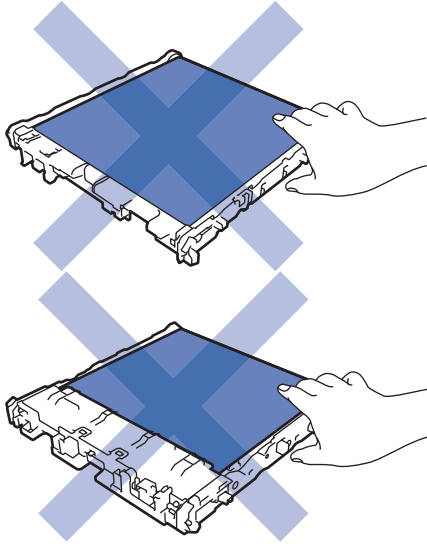
#### Drum Unit



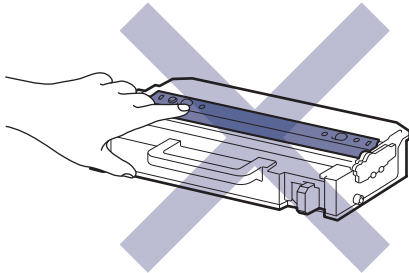


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### Belt Unit



### Waste Toner Box



- DO NOT turn the waste toner box upside down, otherwise the toner may spill out.
  - DO NOT touch the IC chip surface of the toner cartridge and the belt unit. Contamination and damage may interfere with the detection of each unit.
- 




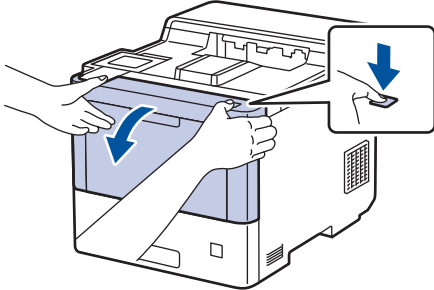
### Related Information

- Routine Maintenance
    - Clean the Laser Scanner Windows
    - Clean the Touchscreen LCD
    - Clean the Corona Wires
    - Clean the Drum Unit
    - Clean the Paper Pick-up Rollers
-

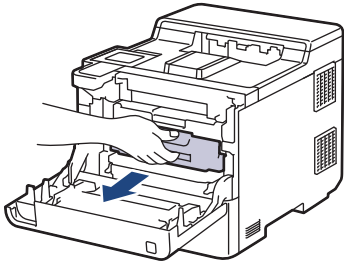
## Clean the Laser Scanner Windows

Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

1. Press and hold  to turn the machine off.
2. Press the front cover release button and open the front cover.



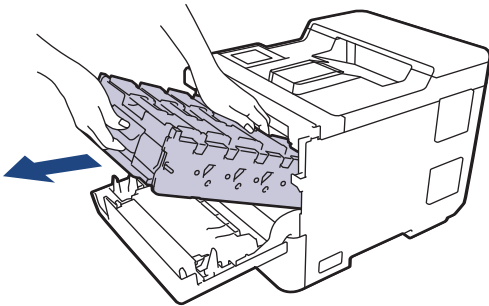
3. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



### CAUTION

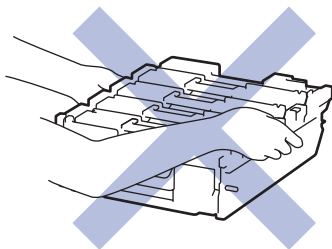
We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

4. Holding the green labeled handles of the drum unit, lift the front of the drum unit and remove it from the machine.

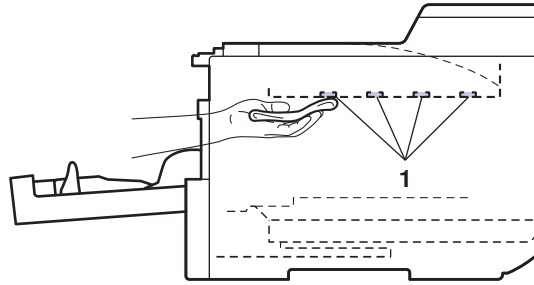
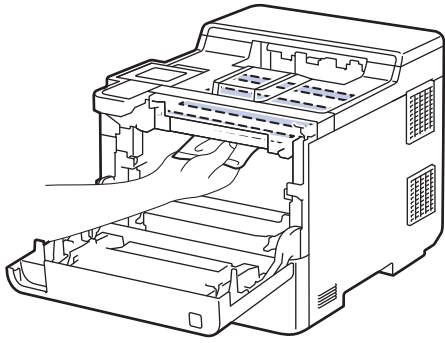


### IMPORTANT

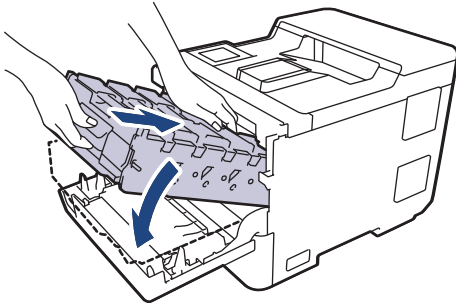
Hold the handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



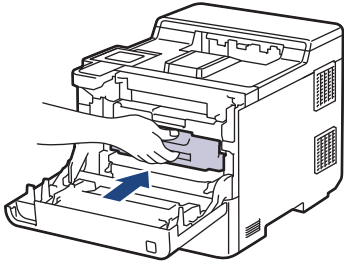
- Wipe the four laser scanner windows (1) with a dry, soft, lint-free cloth.




- Gently slide the drum unit into the machine until it stops.



- Using the green labeled handle, push the drum unit back into the machine until it locks in place.



- Close the machine's front cover.
- Press  to turn the machine on.

### Related Information

- [Clean the Machine](#)

#### Related Topics:


- [Improve the Print Quality](#)

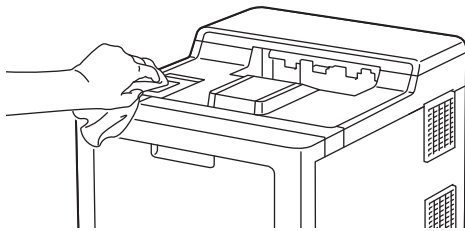
## Clean the Touchscreen LCD


Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

### IMPORTANT

DO NOT use any type of liquid cleaners (including ethanol).

1. Press and hold  to turn the machine off.
2. Clean the touchscreen with a dry, soft lint-free cloth.



3. Press  to turn the machine on.

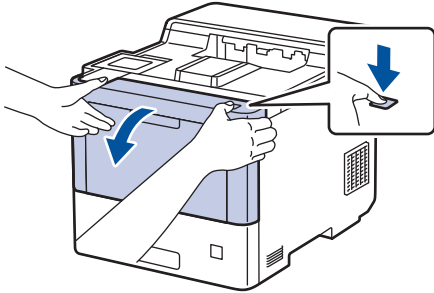
### ✓ Related Information

- [Clean the Machine](#)

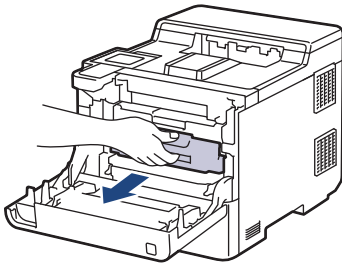
## Clean the Corona Wires

Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

1. Press the front cover release button and open the front cover.



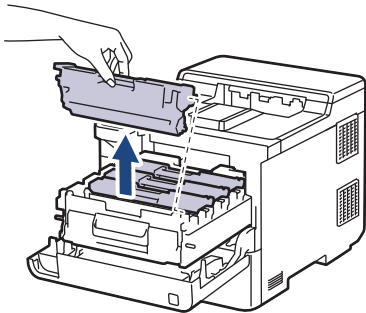
2. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



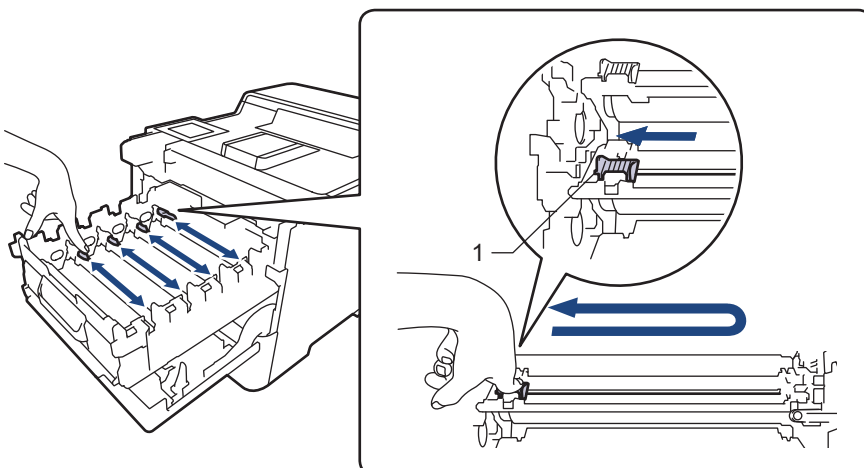
### CAUTION

We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

3. Hold the handle of the toner cartridge and pull the toner cartridge up and out of the drum unit. Repeat this for all toner cartridges.



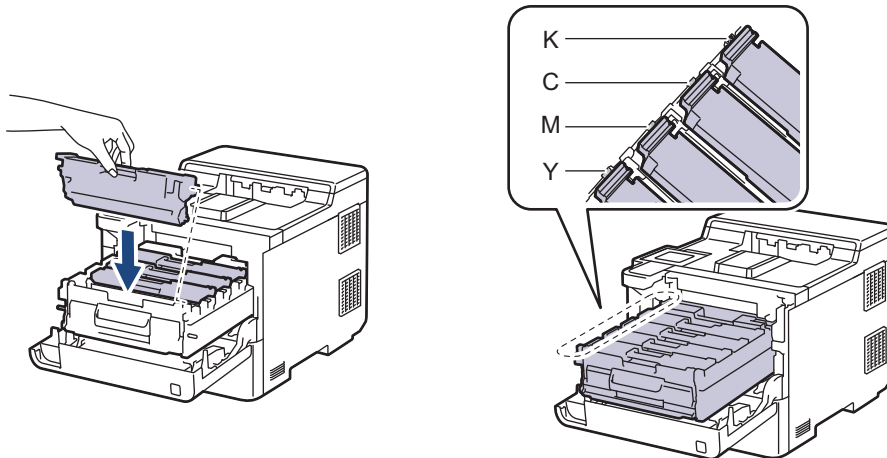
4. Clean the corona wire inside the drum unit by gently sliding the green tab from left to right and right to left several times. Repeat this for all the corona wires.





To avoid poor print quality, be sure to lock the green tab into the home position (1), flush left with the left side of the drum.

5. Insert the toner cartridge into the drum unit. Make sure that you match the toner cartridge colour to the same colour label on the drum unit. Repeat this for all toner cartridges.

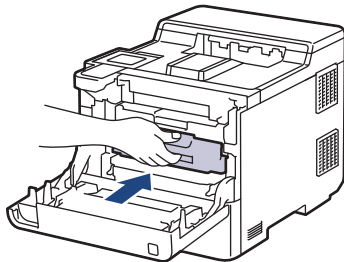


- K: Black
- C: Cyan
- M: Magenta
- Y: Yellow



Make sure you put the toner cartridge in correctly or it may separate from the drum unit.

