



# Online User's Guide

**HL-T4000DW**

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## Before You Use Your Brother Machine

- [Definitions of Notes](#)
- [Trademarks](#)
- [Important Note](#)

## 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.
<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 Brother Machine](#)

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### Related Information

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

## Important Note

- Do not use this product outside the country of purchase as it may violate the wireless telecommunication and power regulations of that country.
- 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 in this User's Guide are for illustration purposes only and may differ from the actual screens.
- Unless otherwise specified, the screens in this manual are from Windows 7 and macOS v10.12.x. Screens on your computer may vary depending on your operating system.
- The contents of this guide and the specifications of this product are subject to change without notice.



### Related Information

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

## Introduction to Your Brother Machine

- [Before Using Your Machine](#)
- [Control Panel Overview](#)
- [Touchscreen LCD Overview](#)
- [Settings Screen Overview](#)
- [Navigate the Touchscreen](#)
- [Access Brother Utilities \(Windows\)](#)
- [USB / Ethernet Port Locations on Your Brother 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.

### Selecting the correct type of paper

For high quality printing, it is important to select the correct type of paper. Be sure to read the information about acceptable paper before buying paper, and to determine the printable area depending on the settings in the printer driver.

### Firewall (Windows)

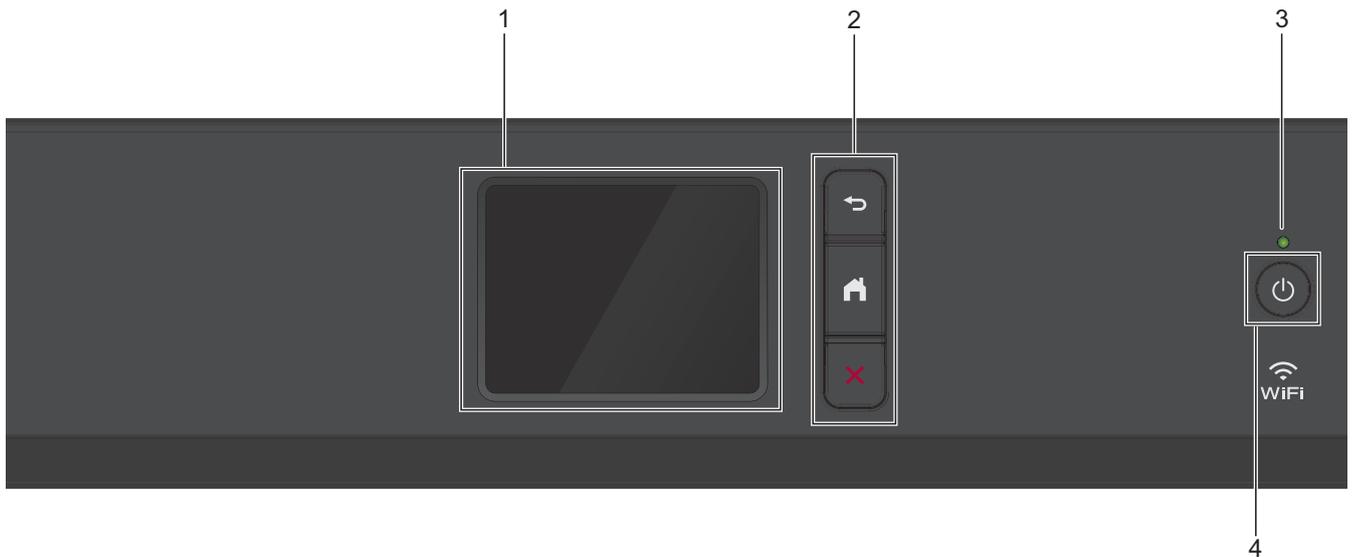
If your computer is protected by a firewall and you are unable to network print, you may need to configure the firewall settings. If you are using the Windows Firewall and you installed the drivers using the steps in the installer, the necessary firewall settings have been already set. If you are using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



### Related Information

- [Introduction to Your Brother Machine](#)
-

## Control Panel Overview



### 1. Touchscreen Liquid Crystal Display (LCD)

Access menus and options by pressing them on the touchscreen.

### 2. Menu buttons



(Back)

Press to go back to the previous menu.



(Home)

Press to return to the Home screen.



(Cancel)

Press to cancel an operation.

### 3. LED Power Indicator

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

When the machine is in Sleep Mode, the LED blinks.

### 4. Power On/Off

Press  to turn the machine on.

Press and hold down  to turn the machine off. The touchscreen displays [Shutting Down] and stays on for a few seconds before turning itself off.

If you turn the machine off using , it will still clean the print head periodically to maintain print quality. To prolong print head life, provide better ink efficiency, and maintain print quality, keep your machine connected to a power source at all times.

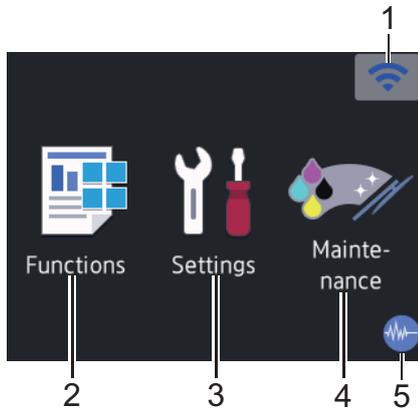
## Related Information

- [Introduction to Your Brother Machine](#)

## Touchscreen LCD Overview

From the Home screen, you can access the Wi-Fi® setup, Functions, Settings, and Maintenance screens.

### Home Screen



This screen shows the machine's status when the machine is idle. When displayed, it indicates that your machine is ready for the next command.