6. Using the green labeled handle, push the drum unit back into the machine until it locks in place.



7. Close the machine's front cover.



## Related Information




- [Clean the Machine](#)

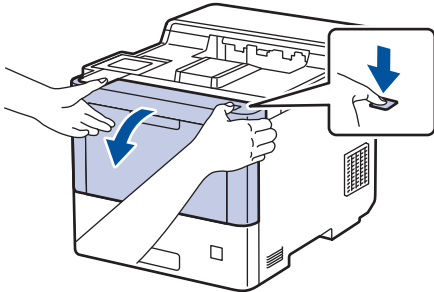
### Related Topics:

- [Error and Maintenance Messages](#)

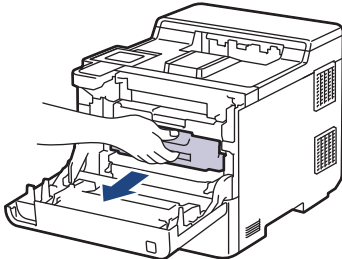
## Clean the Drum Unit

- If your printout has black or white dots or other repeating marks at 94 mm intervals, the drum may have foreign material, such as glue from a label, stuck on the drum surface.
- Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

1. Make sure the machine is in Ready Mode.
2. Press  [Settings] > [All Settings] > [Print Reports] > [Drum Dot Print].
3. Press [Yes].  
The machine prints the Drum Dot Check Sheet.
4. Press .
5. Press and hold  to turn the machine off.
6. Press the front cover release button and open the front cover.



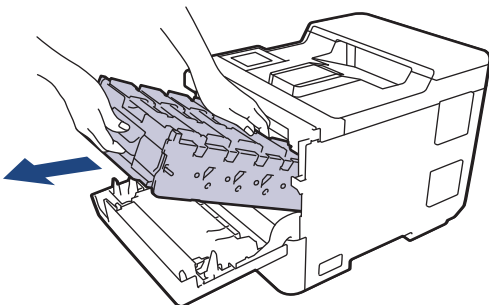
7. Hold the drum unit's green labeled handle. Pull the drum unit out of the machine until it stops.



### CAUTION

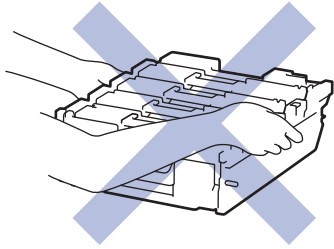
We recommend placing the toner cartridges and the drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

8. Holding the green labeled handles of the drum unit, lift the front of the drum unit and remove it from the machine.

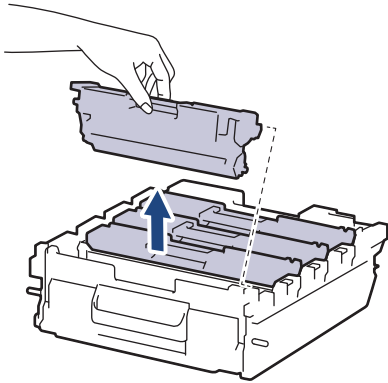


### IMPORTANT

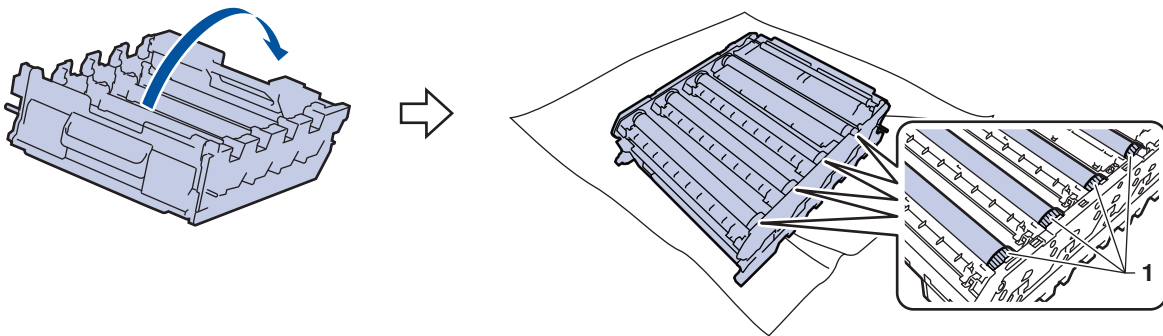
Hold the handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



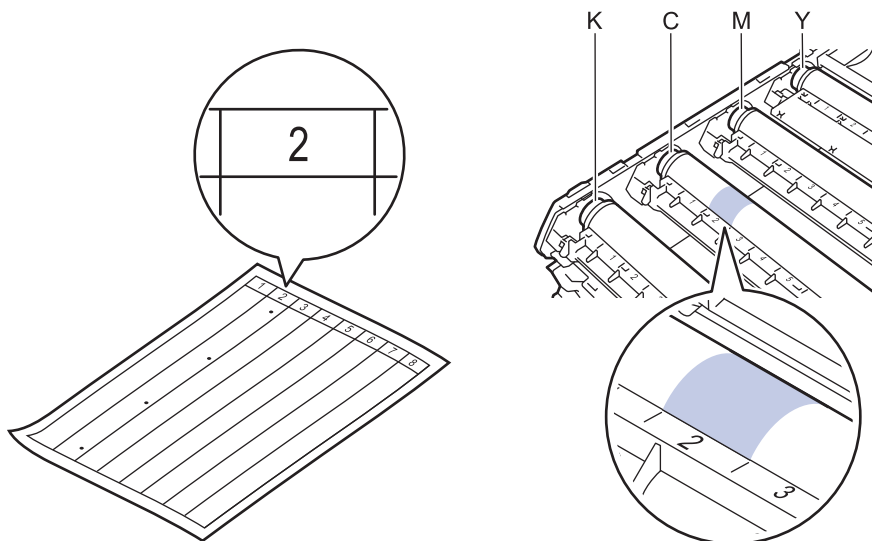
9. Hold the handle of the toner cartridge and pull the toner cartridge up and out of the drum unit. Repeat this for all toner cartridges.



10. Turn the drum unit over by holding the green labeled handles. Make sure that the drum unit gears (1) are on the right side.



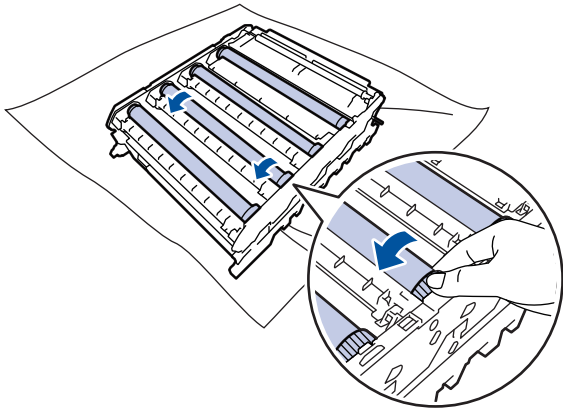
11. Use the column numbers next to the drum roller to find the mark. For example, a cyan dot in column 2 on the check sheet would mean that there is a mark in the "2" region of the cyan drum.



- K: Black
- C: Cyan
- M: Magenta
- Y: Yellow

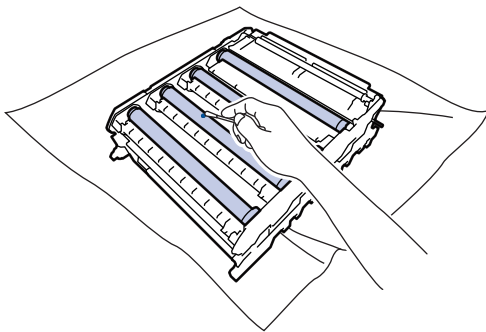


12. Hold the drum unit frame with both hands, place your thumb on the drum unit gear, and roll the drum towards you by hand while looking at the surface of the suspected area.



To avoid print quality problems, DO NOT touch any surface of the drum rollers except the drum unit gear.

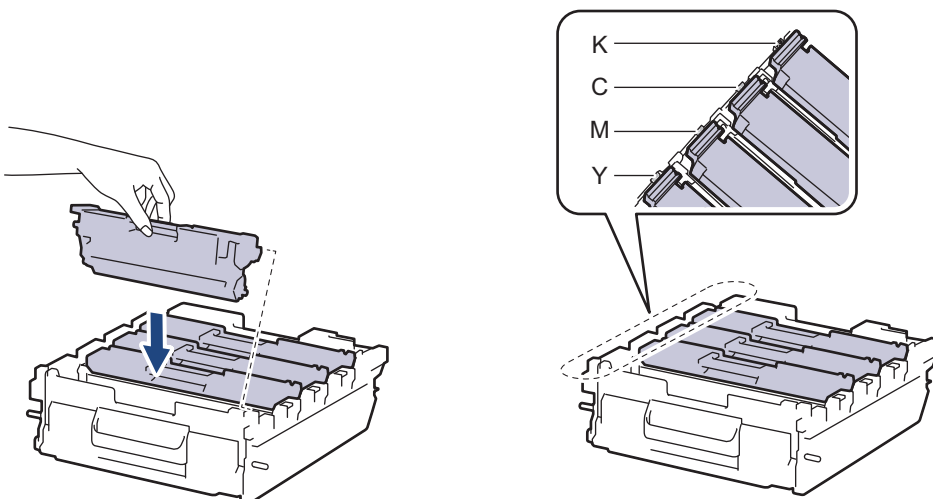
13. Wipe the surface of the drum gently with a dry cotton swab until the mark on the surface comes off.



## NOTE

DO NOT clean the surface of the photosensitive drum with a sharp object or any liquids.

14. Turn the drum unit over by holding the green labeled handles.
15. Reinsert the toner cartridge into the new drum unit. Make sure that you match the toner cartridge colour to the same colour label on the drum unit. Repeat this for all toner cartridges.



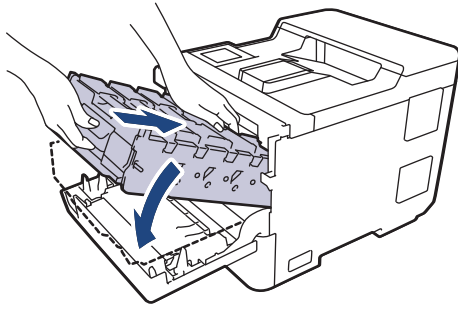
- K: Black
- C: Cyan
- M: Magenta
- Y: Yellow



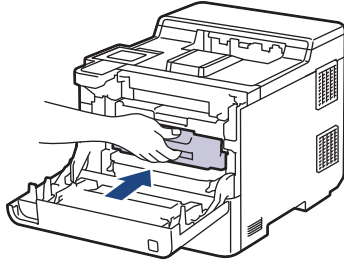
Make sure you put the toner cartridge in correctly or it may separate from the drum unit.

---


16. Gently slide the drum unit into the machine until it stops.



17. Using the green labeled handle, push the drum unit back into the machine until it locks in place.



18. Close the machine's front cover.

19. Press  to turn the machine on.

### Related Information

- [Clean the Machine](#)

#### **Related Topics:**


- [Improve the Print Quality](#)
-

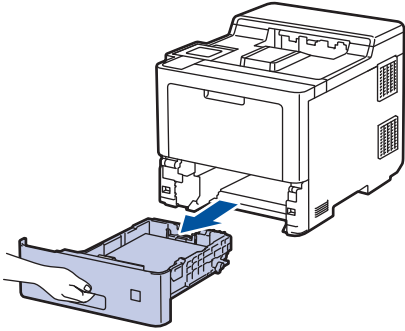
## Clean the Paper Pick-up Rollers

Cleaning the paper pick-up rollers periodically may prevent paper jams by ensuring that paper feeds correctly.

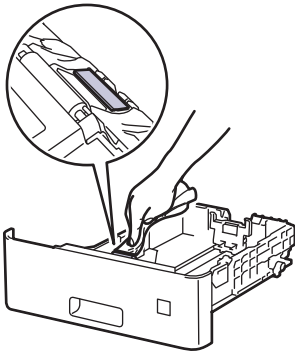
Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

If you have paper feed problems, clean the pick-up rollers as follows:

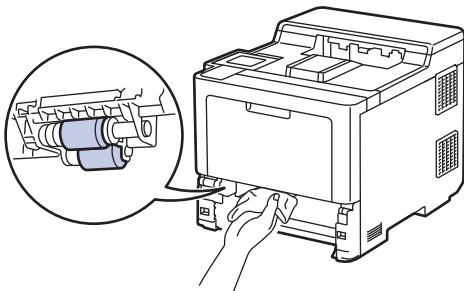
1. Press and hold  to turn the machine off.
2. Pull the paper tray completely out of the machine.




3. If paper is loaded or something is stuck inside in the paper tray, remove it.
4. Tightly wring out a lint-free cloth soaked in lukewarm water, and then wipe the separator pad on the paper tray to remove dust.



5. Wipe the two pick-up rollers inside the machine to remove dust.



6. Reload the paper and put the paper tray firmly back in the machine.
7. Press  to turn the machine on.

### Related Information

- [Clean the Machine](#)

#### Related Topics:


- [Printing Problems](#)
- [Clear Paper Jams](#)

## Correct the Colour Printing

If the colour print quality is poor, calibrate the output density of each colour and then perform the colour alignment.



To perform the calibrations of each colour's output density and colour alignment in sequence, set the Auto Correction function to On.

1. Press  [Toner] > [Colour Correction] > [Correction Start].
2. Press [Yes].



The colour correction starts automatically and will take a few minutes.

3. Press .



### Related Information



- [Routine Maintenance](#)
  - [Set the Auto Correction Function](#)
  - [Reset the Machine's Colour Correction Settings](#)

### Related Topics:

- [Improve the Print Quality](#)

## Set the Auto Correction Function

If you want the machine to always perform the Colour alignment after calibrating the colours, activate the Auto Correction function.

1. Press  [Settings] > [All Settings] > [Printer] > [Colour Correction] > [Auto Correction] > [On].
2. Press .





### Related Information

- [Correct the Colour Printing](#)
-

## Reset the Machine's Colour Correction Settings

If the output colour differs from what you see on your screen, try resetting your machine's colour correction settings.



1. Press  [Toner] > [Colour Correction] > [Reset].
2. Press [Yes].
3. Press .




### Related Information

- [Correct the Colour Printing](#)
-

## Check the Remaining Part Life

1. Press  [Settings] > [All Settings] > [Machine Information] > [Parts Life].
2. Press ▲ or ▼ to display the machine parts, and then press the machine part you want to check.  
The LCD displays the approximate remaining part life.
3. Press .



To display the approximate remaining life of toner cartridges, press  [Toner] > [Toner Life].



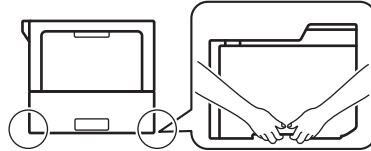
### Related Information

- [Routine Maintenance](#)

## Pack and Ship Your Machine

### WARNING


- This product is heavy and weighs more than 28.7 kg. To prevent possible injuries, at least two people should lift the product by holding it at the front and back.
- When you move the machine, carry the machine as shown in the illustration.

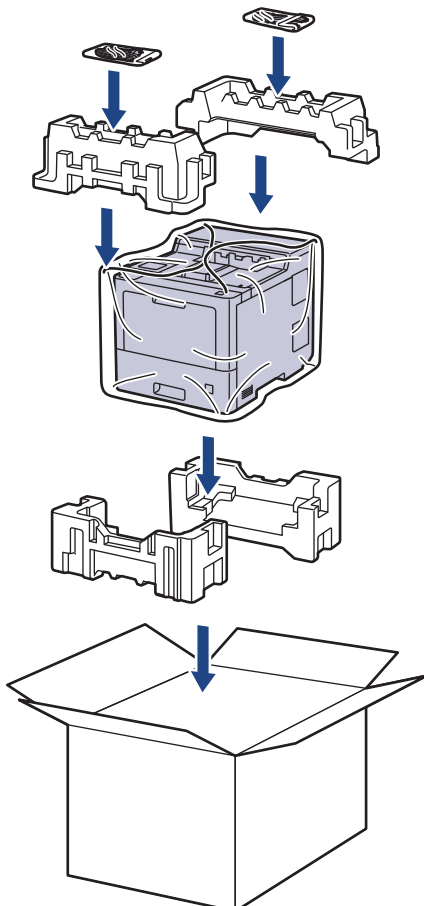


- If the machine has the Optional Tray(s) installed, remove the Optional Tray(s) BEFORE moving the machine. Attempting to move the machine without removing the Optional Tray(s) may cause injury to you or damage to the machine.
- Pack the Optional Tray(s) separately in its original carton with original packing material.



If for any reason you must ship your machine, carefully repack the machine in the original packaging to avoid any damage during transit. The machine should be adequately insured with the carrier.

1. Press and hold  to turn the machine off. Leave the machine off for at least 10 minutes to cool down.
2. Disconnect all the cables, and then unplug the power cord from the electrical socket.
3. Put the machine into the bag it originally came in.
4. Pack the machine, the printed materials, and the AC power cord (if applicable) in the original carton with the original packing material as shown.

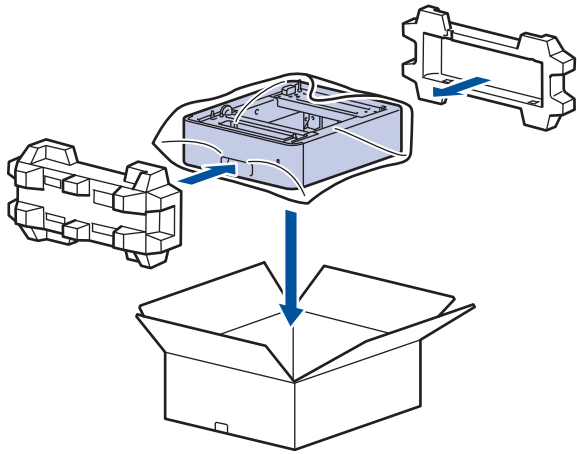


5. Close the carton and tape it shut.



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6. If you have a Lower Tray, repack it as shown.



### Related Information

- [Routine Maintenance](#)

## Replace Periodic Maintenance Parts

Replace the following parts regularly to maintain print quality. The parts listed below must be replaced after printing approximately 50,000 pages<sup>1</sup> for the Paper Feeding Kits of the MP tray, approximately 100,000 pages<sup>1</sup> for the Paper Feeding Kits of the optional paper tray and approximately 200,000 pages<sup>1</sup> for the Paper Feeding Kits of the standard paper tray, Fuser Unit, and Laser Unit.

Contact Brother customer service or your local Brother dealer when the following messages appear on the LCD:

LCD Message	Description
Maintenance Replace Fuser <sup>2</sup>	Replace the Fuser Unit.
Maintenance Replace Laser <sup>2</sup>	Replace the Laser Unit.
Maintenance Replace PF Kit 1 <sup>23</sup>	Replace the Paper Feeding Kit for the Standard Paper Tray.
Maintenance Replace PF Kit 2 <sup>234</sup>	Replace the Paper Feeding Kit for the Optional Tray.
Maintenance Replace PF Kit MP <sup>23</sup>	Replace the Paper Feeding Kit for the Multi-purpose (MP) Tray.



### Related Information

- [Routine Maintenance](#)

<sup>1</sup> Letter or A4 size 1-sided pages.

<sup>2</sup> The replacement frequency depends on the complexity of printed pages, percentage of coverage, and the type of media used.

<sup>3</sup> The kit includes the roller holder assembly, separation pad, and separation pad spring for the paper tray or MP Tray.

<sup>4</sup> If you use the Optional Tray(s) with your machine, this message will appear on the LCD. When the machine has multiple Optional Trays, the machine displays messages using numbers corresponding to each Optional Tray.

## Machine Settings

Customise settings and features to make your machine a more efficient work tool.

- [Change Machine Settings from the Control Panel](#)
- [Change Machine Settings from Your Computer](#)

## Change Machine Settings from the Control Panel

- [General Settings](#)
- [Settings and Features Tables](#)

## General Settings

- [Set Sleep Mode Countdown](#)
- [About Deep Sleep Mode](#)
- [Set Auto Power Off Mode](#)
- [Adjust the LCD Backlight Brightness](#)
- [Change How Long the LCD Backlight Stays On](#)
- [Reduce Toner Consumption](#)
- [Reduce Printing Noise](#)
- [Change the Language on the LCD](#)



## Set Sleep Mode Countdown

The Sleep Mode (or Power Save Mode) setting can reduce power consumption. Select how long the machine must be idle before it goes into Sleep Mode. The Sleep Mode timer is reset when the machine receives a print job.

When the machine is in Sleep Mode, it acts as if it is turned off. The machine will wake up and start printing when it receives a print job. Use these instructions to set a time delay (countdown) before the machine enters Sleep Mode.



The Sleep Mode setting cannot be disabled due to environmental considerations.

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Sleep Time].
2. Enter the length of time (maximum 50 minutes) the machine will remain idle before entering Sleep Mode, and then press [OK].
3. Press .



### Related Information

- [General Settings](#)



## About Deep Sleep Mode

If the machine is in Sleep Mode and does not receive any jobs for a certain length of time, the machine will automatically enter Deep Sleep Mode. The length of time is based on your specific model and settings.

Deep Sleep Mode uses less power than Sleep Mode.



The Deep Sleep Mode setting cannot be disabled due to environmental considerations.

Applicable Models	Machine's Control Panel in Deep Sleep Mode	Conditions That Will Wake the Machine
HL-L9430CDN/HL-L9470CDN	The LCD backlight turns off and the Power LED brightens and dims.	<ul style="list-style-type: none"><li>The machine receives a job.</li><li>Someone presses , , or the touchscreen LCD.</li></ul>






### Related Information

- [General Settings](#)

## Set Auto Power Off Mode

If the machine is in Deep Sleep Mode for certain length of time, based on your model and settings, the machine will go into Power Off Mode automatically. The machine does not go into Power Off Mode when the machine is connected to a network or has secure print data in the memory(available only for certain models).

To start printing, press  on the control panel and then send a print job.

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Auto Power Off].
2. Press ▲ or ▼ to display the length of time the machine will remain idle before entering Power Off Mode, and then press the option you want.
3. Press .





### Related Information

- [General Settings](#)



## Adjust the LCD Backlight Brightness

If you are having difficulty reading the LCD, changing the brightness setting may help.

1. Press  [Settings] > [All Settings] > [General Setup] > [LCD Settings] > [Backlight].
2. Press the option you want:
  - [Light]
  - [Med]
  - [Dark]
3. Press .





### Related Information

- [General Settings](#)

## Change How Long the LCD Backlight Stays On

Set how long the LCD backlight stays on.

1. Press  [Settings] > [All Settings] > [General Setup] > [LCD Settings] > [Dim Timer].
2. Press the option you want:
  - [10 Secs]
  - [20 Secs]
  - [30 Secs]
3. Press .





### Related Information

- [General Settings](#)

## Reduce Toner Consumption

Using the Toner Save feature may reduce toner consumption. When Toner Save is set to on, the print on your documents appears lighter.

We DO NOT recommend using the Toner Save feature for printing photo or greyscale images.

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Toner Save].
2. Press [On] or [Off].
3. Press .

### Related Information



- [General Settings](#)

#### **Related Topics:**

- [Improve the Print Quality](#)

## Reduce Printing Noise

The Quiet Mode setting can reduce printing noise. When Quiet Mode is turned on, the print speed becomes slower. The factory setting is off.

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Quiet Mode].
2. Press [On] or [Off].
3. Press .





### Related Information

- [General Settings](#)

## Change the Language on the LCD

Change the LCD language if needed.