#### 1. **Wireless Status**

Each icon in the following table shows the wireless network status:

	Your machine is not connected to the wireless access point/router. Press this button to configure wireless settings. For more detailed information, see the <i>Quick Setup Guide</i> .
	The wireless network is connected. A three-level indicator in each of the Home screens displays the current wireless signal strength.
	The wireless access point/router cannot be detected.
	The wireless setting is disabled.



You can configure wireless settings by pressing the Wireless Status button.

#### 2. **[Functions]**

Press to access the [Functions] menu.

[Web] / [USB] / [Download Software]

#### 3. **[Settings]**

Press to access the [Settings] menu.

#### 4. **[Maintenance]**

Press to access the [Maintenance] menu.

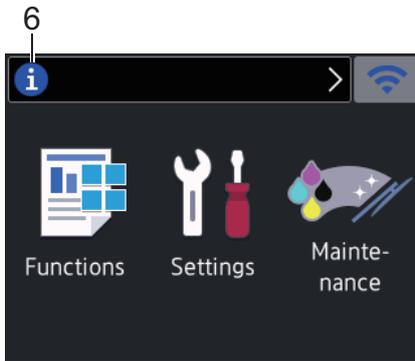
#### 5. **Quiet Mode**

This icon appears when the [Quiet Mode] setting is set to [On].

The Quiet Mode setting can reduce printing noise. When Quiet Mode is turned on, the print speed becomes slower.

---

## 6. Information icon

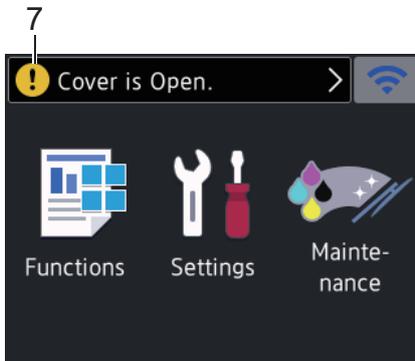


New information from Brother appears in the information bar when the notification settings such as [Message from Brother] and [Firmware Auto Check] are set to [On].

(Internet connection is needed, and data rates may apply.)

Press  to view the details.

## 7. Warning icon



The warning icon  appears when there is an error or maintenance message; press  to view the details, and then press  to return to the Home screen.

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### Related Information

- [Introduction to Your Brother Machine](#)

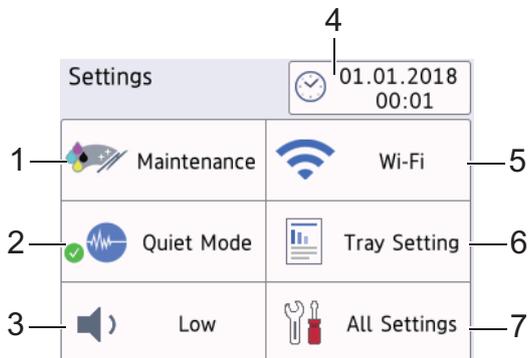
#### Related Topics:

- [Reduce Printing Noise](#)
  - [Settings Screen Overview](#)
  - [Error and Maintenance Messages](#)
-

## Settings Screen Overview

The touchscreen shows the machine's status when you press  [Settings].

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



### 1. [Maintenance]

Press to access the following menus:

- [Improve Print Quality]
- [Print Head Cleaning]
- [Remove Paper Scraps]
- [Clean Paper Pick-up Roller] (Available only for some countries.)
- [Ink Low Notice]
- [Ink Bottle Model]
- [Print Setting Options]

### 2. [Quiet Mode]

Displays the Quiet Mode setting.

Press to access the [Quiet Mode] menu.

When this menu is set to [On],  is displayed on the Home screen.

### 3. [Beep]

Adjust the beeper volume.

### 4. [Date & Time]

Displays the date and time.

Press to access the [Date & Time] menu.

### 5. [Wi-Fi]

Press to set up a wireless network connection.

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

### 6. [Tray Setting]

Press to access the [Tray Setting] menu.

Use options in the Tray setting menu to change the paper size and type.

### 7. [All Settings]

Press to access a menu of all of your machine's settings.

## Related Information

- [Introduction to Your Brother Machine](#)

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**Related Topics:**

- [Touchscreen LCD Overview](#)
-

## Navigate the Touchscreen

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.

### NOTE

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



### Related Information

- [Introduction to Your Brother Machine](#)
-

## 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 7

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

- Windows 8

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

- Windows 8.1

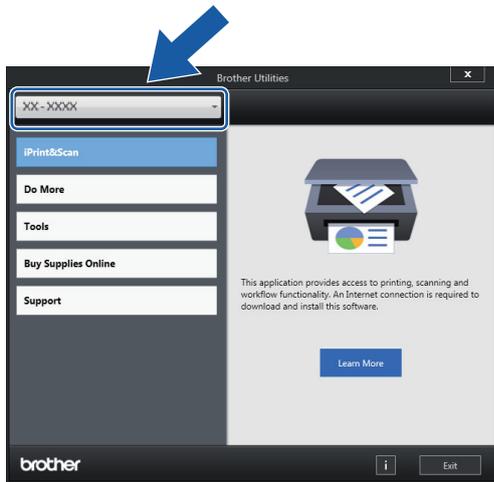
Move your mouse to the lower left corner of the **Start** screen and click  (if using a touch-based device, swipe up from the bottom of the **Start** screen to bring up the **Apps** screen).

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

- Windows 10

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

2. Select your machine.



3. Select the operation you want to use.



### Related Information

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

## Uninstall the Brother Software and Drivers (Windows)

1. Do one of the following:

- Windows 7

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

- Windows 8

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

- Windows 8.1

Move your mouse to the lower left corner of the **Start** screen and click  (if 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 10

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

2. Click the drop-down list, and then select your model name (if not already selected). Click **Tools** in the left navigation bar, and then click **Uninstall**.

Follow the instructions in the dialog box to uninstall the software and drivers.



### Related Information

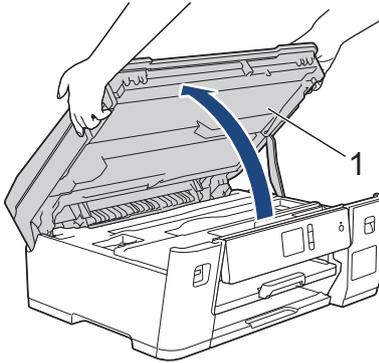
- [Access Brother Utilities \(Windows\)](#)

## USB / Ethernet Port Locations on Your Brother Machine

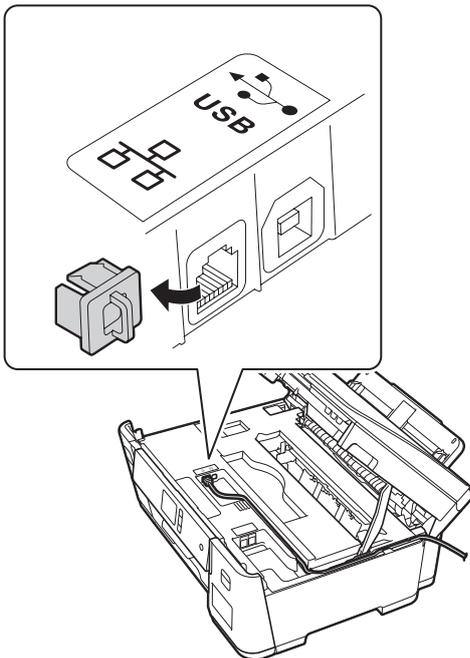
The USB and Ethernet ports are located inside the machine.

- When connecting the USB or Ethernet cable, follow the instructions in the installation process.
- To install the **Full Driver & Software Package** necessary for operating your machine, insert the Brother installation disc into your computer, or go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).

1. Place both hands under the plastic tabs on both sides of the machine to lift the top cover (1) into the open position.

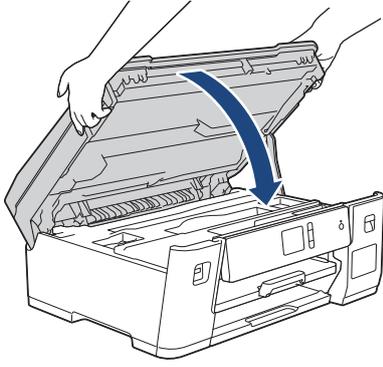


2. Locate the correct port (based on the cable you are using) inside the machine as shown.



Carefully guide the cable through the cable channel and out the back of the machine.

3. Gently close the top cover using both hands.



## Related Information

- [Introduction to Your Brother Machine](#)

## Paper Handling

- [Load Paper](#)

## Load Paper

- [Load Paper in the Paper Tray](#)
- [Load Paper in the Multi-purpose Tray \(MP Tray\)](#)
- [Unprintable Area](#)
- [Paper Settings](#)
- [Acceptable Paper and Other Print Media](#)
- [Error and Maintenance Messages](#)
- [Paper Handling and Printing Problems](#)

## Load Paper in the Paper Tray

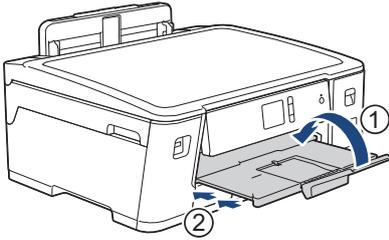
- Load A4, Letter, or Executive Size Paper in Tray #1
- Load A3, Ledger, or Legal Size Paper in Tray #1
- Load Photo Paper in Paper Tray #1
- Load Envelopes in Paper Tray #1

## Load A4, Letter, or Executive Size Paper in Tray #1

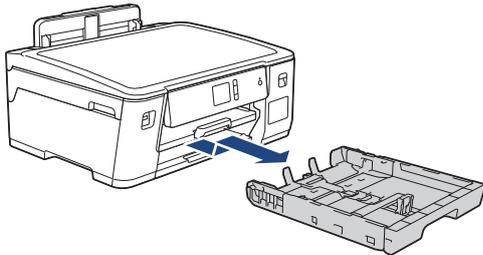
- If the [Check Paper] setting is set to [On] and you pull the paper tray out of the machine, a message appears on the LCD asking if you want to change the paper type and paper size.
- When you load a different paper size in the tray, you must change the Paper Size setting in the machine or the paper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

Doing this enables the machine to automatically feed paper from the appropriate tray if Auto Tray Select has been set in the machine or printer driver.

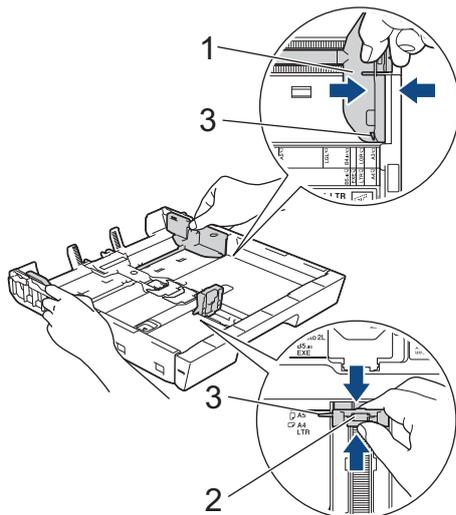
1. If the paper support flap (1) is open, close it, and then close the paper support (2).