This feature is not available in some countries.

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Local Language].
2. Press your language.
3. Press .

### Related Information

- [General Settings](#)
-

## Settings and Features Tables

The Settings tables will help you understand the menu selections and options that are found in the machine's programs.

- [Settings Tables](#)
- [Feature Tables](#)

## Settings Tables

>> [Settings]  
 >> [General Setup]  
 >> [Printer]  
 >> [Network]  
 >> [Print Reports]  
 >> [Machine Information]  
 >> [Initial Setup]

### [Settings]



#### [Settings]

Level 2	Level 3	Level 4	Descriptions
Toner	Toner Life	-	View the approximate remaining toner life.
	Test Print	-	Print a test page.
	Colour Correction	Correction Start	Perform colour calibration to check and correct colours, and then perform registration to align the print position of each colour.
		Reset	Reset the calibration parameters to the default settings.
Network	Wired LAN	-	Access the Wired LAN setting menus.
	WLAN (Wi-Fi) <sup>1</sup>	-	Access the WLAN setting menus.
Tray Setting	-	-	Access the tray setting menus.
Wi-Fi Direct	-	-	Access the Wi-Fi Direct setting menus.
Eco Mode	-	-	Turn the following machine settings on at the same time. <ul style="list-style-type: none"> <li>• 2-sided Print: Long Edge <sup>2</sup></li> <li>• Sleep Time: 0 Min</li> <li>• Dim Timer: 10 Secs</li> <li>• Quiet Mode: On <sup>2</sup></li> <li>• Toner Save: On <sup>2</sup></li> </ul>
All Settings	-	-	Configure the detailed settings.

<sup>1</sup> For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

<sup>2</sup> Changing this setting is available after you change certain machine settings using Web Based Management.

### [General Setup]

[All Settings] > [General Setup]

Level 3	Level 4	Level 5	Level 6	Descriptions
Tray Setting	Paper Type	MP Tray	-	Select the paper type that matches the paper in the MP tray.
		Tray 1	-	Select the paper type that matches the paper in the standard paper tray.
		Tray 2 <sup>1</sup>	-	Select the paper type that matches the paper in the Optional Tray (Tray 2).

Level 3	Level 4	Level 5	Level 6	Descriptions	
Tray Setting	Paper Type	Tray 3 <sup>1</sup>	-	Select the paper type that matches the paper in the Optional Tray (Tray 3).	
		Tray 4 <sup>1</sup>	-	Select the paper type that matches the paper in the Optional Tray (Tray 4).	
		Tray 5 <sup>2</sup>	-	Select the paper type that matches the paper in the Optional Tray (Tray 5).	
	Paper Size	MP Tray	-	Select the size of paper you loaded in the MP tray.	
		Tray 1	-	Select the size of paper you loaded in the standard paper tray.	
		Tray 2 <sup>1</sup>	-	Select the size of paper you loaded in the Optional Tray (Tray 2).	
		Tray 3 <sup>1</sup>	-	Select the size of paper you loaded in the Optional Tray (Tray 3).	
		Tray 4 <sup>1</sup>	-	Select the size of paper you loaded in the Optional Tray (Tray 4).	
		Tray 5 <sup>2</sup>	-	Select the size of paper you loaded in the Optional Tray (Tray 5).	
	Tray Use	-	-	Select the tray you want to use.	
	Priority	-	-	When the <i>Auto</i> option is selected in the <i>Tray Use</i> menu, select the order in which the machine uses paper trays that contain paper of the same size.	
	Print Position	MP Tray	X Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the MP tray horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
			Y Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the MP tray vertically up to -500 (up) to +500 (down) dots in 300 dpi.
		Tray 1	X Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the standard paper tray horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
			Y Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the standard paper tray vertically up to -500 (up) to +500 (down) dots in 300 dpi.
		Tray 2 <sup>1</sup>	X Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 2) horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
			Y Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 2) vertically up to -500 (up) to +500 (down) dots in 300 dpi.
		Tray 3 <sup>1</sup>	X Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 3) horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
			Y Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional



Level 3	Level 4	Level 5	Level 6	Descriptions
Tray Setting	Print Position	Tray 3 <sup>1</sup>		Tray (Tray 3) vertically up to -500 (up) to +500 (down) dots in 300 dpi.
		Tray 4 <sup>1</sup>	X Offset	Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 4) horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
			Y Offset	Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 4) vertically up to -500 (up) to +500 (down) dots in 300 dpi.
		Tray 5 <sup>2</sup>	X Offset	Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 5) horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
	Y Offset		Move the print start position (at the top-left corner of pages) of paper you loaded in the Optional Tray (Tray 5) vertically up to -500 (up) to +500 (down) dots in 300 dpi.	
	Output Tray <sup>3</sup>	-	-	Select the output tray you want to use.
	Staple <sup>4</sup>	-	-	Select whether to staple print jobs and eject the pages onto the Stapler Finisher Output Tray.
	Offset <sup>4</sup>	-	-	Select whether to shift print jobs ejected onto the Stapler Finisher Output Tray for easier collating.
	SF Continue <sup>4</sup>	-	-	Select if you want the machine to continue printing when the selected paper size or media type is not supported by the Stapler Finisher (SF).
	MX Continue <sup>5</sup>	-	-	Select if you want the machine to continue printing as soon as there is any free space in the Mailbox (MX).
Skip Tray <sup>6</sup>	-	-	Select a specific tray you do not want to use if it is loaded with paper of the wrong size.	
Separator Tray <sup>6</sup>	-	-	Select the tray that contains the paper used as the separator paper, which is inserted between each print job.	
Paper Low Notice	Paper Low Notice	Paper Low Notice	-	Select whether to display a message telling you that the paper tray is nearly empty.
		Notice Level	-	Select the minimum paper level that will trigger the message.
	Check Paper	-	-	Select whether to display a message telling you to check the paper type and paper size when you pull the tray out of the machine.
LCD Settings	Backlight	-	-	Adjust the brightness of the LCD backlight.
	Dim Timer	-	-	Set how long the LCD backlight stays on after the last finger press.
Screen Settings	Display Information	IP Address	-	Select whether to display your machine's IP Address on the Home screen.
Ecology	Eco Mode	-	-	Turn the following machine settings on at the same time. <ul style="list-style-type: none"> <li>• 2-sided Print: Long Edge<sup>7</sup></li> <li>• Sleep Time: 0 Min</li> <li>• Dim Timer: 10 Secs</li> </ul>

Level 3	Level 4	Level 5	Level 6	Descriptions
<b>Ecology</b>				<ul style="list-style-type: none"> <li>• Quiet Mode:On<sup>7</sup></li> <li>• Toner Save:On<sup>7</sup></li> </ul>
	<b>Toner Save</b>	-	-	Increase the page yield of the toner cartridge.
	<b>Sleep Time</b>	-	-	Set how much time will pass before the machine enters Power Saving mode.
	<b>Quiet Mode</b>	-	-	Decrease printing noise.
	<b>Auto Power Off</b>	-	-	Set the number of hours that the machine will remain in Deep Sleep mode before going into Power Off mode.
<b>Setting Lock</b>	<b>Set Password</b>	-	-	Restrict unauthorised users from changing the machine's settings.
	<b>Lock Off⇒On</b>	-	-	
	<b>New Password</b> (Available only when you enter the password for the first time.)	-	-	
<b>Interface</b>	<b>Select</b>	-	-	Select the interface to use. If you select the <b>Auto</b> option, the machine changes the interface to USB or Network depending on which interface is receiving data.
	<b>Auto IF Time</b>	-	-	Set the time-out period for the auto interface selection.
	<b>Input Buffer</b>	-	-	Increase or decrease the input buffer capacity.
<b>Delete Storage</b>	<b>Macro ID</b>	-	-	Delete the registered Macro data.
	<b>Stream ID</b>	-	-	Delete the registered Stream data.
	<b>Font ID</b>	-	-	Delete the registered Font data.
	<b>Delete All</b>	-	-	Restore the Macro, Stream and Font data of your machine to the default settings.
	<b>Initialise USB Flash Drive</b> (Available only when the USB flash drive is selected in the Job Save Location menu.)	-	-	Initialise the USB flash drive for USB Storage Print. Initialising the USB flash drive takes more than 40 minutes.

1 Available if the Optional Tray(s) is installed.

2 Available if the Optional Tray(s) is installed.

3 Available if the Mailbox or Stapler Finisher is installed.

4 Available if the Stapler Finisher is installed.

5 Available if the Mailbox is installed.

6 Available if the Lower Tray(s) is installed.

7 Changing this setting is available after you change certain machine settings using Web Based Management.

## [Printer]

[All Settings] > [Printer]

Level 3	Level 4	Level 5	Descriptions
<b>Emulation</b>	-	-	Choose the emulation mode.
<b>Quality</b>	-	-	Select the print quality.

Level 3	Level 4	Level 5	Descriptions
Print Options	Font List	HP LaserJet	Print the font list and samples of HP LaserJet.
		BR-Script 3	Print the font list and samples of BR-Script.
	Test Print	-	Print the test page.
2-sided	2-sided Print	-	Select whether to print on both sides of the paper.
	Single Image	-	For a print job where the last page is a 1-sided image, select the 1-sided Feed option to reduce printing time. When you use letterhead or preprinted paper, you must select the 2-sided Feed option. If you select 1-sided Feed for letterhead or preprinted paper, the last page will be printed on the reverse side.
Auto Continue	-	-	Select if you want the machine to clear paper size errors or media type errors automatically, and use paper from other trays.
Output Colour	-	-	Set the output colour.
Paper Type	-	-	Set the type of paper.
Paper Size	-	-	Set the size of paper.
Copies	-	-	Set the number of printed pages.
Orientation	-	-	Set pages to print in either portrait or landscape orientation.
Print Position	-	-	Access the Print Position setting menus.
Auto FF	-	-	Allow the machine to print any remaining data automatically.
HP LaserJet	Font No.	Font No.	Set the font number. This menu appears if a soft font is installed on your Brother machine.
		Soft Font No.	Set the soft font number. This menu appears if a soft font is installed on your Brother machine.
	Font Pitch	-	Set the font pitch. (Available for certain font numbers)
	Font Point	-	Set the font size. (Available for certain font numbers)
	Symbol Set	-	Select the symbol or character set.
	Table Print	-	Print the code table.
	Auto LF	-	ON: CR -> CR+LF, OFF: CR -> CR
	Auto CR	-	ON: LF -> LF+CR, FF -> FF+CR, or VT -> VT+CR OFF: LF -> LF, FF -> FF, or VT -> VT
	Auto WRAP	-	Choose whether a line feed and carriage return will happen when the machine reaches the right margin.
	Auto SKIP	-	Choose whether a line feed and carriage return will happen when the carriage position reaches the bottom margin.
	Left Margin	-	Set the left margin at column 0 to 70 columns at 1 cpi.
	Right Margin	-	Set the right margin at column 10 to 80 columns at 1 cpi.