2. Pull the paper tray completely out of the machine as shown by the arrow.

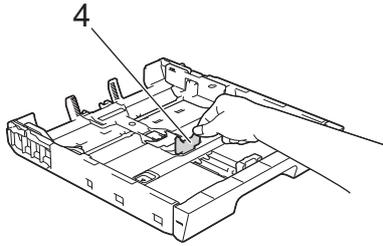


3. Gently press and slide the paper width guides (1) and then the paper length guide (2) to fit the paper size. Make sure the triangular mark (3) on the paper width guide (1) and paper length guide (2) line up with the marks for the paper you are using.

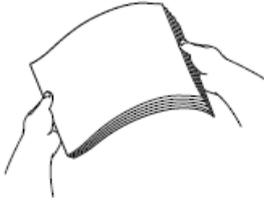




If you load Executive or B5 (JIS) size paper, lift up the stopper (4).



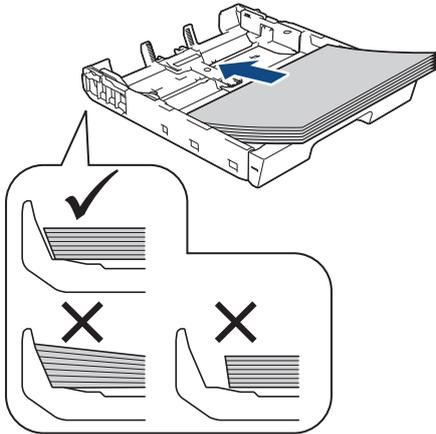
4. Fan the stack of paper well to avoid paper jams and misfeeds.



Always make sure the paper is not curled or wrinkled.

5. Gently load paper in the paper tray with the printing surface *face down*.

#### Landscape orientation



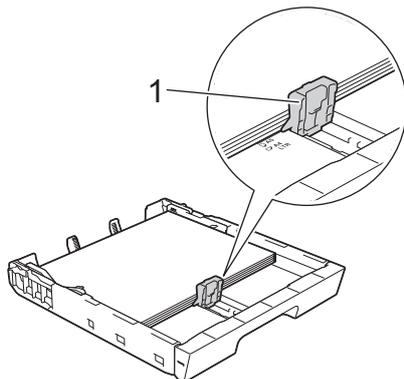
### IMPORTANT

Be careful not to push the paper in too far; it may lift at the back of the tray and cause paper feed problems.



To add paper before the tray is empty, remove the paper from the tray and combine it with the paper you are adding. Always fan the stack of paper well to prevent the machine from feeding multiple pages.

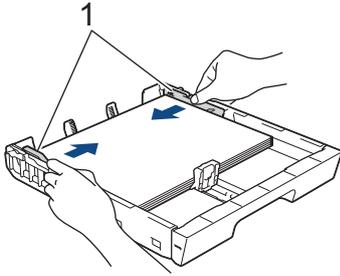
6. Make sure the paper length guide (1) touches the edges of the paper.



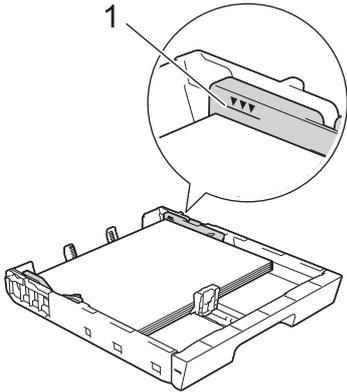
7. Gently adjust the paper width guides (1) to fit the paper.

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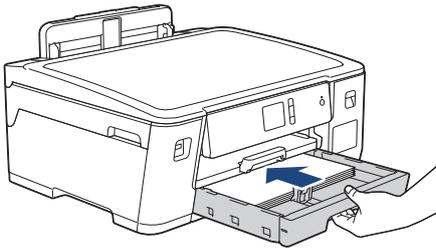
Make sure the paper guides touch the edges of the paper.



8. Make sure the paper is flat in the tray and below the maximum paper mark (1).  
Overfilling the paper tray may cause paper jams.



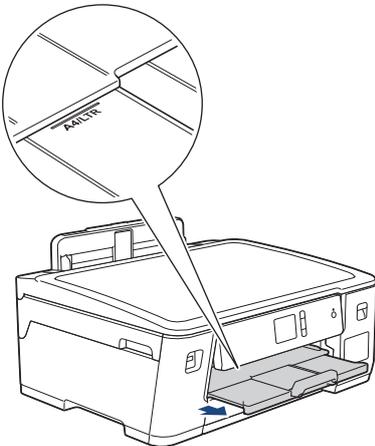
9. Slowly push the paper tray completely into the machine.



## IMPORTANT

DO NOT push the paper tray into the machine forcefully or quickly. Doing this may cause paper jams or paper feed problems.

10. Pull out the paper support until it locks into place.



11. Change the paper size setting in the machine's menu, if needed.



## Related Information

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

### **Related Topics:**

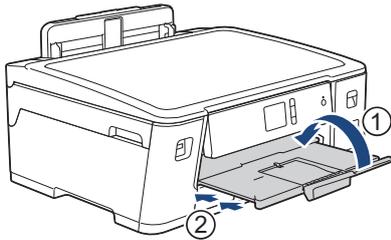
- [Change the Check Paper Size Setting](#)
- [Choose the Right Print Media](#)
- [Change the Paper Size and Paper Type](#)

## Load A3, Ledger, or Legal Size Paper in Tray #1

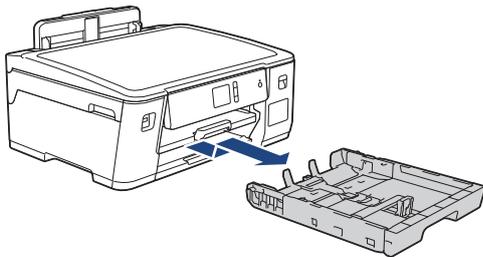
- If the [Check Paper] setting is set to [On] and you pull the paper tray out of the machine, a message appears on the LCD asking if you want to change the paper type and paper size.
- When you load a different paper size in the tray, you must change the Paper Size setting in the machine or the paper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

Doing this enables the machine to automatically feed paper from the appropriate tray if Auto Tray Select has been set in the machine or printer driver.