Level 3	Level 4	Level 5	Descriptions	
HP LaserJet	Top Margin	-	Set the top margin distance from the top edge of the paper.	
	Bottom Margin	-	Set the bottom margin distance from the bottom edge of the paper.	
	Lines	-	Set the number of lines on each page.	
	Tray Command	-	Select this setting if a tray mismatch appears when you use the HP drivers.	
BR-Script 3	Error Print	-	Choose whether the machine prints the error information when errors occur.	
	CAPT	-	Use CAPT (Colour Advanced Printing Technology) for optimal print quality when printing a PS file created by a non-Brother PS driver. Colours and photos appear clearer and more accurate. Print speed will be slower.	
PDF	Multiple Page	-	Set the page layout when printing multiple pages.	
	PDF Print Options	-	Set the PDF Print setting to print either comments (Markup) or stamps in the PDF file, along with the text.	
	PDF Fit to Page	-	Select if the machine scales or resizes the pages in the PDF file to fit the selected paper size.	
Carbon Menu	Carbon Copy	-	Enable or disable the Carbon Copy function.	
	Copies	-	Sets the number of printed pages.	
	Copy1 Tray	-	Select the tray you use for Copy1.	
	Copy1 Stream	-	Select a stream for Copy1.	
	Copy2 Tray ...	-	Select the tray you use for Copy2 to 8.	
	Copy8 Tray	-		
	Copy2 Stream ... Copy8 Stream	-	Select a stream for Copy2 to 8.	
Colour Correction	Correction Start	-	Perform colour calibration to check and correct colours, and then perform registration to align the print position of each colour.	
	Reset	-	Reset the calibration parameters to the default settings.	
	Auto Correction	-	Set the machine to perform Colour Calibration and Registration automatically.	
	Colour Settings	Setting Mode		Select whether to apply the colour print settings of the machine or the printer driver.
		Colour Mode		Select the colour mode.
		Improve Gray Colour		Turn on or off to improve the image quality of shaded areas.
		Enhance Black Printing		Turn on or off if a black graphic does not print correctly.
		Brightness		Adjust the brightness.
		Contrast		Adjust the contrast.
		Red		Adjust the red colour.
Green		Adjust the green colour.		
Blue		Adjust the blue colour.		

Level 3	Level 4	Level 5	Descriptions
Job Save Location	-	-	Select the location where you want to save print jobs.
Reset Printer	-	-	Restore the printer settings to the factory settings.

## [Network]

[All Settings] > [Network]

Level 3	Level 4	Level 5	Level 6	Descriptions
Wired LAN	TCP/IP	Boot Method	-	Choose the IP method that best suits your needs.
		IP Address	-	Enter the IP address.
		Subnet Mask	-	Enter the Subnet mask.
		Gateway	-	Enter the Gateway address.
		Node Name	-	Enter the Node name.
		WINS Configuration	-	Select the WINS configuration mode.
		WINS Server	Primary	Specify the IP address of the primary WINS server.
			Secondary	Specify the IP address of the secondary WINS server.
		DNS Server	Primary	Specify the primary DNS server's IP address.
			Secondary	Specify the secondary DNS server's IP address.
	APIPA	-	Allocate the IP address from the link-local address range automatically <sup>1</sup> .	
	IPv6	-	Enable or disable the IPv6 protocol.	
	Ethernet	-	-	Choose the Ethernet link mode.
	Wired Status	-	-	Display the Ethernet link status.
	MAC Address	-	-	Display the MAC address of the machine.
Set to Default <sup>2</sup>	-	-	Restore wired network settings of your machine to the factory settings.	
Wired Enable <sup>2</sup>	-	-	Turn the wired interface on or off.	
WLAN (Wi-Fi) <sup>2</sup>	Find Wi-Fi Network	-	-	Configure your wireless network settings manually.
	TCP/IP	Boot Method	-	Choose the IP method that best suits your needs.
		IP Address	-	Enter the IP address.
		Subnet Mask	-	Enter the Subnet mask.
		Gateway	-	Enter the Gateway address.
		Node Name	-	Enter the Node name.
		WINS Configuration	-	Select the WINS configuration mode.
		WINS Server	Primary	Specify the IP address of the primary WINS server.

Level 3	Level 4	Level 5	Level 6	Descriptions
WLAN (Wi-Fi) <sup>2</sup>	TCP/IP	WINS Server	Secondary	Specify the IP address of the secondary WINS server.
		DNS Server	Primary	Specify the primary DNS server's IP address.
			Secondary	Specify the secondary DNS server's IP address.
		APIPA	-	Allocate the IP address from the link-local address range automatically. <sup>1</sup>
	IPv6	-	Enable or disable the IPv6 protocol.	
	WPS/Push Button	-	-	Configure your wireless network settings using the one-button push method.
	WPS/PIN Code	-	-	Configure the wireless network settings using WPS with a PIN code.
	WLAN Status	Status	-	Display the wireless Ethernet link status.
		Signal	-	Display the signal condition.
		SSID	-	Display the wireless SSID.
		Comm. Mode	-	Display the current Communication mode.
	MAC Address	-	-	Display the MAC address of the machine.
	Set to Default	-	-	Restore wireless network settings of your machine to the factory settings.
	WLAN Enable	-	-	Turn the wireless interface on or off.
Wi-Fi Direct <sup>2</sup>	Manual	-	-	Configure your Wi-Fi Direct network settings manually.
	Group Owner	-	-	Set your machine as the Group Owner.
	Push Button	-	-	Configure your Wi-Fi Direct network settings using the one-button push method quickly.
	PIN Code	-	-	Configure your Wi-Fi Direct network settings using WPS with a PIN code quickly.
	Device Information	Device Name	-	View your machine's device name.
		SSID	-	Display the Group Owner's SSID.
		IP Address	-	Display your machine's IP Address.
	Status Information	Status	-	Display the Wi-Fi Direct network status.
		Signal	-	Display the current Wi-Fi Direct network signal strength.
	I/F Enable	-	-	Enable or disable the Wi-Fi Direct connection.
NFC	-	-	-	Turn the NFC function on or off.
IPsec	-	-	-	IPsec is an optional security feature of the IP protocol that provides authentication and encryption services. We recommend contacting

Level 3	Level 4	Level 5	Level 6	Descriptions
				your network administrator before changing this setting.
<b>Network Reset</b>	-	-	-	Restore all network settings of your machine to the factory settings.

- 1 On connection to the network, if the machine's 'Boot Method' is 'Auto' the machine will attempt to set the IP address and Subnet Mask from a boot server such as DHCP. If a boot server cannot be found, an APIPA IP address will be allocated, such as 169. 254. [001-254]. [000-255]. If the 'Boot Method' of the machine is set to 'Static' you must manually enter an IP address from the machine's control panel.
- 2 For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.

## [Print Reports]

### [All Settings] > [Print Reports]

Level 3	Descriptions
<b>Printer Settings</b>	Print the Printer Settings page.
<b>Network Configuration</b>	Print the Network Configuration Report.
<b>Print File List</b>	Print a list of data saved in the memory.
<b>Drum Dot Print</b>	Print the Drum Dot Check Sheet.
<b>WLAN Report</b>	Print the wireless LAN connectivity diagnosis result.

## [Machine Information]

### [All Settings] > [Machine Information]

Level 3	Level 4	Descriptions
<b>Serial No.</b>	-	Display the machine's serial number.
<b>Firmware Version</b>	<b>Main Version</b>	Check your machine's firmware version.
	<b>Security Version</b>	
<b>Firmware Update</b>	-	Update your machine to the latest firmware.
<b>Firmware Auto Check</b>	-	View firmware information on the Home screen.
<b>Page Counter</b>	<b>Total</b>	Display the total printed pages.
	<b>Colour</b>	Display the total colour printed pages.
	<b>Black and White</b>	Display the total monochrome printed pages.
<b>Parts Life</b> <sup>1</sup>	<b>Drum</b>	Display the remaining life of the drum unit.
	<b>Belt</b>	Display the remaining life of the belt unit.
	<b>Fuser</b>	Display the remaining life of the fuser unit.
	<b>Laser</b>	Display the remaining life of the laser unit.
	<b>PF Kit MP</b>	Display the remaining life of the PF Kit MP.
	<b>PF Kit 1</b>	Display the remaining life of the PF Kit 1.
	<b>PF Kit 2</b> <sup>2</sup>	Display the remaining life of the PF Kit 2.
	<b>PF Kit 3</b> <sup>2</sup>	Display the remaining life of the PF Kit 3.
	<b>PF Kit 4</b> <sup>2</sup>	Display the remaining life of the PF Kit 4.
<b>PF Kit 5</b> <sup>2,3</sup>	Display the remaining life of the PF Kit 5.	

<sup>1</sup> The parts life is approximate and may vary by type of use.

<sup>2</sup> Available if the Optional Tray(s) is installed.

3 Supported models only.

## [Initial Setup]

[All Settings] > [Initial Setup]

Level 3	Level 4	Descriptions
Reset	Machine Reset	Restore all the machine's settings that you have changed, such as Paper Type.
	Network Reset	Restore all network settings of your machine to the factory settings.
	Factory Reset	Reset the machine and restore the printer settings (including command settings) to the factory settings.
Local Language	-	Select the LCD language for your country.



### Related Information

- [Settings and Features Tables](#)




## Feature Tables

- >> [Toner](#)
- >> [Wi-Fi Setup](#)
- >> [\[Direct Print\]](#)
- >> [\[Secure Print\]](#)


### Toner



Level 2	Level 3	Level 4	Descriptions	
 (Toner)	<b>Toner Life</b>	-	View the approximate remaining toner life for each colour.	
	<b>Test Print</b>	-	Print the test page.	
	<b>Colour Correction</b>	<b>Correction Start</b>		Perform colour calibration to check and correct colours, and then perform registration to align the print position of each colour.
		<b>Reset</b>		Reset the calibration parameters to the default settings.

### Wi-Fi Setup



Level 2	Level 3	Descriptions
 (Wi-Fi Setup)	<b>TCP/IP</b> <sup>1</sup>	Change the TCP/IP settings.
	<b>Find Wi-Fi Network</b>	Configure your wireless network settings manually.
	<b>WPS/Push Button</b>	Configure your wireless network settings using the one-button push method.
	<b>WPS/PIN Code</b> <sup>1</sup>	Configure the wireless network settings using WPS with a PIN code.
	<b>WLAN Status</b> <sup>1</sup>	Display the wireless network connection status.
	<b>MAC Address</b> <sup>1</sup>	Display the MAC address of the machine.
	<b>Set to Default</b> <sup>1</sup>	Restore wireless network settings of your machine to the factory settings.
	<b>WLAN Enable</b> <sup>1</sup>	Turn the wireless interface on or off.

<sup>1</sup> Available after a Wi-Fi® connection has been configured.


## NOTE

For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.


[Direct Print]



[Direct Print]

Level 3	Level 4	Level 5	Level 6	Descriptions
 <b>Direct Print</b>	(Select the file you want to print out.)	<b>Print Settings</b>	<b>Print Quality</b>	Set the print quality option when printing directly from a USB flash drive.
			<b>Tray Use</b>	Select the paper tray that will be used when printing directly from a USB flash drive.
			<b>Paper Type</b>	Set the print media type when printing directly from a USB flash drive.
			<b>Paper Size</b>	Set the paper size when printing directly from a USB flash drive.
			<b>Staple</b> <sup>1</sup>	Select whether to staple print jobs and eject the pages onto the Stapler Finisher Output Tray when printing directly from a USB flash drive.
			<b>Offset</b> <sup>1</sup>	Select whether to shift print jobs ejected onto the Stapler Finisher Output Tray when printing directly from a USB flash drive.
			<b>Multiple Page</b>	Set the page layout when printing multiple pages directly from a USB flash drive.
			<b>Orientation</b>	Select the page orientation when printing directly from a USB flash drive.
			<b>2-sided</b>	Select whether to print on both sides of the paper when printing directly from a USB flash drive.
			<b>Collate</b>	Enable or disable page collation when printing directly from a USB flash drive.
			<b>PDF Print Options</b>	Set the USB Direct Print setting to print either comments (Markup) or stamps in the PDF file, along with the text.
			<b>PDF Fit to Page</b>	Select if the machine scales or resizes the pages in the PDF file to fit the selected paper size when printing directly from a USB flash drive.
			<b>Colour Start</b>	-
		<b>Mono Start</b>	-	Print data in mono directly from the USB flash drive.
	<b>Index Print</b>	-	-	Print a thumbnail page.


<sup>1</sup> Available if the Stapler Finisher is installed.