1. If the paper support flap (1) is open, close it, and then close the paper support (2).

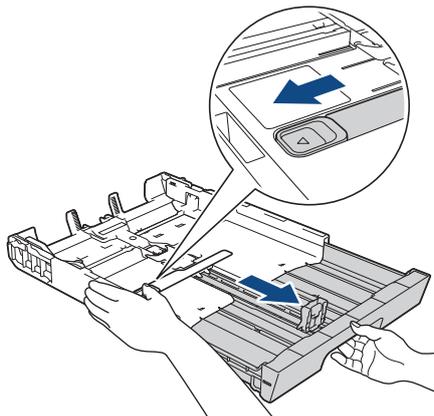


2. Pull the paper tray completely out of the machine as shown by the arrow.

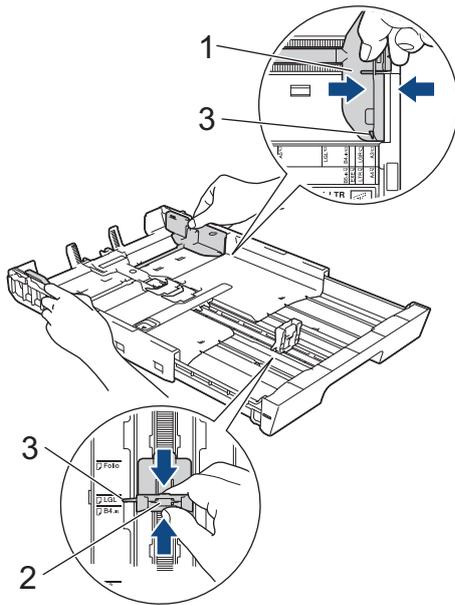


3. Rest the tray on a flat surface.

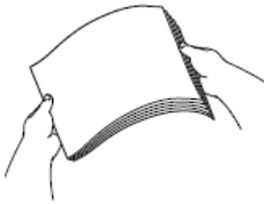
Push the green slider to the left and then extend the tray until it locks into place.



- Gently press and slide the paper width guides (1) and then the paper length guide (2) to fit the paper size. Make sure the triangular mark (3) on the paper width guide (1) and paper length guide (2) line up with the marks for the paper you are using.



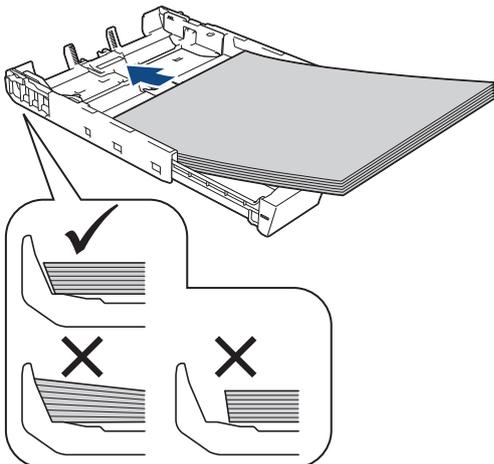
- Fan the stack of paper well to avoid paper jams and misfeeds.



Always make sure the paper is not curled or wrinkled.

- Gently load paper in the paper tray with the printing surface *face down*.

#### Portrait orientation



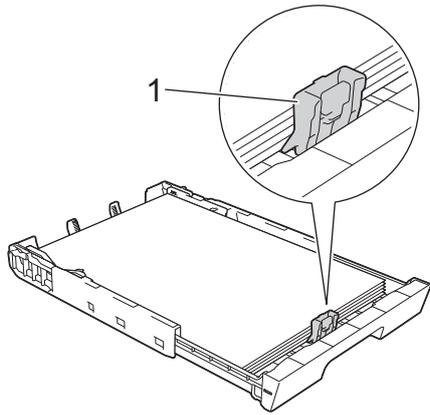
### IMPORTANT

Be careful not to push the paper in too far; it may lift at the back of the tray and cause paper feed problems.

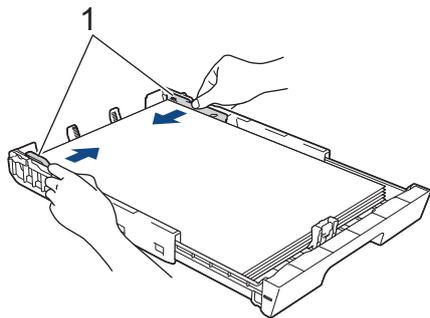


To add paper before the tray is empty, remove the paper from the tray and combine it with the paper you are adding. Always fan the stack of paper well to prevent the machine from feeding multiple pages.

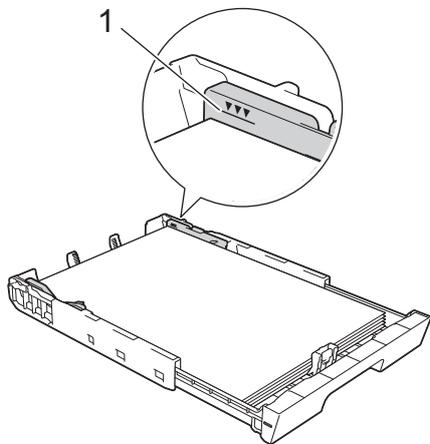
- Make sure the paper length guide (1) touches the edges of the paper.



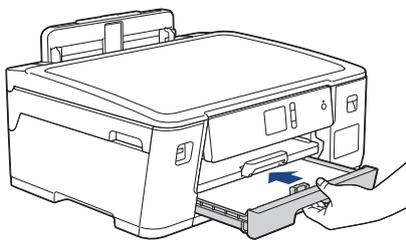
8. Gently adjust the paper width guides (1) to fit the paper.  
Make sure the paper guides touch the edges of the paper.



9. Make sure the paper is flat in the tray and below the maximum paper mark (1).  
Overfilling the paper tray may cause paper jams.



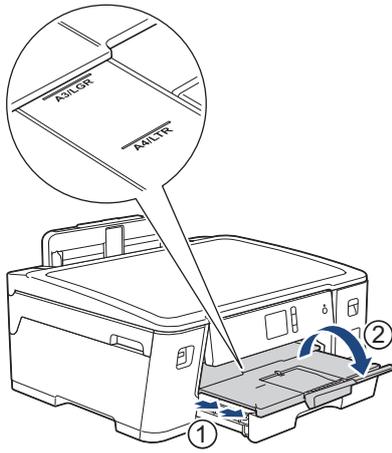
10. Slowly push the paper tray completely into the machine.



## IMPORTANT

DO NOT push the paper tray into the machine forcefully or quickly. Doing this may cause paper jams or paper feed problems.

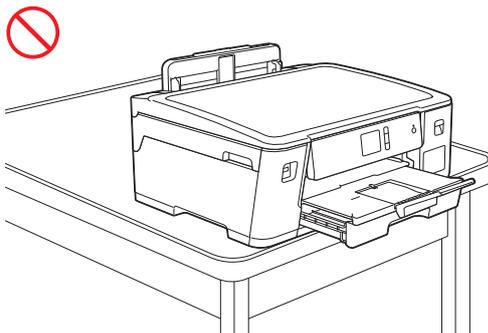
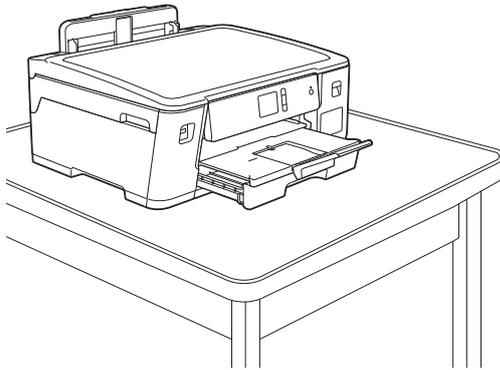
11. Pull out the paper support (1) until it locks into place, and then unfold the paper support flap (2).



12. Change the paper size setting in the machine's menu, if needed.

**⚠ CAUTION**

Position the machine so the tray will not protrude past the edge of the table or desk where someone may bump into it. The machine could fall and cause injury.

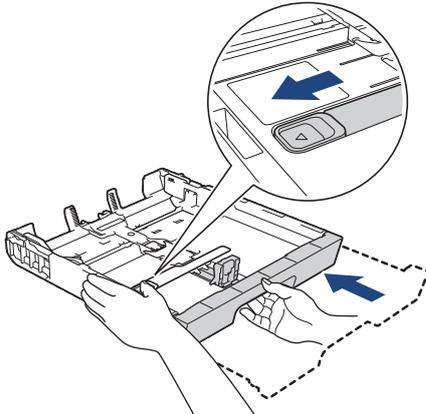




Before you collapse the paper tray, take the paper out of the tray.

Rest the tray on a flat surface.

Push the green slider to the left and then push in the front of the tray to collapse it until it locks into place. Put the paper in the tray.



### Related Information

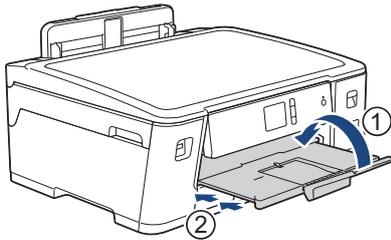
- [Load Paper in the Paper Tray](#)

## Load Photo Paper in Paper Tray #1

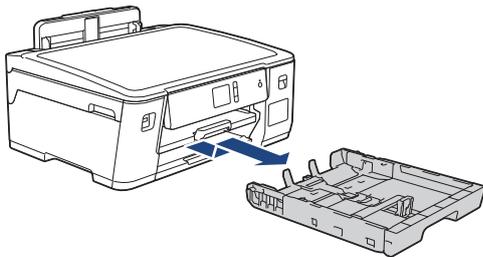
- If the [Check Paper] setting is set to [On] and you pull the paper tray out of the machine, a message appears on the LCD asking if you want to change the paper type and paper size.
- When you load a different paper size in the tray, you must change the Paper Size setting in the machine or the paper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

Doing this enables the machine to automatically feed paper from the appropriate tray if Auto Tray Select has been set in the machine or printer driver.