Level 3	Level 4	Level 5	Level 6	Descriptions
 <b>Direct Print</b>	<b>DefaultSettings</b>	<b>Print Quality</b>	-	Set the print quality option when printing directly from a USB flash drive.
		<b>Paper Type</b>	-	Set the print media type when printing directly from a USB flash drive.
		<b>Paper Size</b>	-	Set the paper size when printing directly from a USB flash drive.
		<b>Multiple Page</b>	-	Set the page layout when printing multiple pages directly from a USB flash drive.
		<b>Orientation</b>	-	Select the page orientation when printing directly from a USB flash drive.
		<b>Collate</b>	-	Enable or disable page collation when printing directly from a USB flash drive.
		<b>PDF Print Options</b>	-	Set the USB Direct Print setting to print either comments (Markup) or stamps in the PDF file, along with the text.
		<b>PDF Fit to Page</b>	-	Select if the machine scales or resizes the pages in the PDF file to fit the selected paper size when printing directly from a USB flash drive.
		<b>Index Print</b>	-	Set the default index print format to either "Simple" or "Details".

### [Secure Print]



### [Secure Print]

Level 2	Descriptions
 <b>Secure Print</b>	<p>You can print data saved in the machine's memory or USB flash drive when you enter your four-digit password.</p> <p>Active only when the machine or USB flash drive has secure print data.</p>



### Related Information

- [Settings and Features Tables](#)

## Change Machine Settings from Your Computer

- [Change Machine Settings Using Web Based Management](#)
- [Check Your Machine's Network Settings](#)
- [Configure Network Settings](#)

## Change Machine Settings Using Web Based Management

Web Based Management is a utility that uses a standard web browser to manage your machine using the Hyper Text Transfer Protocol (HTTP) or Hyper Text Transfer Protocol over Secure Socket Layer (HTTPS).

- [What is Web Based Management?](#)
- [Access Web Based Management](#)
- [Set or Change a Login Password for Web Based Management](#)

## What is Web Based Management?

Web Based Management is a utility that uses a standard web browser to manage your machine using the Hyper Text Transfer Protocol (HTTP) or Hyper Text Transfer Protocol over Secure Socket Layer (HTTPS).



- We recommend Microsoft Internet Explorer 11/Microsoft Edge for Windows, Safari 12/13 for Mac, Chrome for Android (4.x or later), and Chrome/Safari for iOS (10.x or later). Make sure that JavaScript and Cookies are always enabled in whichever browser you use.
- Make sure your machine is On and connected to the same network as your computer, and that your network supports the TCP-IP protocol.

XXX-XXXX series

brother

**Status**

**Device Status**

Sleep

Automatic Refresh

Off  
 On

**Toner Level**

BK C M Y

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The actual screen may differ from the screen shown above.



### Related Information

- [Change Machine Settings Using Web Based Management](#)

## Access Web Based Management

- We recommend Microsoft Internet Explorer 11/Microsoft Edge for Windows, Safari 12/13 for Mac, Chrome for Android (4.x or later), and Chrome/Safari for iOS (10.x or later). Make sure that JavaScript and Cookies are always enabled in whichever browser you use.
- We recommend using the HTTPS security protocol when configuring settings using Web Based Management.
- When you use HTTPS for Web Based Management configuration, your browser will display a warning dialog box. To avoid displaying the warning dialog box, you can install a self-signed certificate to use SSL/TLS communication. For more information, see *Related Information*.
- The default password to manage this machine's settings is located on the back of the machine and marked "Pwd". We recommend immediately changing the default password to protect your machine from unauthorised access. You can also find the default password in the Network Configuration Report.

>> [Access Web Based Management from your Web Browser](#)

>> [Access Web Based Management from Brother iPrint&Scan \(Windows/Mac\)](#)

>> [Access Web Based Management from Brother Utilities \(Windows\)](#)

### Access Web Based Management from your Web Browser

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.

For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. If you want to pin the navigation menu on the left side of the screen, click ☰ and then click 🌟.

You can now change the machine's settings.

### Access Web Based Management from Brother iPrint&Scan (Windows/Mac)

1. Start Brother iPrint&Scan.


- Windows

Launch  (Brother iPrint&Scan).

- Mac

In the **Finder** menu bar, click **Go > Applications**, and then double-click the iPrint&Scan icon.

The Brother iPrint&Scan screen appears.



2. If your Brother machine is not selected, click the **Select your Machine** button, and then select your model name from the list. Click **OK**.
3. Click  (**Machine Settings**).
4. Click **All Settings**.  
The Web Based Management page appears.
5. If required, type the password in the **Login** field, and then click **Login**.



---

The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

---

6. If you want to pin the navigation menu on the left side of the screen, click  and then click .

You can now change the machine's settings.




---

You can also access Web Based Management from Brother Mobile Connect for mobile devices.

---

## Access Web Based Management from Brother Utilities (Windows)



1. Launch  (**Brother Utilities**), and then click the drop-down list and select your model name (if not already selected).
2. Click **Tools** in the left navigation bar, and then click **Machine Settings**.  
The Web Based Management page appears.
3. If required, type the password in the **Login** field, and then click **Login**.



---

The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

---

4. If you want to pin the navigation menu on the left side of the screen, click  and then click .

You can now change the machine's settings.

If you change the protocol settings, you must restart the machine after clicking **Submit** to activate the configuration.

After configuring the settings, click **Logout**.

## Related Information

- [Change Machine Settings Using Web Based Management](#)

### Related Topics:

- [Print the Network Configuration Report](#)
  - [Use SSL/TLS](#)
  - [Create a Self-signed Certificate](#)
  - [Install the Self-signed Certificate for Windows users with Administrator Rights](#)
-



## Set or Change a Login Password for Web Based Management

The default password to manage this machine's settings is located on the back of the machine and marked "Pwd". We recommend immediately changing the default password to protect your machine from unauthorised access.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2



If you are using a Domain Name System or enable a NetBIOS name, you can type another name, such as "SharedPrinter" instead of the IP address.

For example:

https://SharedPrinter

If you enable a NetBIOS name, you can also use the node name.


For example:

https://brnxxxxxxxxxxxx

The NetBIOS name can be found in the Network Configuration Report.

3. Do one of the following:
  - If you have previously set your own password, type it, and then click **Login**.
  - If you have not previously set your own password, type the default login password, and then click **Login**.
4. Go to the navigation menu, and then click **Administrator > Login Password**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Following the on-screen **Login Password** guidelines, type your password in the **Enter New Password** field.
6. Retype the password in the **Confirm New Password** field.
7. Click **Submit**.



You can also change the lockout settings in the **Login Password** menu.



### Related Information

- [Change Machine Settings Using Web Based Management](#)

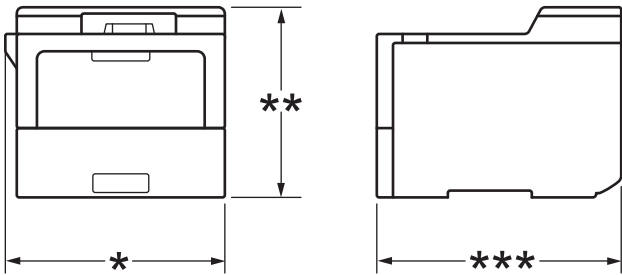
## Appendix

- [Specifications](#)
- [Supplies](#)
- [Important Information About Toner Cartridge Life](#)
- [Accessories](#)
- [Notice](#)
- [Brother Help and Customer Support](#)

## Specifications

- >> General Specifications
- >> Print Media Specifications
- >> Printer Specifications
- >> Interface Specifications
- >> Direct Print Feature Specifications
- >> Supported Protocols and Security Features
- >> Computer Requirements Specifications

### General Specifications

<b>Printer Type</b>		Laser
<b>Print Method</b>		Electrophotographic Laser Printer
<b>Memory Capacity</b>	<b>Standard</b>	1 GB
<b>Machine display</b>		Liquid Crystal Display (LCD) 3.5 in. (87.6 mm) TFT Colour touchscreen LCD <sup>1</sup> Touchscreen 2.85 x 2.70 in. (72.5 x 68.7 mm)
<b>Power Source</b>		220 V to 240 V AC 50/60 Hz
<b>Power Consumption</b> (Average)	<b>Peak</b>	Approximately 1,080 W
	<b>Printing</b> <sup>2</sup>	Approximately 770 W at 25°C
	<b>Printing (Quiet Mode)</b> <sup>2</sup>	Approximately 420 W at 25°C
	<b>Ready</b> <sup>2</sup>	Approximately 85 W at 25°C
	<b>Sleep</b> <sup>2</sup>	Approximately 15.6 W
	<b>Deep Sleep</b> <sup>2</sup>	Approximately 1 W
	<b>Power Off</b> <sup>3 4</sup>	Approximately 0.04 W
<b>Dimensions</b> (Typical outline view)		Unit: mm * : 442 ** : 403 *** : 541
		
<b>Weights (with supplies)</b>		<ul style="list-style-type: none"> <li>• HL-L9430CDN 28.7 Kg</li> <li>• HL-L9470CDN 28.9 Kg</li> </ul>

<b>Noise Level</b>	<b>Sound Pressure</b>	<b>Printing</b>	<ul style="list-style-type: none"> <li>• <b>1-sided printing</b> LpAm = 55 dB (A)</li> <li>• <b>2-sided printing</b> LpAm = 56.5 dB (A)</li> </ul>
		<b>Printing (Quiet Mode)</b>	<ul style="list-style-type: none"> <li>• <b>1-sided printing</b> LpAm = 52 dB (A)</li> <li>• <b>2-sided printing</b> LpAm = 53 dB (A)</li> </ul>
		<b>Ready</b>	LpAm = 17.2 dB(A) <sup>5</sup>
	<b>Sound Power</b>	<b>Printing</b> <sup>6</sup>	<b>Monochrome</b> LWAd = 6.87 B (A)
			<b>Colour</b> LWAd = 6.88 B (A)
		<b>Printing (Quiet Mode)</b>	<b>Monochrome</b> <ul style="list-style-type: none"> <li>• <b>1-sided printing</b> LWAd = 6.37 B (A)</li> <li>• <b>2-sided printing</b> LWAd = 6.68 B (A)</li> </ul>
			<b>Colour</b> <ul style="list-style-type: none"> <li>• <b>1-sided printing</b> LWAd = 6.37 B (A)</li> <li>• <b>2-sided printing</b> LWAd = 6.68 B (A)</li> </ul>
		<b>Ready</b>	LWAd = 3.02B (A)
<b>Temperature</b>	<b>Operating</b>	From 10°C to 32°C <sup>7</sup>	
	<b>Storage</b>	From 0°C to 40°C	
<b>Humidity</b>	<b>Operating</b>	20% to 80% (without condensation)	
	<b>Storage</b>	10% to 90% (without condensation)	

1 Measured diagonally.

2 Measured when the machine is connected to the USB interface.

3 Measured according to IEC 62301 Edition 2.0.

4 Power consumption varies slightly depending on the usage environment.

5 If the fan motor is on: LpAm = 17.2 dB(A)

6 Measured in accordance with ISO 7779.

7 To ensure the high print quality, the maximum ambient temperature we recommend is 32°C. The maximum ambient temperature to safely use this machine is 35°C.