1. If the paper support flap (1) is open, close it, and then close the paper support (2).



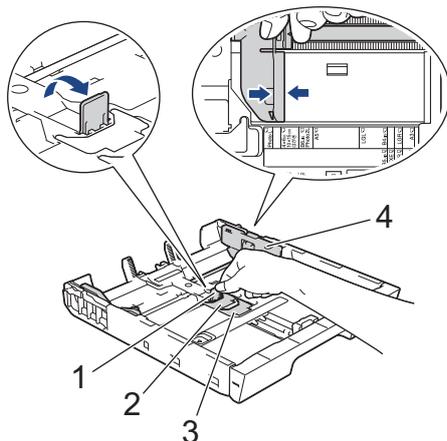
2. Pull the paper tray completely out of the machine as shown by the arrow.



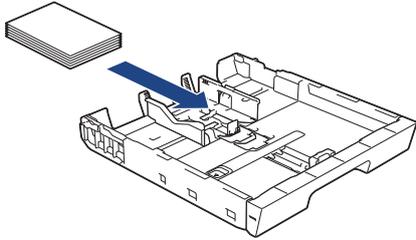
3. Do one of the following:

- If you load Photo L (9 x 13 cm) in the paper tray, lift up the Photo L stopper (1).
- If you load Photo (10 x 15 cm) in the paper tray, lift up the Photo stopper (2).
- If you load Photo 2L (13 x 18 cm) in the paper tray, lift up the Photo 2L stopper (3).

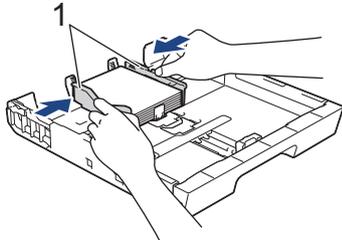
Gently press and slide the paper width guides (4) to fit the paper size.



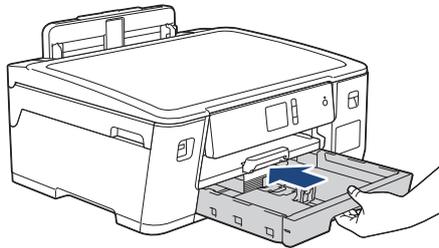
4. Load up to 20 sheets of photo paper in the paper tray with the printing surface *face down*. Loading more than 20 sheets of photo paper may cause paper jams.



5. Gently adjust the paper width guides (1) to fit the paper.  
Make sure the paper guides touch the edges of the paper and the paper is flat in the tray.



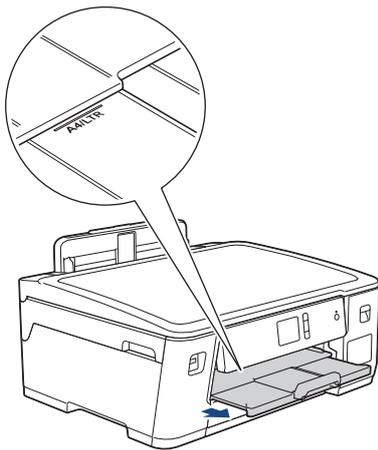
6. Slowly push the paper tray completely into the machine.



## IMPORTANT

DO NOT push the paper tray into the machine forcefully or quickly. Doing this may cause paper jams or paper feed problems.

7. Pull out the paper support until it locks into place.



8. Change the paper size setting in the machine's menu, if needed.

## ✓ Related Information

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

### Related Topics:

- [Change the Check Paper Size Setting](#)
- [Choose the Right Print Media](#)

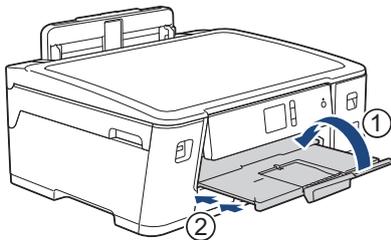
- 
- Change the Paper Size and Paper Type
-

## Load Envelopes in Paper Tray #1

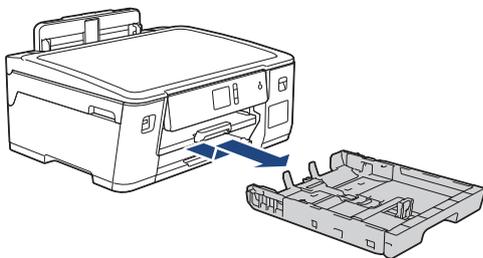
- If the [Check Paper] setting is set to [On] and you pull the paper tray out of the machine, a message appears on the LCD asking if you want to change the paper type and paper size.
- You can load envelopes in a variety of sizes. See *Related Information: Paper Type and Size for Each Operation*.
- When you load a different paper size in the tray, you must change the Paper Size setting in the machine or the paper size setting on your computer.  
Doing this enables the machine to automatically feed paper from the appropriate tray if Auto Tray Select has been set in the machine or printer driver.
- Before loading envelopes in the tray, press the corners and sides of the envelopes to make them as flat as possible.



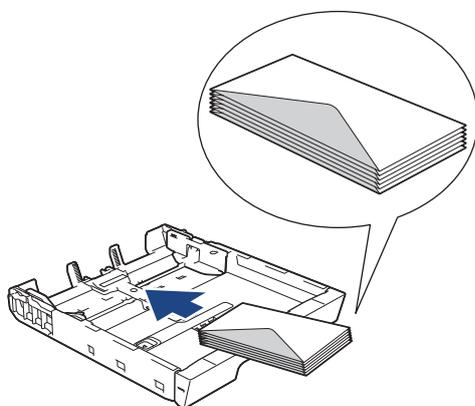
1. If the paper support flap (1) is open, close it, and then close the paper support (2).



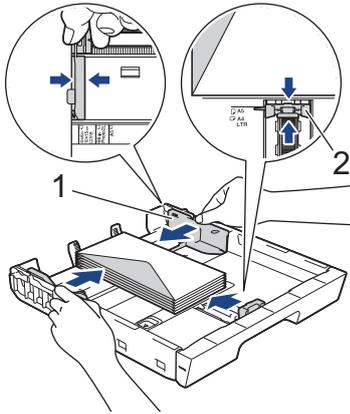
2. Pull the paper tray completely out of the machine as shown by the arrow.