## Print Media Specifications

<b>Paper Input</b>	<b>Paper Tray (Standard)</b>	<b>Paper Type</b>	Plain Paper, Letterhead, Coloured Paper, Thin Paper, Recycled Paper, Thick Paper, Thicker Paper
		<b>Paper Size</b>	A4, Letter, B5 (JIS), B5 (ISO), A5, A5 (Long Edge), B6 (JIS), A6, Executive, Legal, Mexico Legal, India Legal, Folio, 16K (195x270 mm), A4 Short (270mm Paper)
		<b>Paper Weight</b>	60 to 230 g/m <sup>2</sup>
		<b>Maximum Paper Capacity</b>	Up to 520 sheets of 80 g/m <sup>2</sup> Plain Paper

<b>Paper Input</b>	<b>Multi-purpose tray (MP tray)</b>	<b>Paper Type</b>	Plain Paper, Letterhead, Coloured Paper, Thin Paper, Thick Paper, Thicker Paper, Recycled Paper, Bond, Label, Envelope, Env.Thin, Env.Thick, Glossy Paper
		<b>Paper Size</b>	<ul style="list-style-type: none"> <li>Width: 76.2 to 215.9 mm</li> <li>Length: 127 to 355.6 mm</li> <li>Envelope: COM-10, DL, C5, Monarch</li> </ul>
		<b>Paper Weight</b>	60 to 230 g/m <sup>2</sup>
		<b>Maximum Paper Capacity</b>	<ul style="list-style-type: none"> <li>Up to 100 Sheets of 80 g/m<sup>2</sup> Plain Paper</li> <li>Envelope: 15 envelopes</li> </ul>
	<b>Paper Tray 2, 3, 4 (Optional) <sup>1</sup></b>	<b>Paper Type</b>	Plain Paper, Letterhead, Coloured Paper, Thin Paper, Recycled Paper
		<b>Paper Size</b>	A4, Letter, B5 (JIS), A5, Executive, Legal, Mexico Legal, India Legal, Folio, 16K (195x270 mm), A4 Short (270mm Paper)
		<b>Paper Weight</b>	60 to 105 g/m <sup>2</sup>
		<b>Maximum Paper Capacity</b>	<ul style="list-style-type: none"> <li>LT-330CL Up to 250 sheets of 80 g/m<sup>2</sup> Plain Paper</li> <li>LT-340CL Up to 500 sheets of 80 g/m<sup>2</sup> Plain Paper</li> </ul>
<b>Paper Output <sup>2</sup></b>	<b>Face Down Output Tray</b>		Up to 250 Sheets of 80 g/m <sup>2</sup> Plain Paper (face down delivery to the face down output paper tray)
	<b>Face Up Output Tray</b>		One sheet (face up delivery to the face up output tray)
	<b>Mailbox (Optional)</b>		100 sheets x 4 bins of 80 g/m <sup>2</sup> 400 sheets x 2 bins of 80 g/m <sup>2</sup>
<b>2-sided</b>	<b>Automatic 2-sided Printing</b>	<b>Paper Type</b>	Plain Paper, Letterhead, Coloured Paper, Thin Paper, Thick Paper, Thicker Paper, Recycled Paper, Glossy Paper
		<b>Paper Size</b>	Select the paper size you want to use by sliding the 2-sided lever: <ul style="list-style-type: none"> <li>A4, A4 Short (270mm Paper)</li> <li>Letter, Legal, Mexico Legal, India Legal, Folio</li> </ul>
		<b>Paper Weight</b>	60 to 230 g/m <sup>2</sup>

<sup>1</sup> Maximum number of Lower Trays: Up to three LT-330CL Lower Trays, or two LT-340CL, or a combination of one LT-330CL and one LT-340CL.

<sup>2</sup> For labels, we recommend removing the printed sheets from the output paper tray immediately after they exit the machine to avoid the possibility of smudging.

## Printer Specifications

<b>Automatic 2-sided Print</b>	Yes
<b>Emulation</b>	PCL5e, PCL5c, PCL6 (PCL XL Class3.0), BR-Script3, PDF Version 1.7, XPS Version 1.0
<b>Resolution</b>	600 x 600 dpi, 2,400 dpi class (2400 x 600) quality
<b>Print Speed <sup>1 2</sup></b>	<b>1-sided Print <sup>3</sup></b> <b>Monochrome</b> Up to 42 pages/minute (Letter size) Up to 40 pages/minute (A4 size)

<b>Print Speed</b> <sup>1 2</sup>	<b>1-sided Print</b> <sup>3</sup>	<b>Colour</b> Up to 42 pages/minute (Letter size) Up to 40 pages/minute (A4 size)
	<b>2-sided Print</b>	<b>Monochrome</b> • (HL-L9430CDN) Up to 29 sides/minute (Up to 14 sheets/minute) (Letter size) Up to 28 sides/minute (Up to 14 sheets/minute) (A4 size) • (HL-L9470CDN) Up to 42 sides/minute (Up to 21 sheets/minute) (Letter size) Up to 40 sides/minute (Up to 20 sheets/minute) (A4 size)
		<b>Colour</b> • (HL-L9430CDN) Up to 29 sides/minute (Up to 14 sheets/minute) (Letter size) Up to 28 sides/minute (Up to 14 sheets/minute) (A4 size) • (HL-L9470CDN) Up to 42 sides/minute (Up to 21 sheets/minute) (Letter size) Up to 40 sides/minute (Up to 20 sheets/minute) (A4 size)
<b>First Print Time</b> <sup>4 5 6 7</sup>	<b>Monochrome</b> Less than 10 seconds at 23°C /230 V	
	<b>Colour</b> Less than 10 seconds at 23°C /230 V	

- 1 The print speed may change depending on the type of document you print.
- 2 The print speed may be slower when the machine is connected by wireless LAN.
- 3 Measured in accordance with ISO/IEC 24734.
- 4 Printing from Ready mode and standard tray.
- 5 Length of time from when the machine is started until paper output is complete (except when the machine is turned on or when an error is fixed).
- 6 May vary when calibration or registration is in progress.
- 7 This applies when printing on A4- or Letter-size paper from the standard tray. It could be longer however, depending on the paper size and the amount of print data.

## Interface Specifications

<b>USB</b> <sup>1 2</sup>	Hi-Speed USB 2.0 Use a USB 2.0 interface cable that is no more than 2 metres long.
<b>LAN</b>	10Base-T/100Base-TX/1000Base-T <sup>3</sup>
<b>Wireless LAN</b> <sup>4</sup>	IEEE 802.11a/b/g/n (Infrastructure Mode) IEEE 802.11a/g/n (Wi-Fi Direct®)
<b>NFC</b> <sup>5</sup>	Yes

- 1 Your machine has a USB 2.0 Hi-Speed interface. The machine can also be connected to a computer that has a USB 1.1 interface.
- 2 Third-party USB hub devices are not supported.
- 3 Use a Category 5e (or greater) network cable.
- 4 For certain models, the wireless network connection can be used only when the optional Wireless Module is installed.
- 5 When you connect an external IC card reader, use a HID class driver supported device.

## Direct Print Feature Specifications

<b>Compatibility</b>	PDF version 1.7, JPEG, Exif+JPEG, PRN (created by the machine's own printer driver), TIFF (scanned by Brother models), XPS version 1.0
<b>Interface</b>	USB direct interface : Front x 1, Rear x 1

## Supported Protocols and Security Features

### Ethernet

10Base-T/100Base-TX/1000Base-T

### Wireless LAN (5 GHz)

IEEE 802.11a/n (Infrastructure Mode), IEEE 802.11a/n (Wi-Fi Direct)

### Wireless LAN (2.4 GHz)

IEEE 802.11b/g/n (Infrastructure Mode), IEEE 802.11g/n (Wi-Fi Direct)

### Protocols (IPv4)

ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), WINS/NetBIOS name resolution, DNS Resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMP, Web Services (Print), CIFS client, SNT client, LDAP

### Protocols (IPv6)

NDP, RA, DNS resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMPv6, Web Services (Print), CIFS Client, SNT Client, LDAP

### Network Security (Wired)

SMTP-AUTH, SSL/TLS (IPPS, HTTPS, SMTP), SNMP v3, 802.1x (EAP-MD5, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPsec

### Network Security (Wireless)

SMTP-AUTH, SSL/TLS (IPPS, HTTPS, SMTP), SNMP v3, 802.1x (EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPsec

### Wireless Network Security

WEP 64/128 bit, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) (Wi-Fi Direct supports WPA2-PSK (AES) only)

### Wireless Certification

Wi-Fi Certification Mark License (WPA™/WPA2™ - Enterprise, Personal), Wi-Fi Protected Setup™ (WPS) Identifier Mark License, Wi-Fi CERTIFIED™ Wi-Fi Direct

## Computer Requirements Specifications

### Supported Operating Systems And Software Functions

Computer Platform & Operating System Version		Computer Interface				Processor	Hard Disk Space to Install	
		Parallel (IEEE1284)	USB <sup>1</sup>	10Base-T/100Base-TX/1000Base-T (Ethernet)	Wireless <sup>2</sup> 802.11a/b/g/n		For Drivers	For Applications (including Drivers)
Windows Operating System	Windows 7 SP1 / 8.1 <sup>1 3</sup>	N/A	Printing		32 bit (x86) or 64 bit (x64) processor	50 MB	1.6 GB	
	Windows 10 Home / 10 Pro / 10 Education / 10 Enterprise <sup>1</sup>		Printing				50 MB	
	Windows Server 2008 SP2 <sup>3</sup>							

	Windows Server 2008 R2 <sup>3</sup>			64 bit (x64) processor		
	Windows Server 2012					
	Windows Server 2012 R2					
	Windows Server 2016					
	Windows Server 2019					
Mac Operating System <sup>4</sup>	macOS v10.14.x	Printing		64 bit (x64) processor	N/A	500 MB
	macOS v10.15.x					
	macOS v11					

1 Third-party USB ports are not supported.

2 For certain models, the optional Wireless Module is required.

3 Windows 7 / Server 2008 / Server 2008 R2 supported by Extended Security Updates until Jan 10, 2023.

4 macOS Disclaimer. AirPrint capable: Printing via Mac requires using AirPrint. Mac printer driver is not provided.

For the latest driver updates, go to your model's **Downloads** page at [support.brother.com](https://support.brother.com).

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## Related Information

- [Appendix](#)

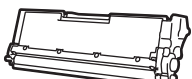
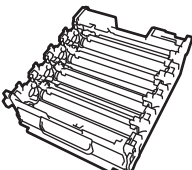


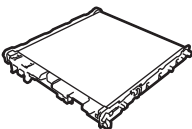
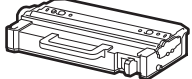
## Supplies

When the time comes to replace supplies, such as the toner cartridge or drum unit, an error message will appear on your machine's control panel or in the Status Monitor. For more information about the supplies for your machine, visit [www.brother.com/original](http://www.brother.com/original) or contact your local Brother dealer.



The Supply Model Name will vary depending on your country and region.

Supply Items	Supply Model Name	Approximate Life (Page Yield)	Applicable Models
<b>Toner Cartridge</b> 	Standard Toner: TN881	<ul style="list-style-type: none"> <li>Black: Approximately 9,000 pages<sup>1 2</sup></li> <li>Cyan / Magenta / Yellow: Approximately 6,500 pages<sup>1 2</sup></li> </ul>	HL-L9430CDN/HL-L9470CDN
	High Yield Toner: TN881XL	<ul style="list-style-type: none"> <li>Black: Approximately 12,000 pages<sup>1 2</sup></li> <li>Cyan / Magenta / Yellow: Approximately 9,000 pages<sup>1 2</sup></li> </ul>	HL-L9430CDN/HL-L9470CDN
	Super High Yield Toner: TN881XXL	<ul style="list-style-type: none"> <li>Black: Approximately 15,000 pages<sup>1 2</sup></li> <li>Cyan / Magenta / Yellow: Approximately 12,000 pages<sup>1 2</sup></li> </ul>	HL-L9430CDN/HL-L9470CDN
	Inbox Toner: (Supplied with your machine)	<ul style="list-style-type: none"> <li>Black: Approximately 6,500 pages<sup>1 2</sup></li> <li>Cyan / Magenta / Yellow: Approximately 5,000 pages<sup>1 2</sup></li> </ul>	HL-L9430CDN
		<ul style="list-style-type: none"> <li>Black: Approximately 6,500 pages<sup>1 2</sup></li> <li>Cyan / Magenta / Yellow: Approximately 5,000 pages<sup>1 2</sup></li> </ul>	HL-L9470CDN
<b>Drum Unit</b> 	DR881CL	Approximately 100,000 pages <sup>3</sup>	HL-L9430CDN/HL-L9470CDN

Supply Items	Supply Model Name	Approximate Life (Page Yield)	Applicable Models
<b>Belt Unit</b> 	BU800CL	Approximately 150,000 pages <sup>4</sup>	HL-L9430CDN/HL-L9470CDN
<b>Waste Toner Box</b> 	WT800CL	Approximately 100,000 pages <sup>5 6</sup>	HL-L9430CDN/HL-L9470CDN

<sup>1</sup> The approximate cartridge yield is declared in accordance with ISO/IEC 19798.

<sup>2</sup> A4 or Letter size single-sided pages

<sup>3</sup> Approximately 100,000 pages based on three pages per job (A4/Letter single-sided pages). The number of pages may be affected by a variety of factors including but not limited to media type and media size.

<sup>4</sup> Approximately 150,000 pages based on two pages per job (A4/Letter single-sided pages). The number of pages may be affected due to a variety of factors including but not limited to media type and media size.

<sup>5</sup> Approximate waste toner box yield is declared in accordance with ISO/IEC 19798.

<sup>6</sup> The number of pages may be affected due to a variety of factors including but not limited to media type and media size.



## Related Information

- [Appendix](#)

## Important Information About Toner Cartridge Life

### Toner Cartridge Life

This product detects the life of the toner cartridges using the following two methods:

- Detection by counting the dots of each colour that are necessary to create an image
- Detection by counting the rotations of the developer roller

This product has a function that will count the dots of each colour used to print every document and the rotations of each toner cartridge's developer roller. The print operation will stop when either of the upper limits is reached. The upper limit is set above the number of dots or rotations that would be required for the cartridge to perform consistently with its advertised page yield. This function is intended to reduce the risk of poor print quality and damage to the machine.

There are two messages that indicate when the toner is low or needs replacing: Toner Low and Replace Toner.

Toner Low is displayed on the LCD when the number of dots or rotations of the developer roller nears its maximum count: Replace Toner is displayed on the LCD when the number of dots or rotations of the developer roller reaches its maximum count.

### Colour Correction

The number of developer roller rotations that are counted may not only be for normal operations, such as printing and copying, but also for machine adjustments, such as Colour Calibration and Colour Registration.

#### Colour Calibration (Adjustment of Colour Density)

To obtain stable print quality, the density of each toner cartridge needs to be maintained at a fixed value. If the density balance between the colours cannot be kept, the tint becomes unstable, and accurate colour reproduction becomes unavailable. The toner density can change due to chemical changes to the toner that affect its electrical charge, deterioration of the developer unit, and temperature and humidity levels in the machine. During calibration, the density level adjustment test patterns are printed on the belt unit.

Calibration is mainly performed at the following times:

- When the user manually selects Correction Start from the operation panel or the printer driver.  
(Please perform calibration if colour density needs to be improved.)
- When a used toner cartridge or drum unit is replaced with a new one.
- When the machine detects that the ambient temperature and humidity have changed.
- When a specified number of printed pages is reached.

#### Colour Registration (Correction of Colour Position)

In this machine, the drum unit and developer unit are prepared for black (K), yellow (Y), magenta (M), and cyan (C), respectively. Four colour images are combined into one image, and therefore colour registration errors (for example, how the four colour images align) might occur. When registration errors occur, registration correction test patterns are printed on the belt unit.

Registration is mainly performed at the following times:

- When calibration is performed by selecting Correction Start from the operation panel.  
(Please perform registration if a colour registration error needs to be corrected.)
- When a specified number of printed pages is reached.



### Related Information

- [Appendix](#)

## Accessories

Availability of accessories may vary depending on your country or region. For more information about the accessories for your machine, visit [www.brother.com/original](http://www.brother.com/original) or contact your Brother dealer or Brother customer service.

Model name	Items	Applicable Models
LT-330CL	Lower Tray (250 sheets)	HL-L9430CDN/HL-L9470CDN <sup>1</sup>
LT-340CL	Lower Tray (500 sheets)	HL-L9430CDN/HL-L9470CDN <sup>1</sup>
MX-4000	Mailbox	HL-L9430CDN/HL-L9470CDN
SF-4000 (Available only for some countries)	Stapler Finisher	HL-L9430CDN/HL-L9470CDN
NC-9000w (Available only for some countries)	Wireless Module	HL-L9430CDN/HL-L9470CDN

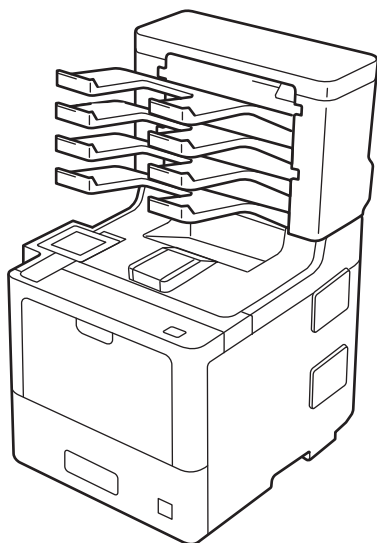
<sup>1</sup> Maximum number of Lower Trays: Up to three LT-330CL Lower Trays, or two LT-340CL, or a combination of one LT-330CL and one LT-340CL.



### Related Information

- [Appendix](#)
  - [The Mailbox Unit](#)

## The Mailbox Unit



The optional Mailbox (MX) unit gives you increased control over your machine's print output. You can assign the unit's four output bins to specific users, organise specific print jobs more efficiently, and extend the machine's printout capacity.

Use the Mailbox unit as a:

- **Mailbox:** Assign each bin to a specific user or group, and send print jobs directly to each recipient's bin.
- **Stacker:** When printing large documents, use the bins to increase your machine's output tray capacity. When the machine's output tray is full, the machine ejects the pages into the Mailbox bins.  
To increase the machine's output capacity to a maximum of 1,050 sheets (including the standard output tray), remove bins 2 and 4.
- **Sorter:** When printing multiple copies, set the printer driver to eject each copy into a different bin.

Set your preferences for **Stacker (MX Stacker)** and **Sorter (MX Sorter)** in your printer driver or on your machine's LCD.



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For information regarding settings from your machine, see *Related Information*.

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### To set MX Stacker or MX Sorter in your printer driver (for Windows)

In your printer driver, click the **Advanced** tab, click the **Output Tray** drop-down menu, and select either **MX Stacker** or **MX Sorter**. Click **OK**.

### To set MX Stacker or MX Sorter in your printer driver (for Mac)

In your printer driver, select **Print Settings**, click the **Output Tray** pop-up menu, and select either **MX Stacker** or **MX Sorter**.



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For more information on printer driver settings, see *Related Information*.

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### Related Information


- [Accessories](#)
  - [Set MX Stacker or MX Sorter Using the Machine's LCD](#)
  - [Use Standard Tray When Full](#)
  - [Set the Mailbox Continue Feature](#)
  - [Assign a Mailbox Bin to a User or Group](#)

#### Related Topics:

- [Print Settings \(Windows\)](#)

## Set MX Stacker or MX Sorter Using the Machine's LCD

When you use the Mailbox unit, set your preferences for Stacker and Sorter from the machine's LCD.

1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting] > [Output Tray] > [MX Stacker] or [MX Sorter].

### Related Information

- [The Mailbox Unit](#)
-

## Use Standard Tray When Full

The **Use Std. Tray when full** feature allows a large print job to continue printing, even if the Mailbox bins are full. If you select this option in your printer driver, the machine continues the print job, ejecting the remaining pages onto the machine's main output tray when the Mailbox bins are full.



This setting's name is for Windows and may vary for Mac depending on your country.



### Related Information


- [The Mailbox Unit](#)

## Set the Mailbox Continue Feature

If a print job stopped because all the bins are full, the MX (Mailbox) Continue feature allows the machine to resume the print job after you remove the printed pages from any of the printout locations.

Setting	Description
On	Your machine resumes the print job using the first empty output tray or Mailbox bin.
Off	You must remove the printed pages from the output tray and all Mailbox bins to resume the print job.

By default, MX Continue is off. To turn on MX Continue:

Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting] > [MX Continue] > [On].

### Related Information

- [The Mailbox Unit](#)



## Assign a Mailbox Bin to a User or Group

To organise print jobs by sending them to a specific recipient, assign each Mailbox bin to an individual or to a group.



- This feature is available only when Secure Function Lock 3.0 is on.
- Make sure you select **Auto Detect** (default setting) from **Output Tray** in the printer driver when you send the print job.
- This setting's name is for Windows and may vary for Mac depending on your country.

Anyone using your Brother machine can send a print job to a specific bin but the administrator must assign the bins to users or groups first.

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the machine's IP address).

For example:

https://192.168.1.2


3. If required, type the password in the **Login** field, and then click **Login**.



The default password to manage this machine's settings is located on the back of the machine and marked "Pwd".

4. Go to the navigation menu, and then click **Administrator > Restriction Management** or **User Restriction Function**.



Start from , if the navigation menu is not shown on the left side of the screen.

5. Select **Secure Function Lock**.
6. Click **Submit**.
7. Click the **Restricted Functions** menu.
8. In the **User List / Restricted Functions** field, type a group name or user name.
9. Click the **Output** drop-down list, and then select the output tray for each user.
10. Click **Submit**.
11. Go to the navigation menu, and then click **Print > Tray**.
12. Click the **Output** drop-down list, and then select **SFL setting**.
13. Click **Submit**.



### Related Information

- [The Mailbox Unit](#)

## Notice

### To create a better environment

Please cooperate.

Firstly, thank you very much indeed for using our Brother products!

Brother focuses on the earth environment concerned. And make a basic policy which is to concern about the earth environment, including any workflow from product development to discard. The local citizen should be responsible for local society and its environment during these environment protection activities.

Therefore, we hope you'll take part in this environment plan, and pay attention to environment protection points as below while discarding used consumables.

1. Please deliver the used package materials to relevant waste disposal office for recycle.
2. When you discard used consumables, please follow and carry on relevant local regulations properly.
3. When the machine need replacing parts for the maintenance and repair, please discard used circuit boards, used electrical parts and products as disposed electrical materials.
4. The power consumption is 0 W after you turn off the machine and unplug it from the AC outlet.
5. Some parts in the machine can be used on the same series model machines which are produced in the same factory.

Note: If you want to replace the parts, please contact Brother Authorized Service Centers.

6. Machines with an LWAd > 63.0 dB(A) are recommended to be set up in separate rooms due to their noise emissions.
7. The machine can use recycled paper.
8. Ensure that during use the machine is used in a well ventilated area.
9. Brother will accept machines and consumables for recycling. For details of the return scheme please refer to the webpage

[www.brother.cn/company/info/declaration/20090304.html](http://www.brother.cn/company/info/declaration/20090304.html).



#### Related Information

- [Appendix](#)

## Brother Help and Customer Support

### IMPORTANT

For technical and operational assistance, call the call center in mainland China.

To search Frequently asked questions (FAQs)/ASCs/Driver/Manuals, etc, please visit our service website:

[support.brother.com](http://support.brother.com)

To search where to purchase consumables, please visit the official website of BROTHER (CHINA) LTD.:

[www.brother.cn](http://www.brother.cn)



### Related Information

- [Appendix](#)

# brother

These machines are approved for use in the country of purchase only. Local Brother companies or their dealers will support only machines purchased in their own countries.



CHN-ENG  
Version A