3. Load up to 10 envelopes in the paper tray with the printing surface *face down*. Loading more than 10 envelopes may cause paper jams.



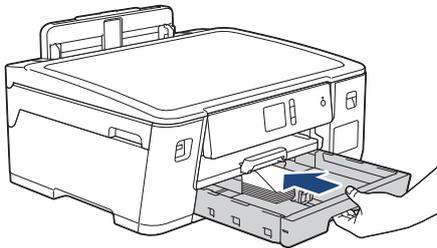
4. Gently press and slide the paper width guides (1) and paper length guide (2) to fit the size of the envelopes. Make sure the envelopes are flat in the tray.



## IMPORTANT

If envelopes are multi-feeding, load one envelope in the paper tray at a time.

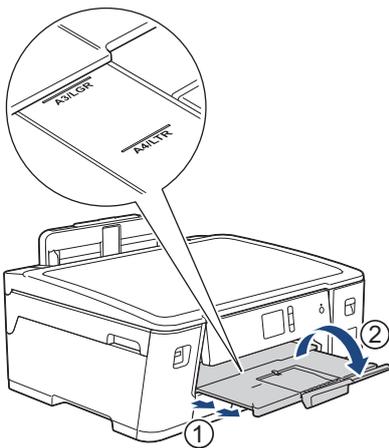
5. Slowly push the paper tray completely into the machine.



## IMPORTANT

DO NOT push the paper tray into the machine forcefully or quickly. Doing this may cause paper jams or paper feed problems.

6. Pull out the paper support (1) until it locks into place, and then unfold the paper support flap (2).



7. Change the paper size setting in the machine's menu, if needed.

## ✓ Related Information

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

### Related Topics:

- [Change the Check Paper Size Setting](#)
- [Choose the Right Print Media](#)
- [Change the Paper Size and Paper Type](#)

- 
- Paper Type and Size for Each Operation
-

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

Use the MP Tray for special print media, such as photo paper or envelopes.

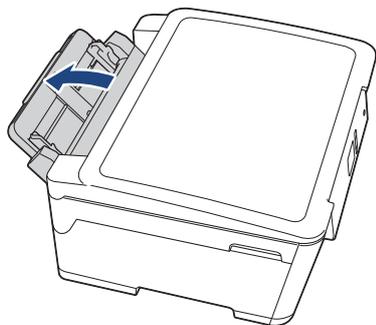
- If the [Check Paper] setting is set to [On] and you set the paper in MP tray, a message appears on the LCD asking if you want to change the paper type and paper size.
- When you load a different paper size in the tray, you must change the Paper Size setting in the machine or the paper size setting on your computer.

Doing this enables the machine to automatically feed paper from the appropriate tray if Auto Tray Select has been set in the machine or printer driver.

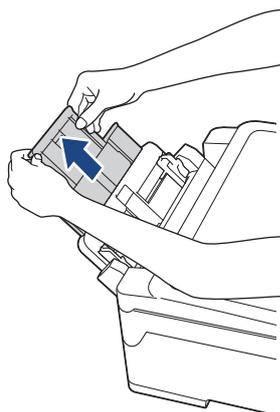
### NOTE

- To prevent dust from entering the machine, be sure to close the MP tray if you are not using it.
- (For some countries) An MP tray cover is attached with your machine. Follow the instructions at the bottom of this page, to load the paper in the MP tray using the MP tray cover.

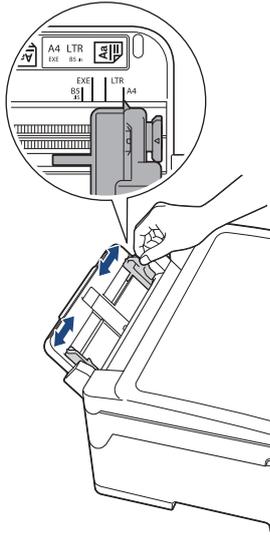
1. Open the MP tray.



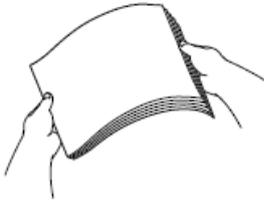
When you want to load paper larger than A4 or Letter size paper, pull up the paper tray using both hands until it locks into place.



2. Gently press and slide the MP tray paper guides to match the width of the paper you are using.



3. Fan the stack of paper well to avoid paper jams and misfeeds.

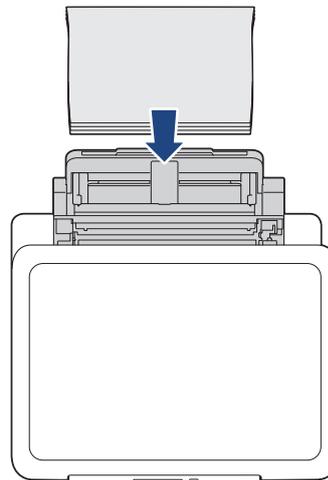
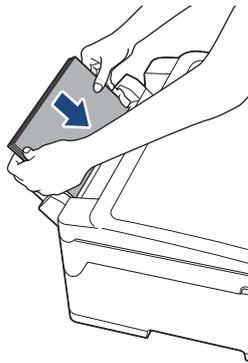


Always make sure the paper is not curled or wrinkled.

4. Gently load the paper in the MP tray with the printing surface *face up*.

- Using A4, Letter, Executive, or B5 (JIS) <sup>1</sup>

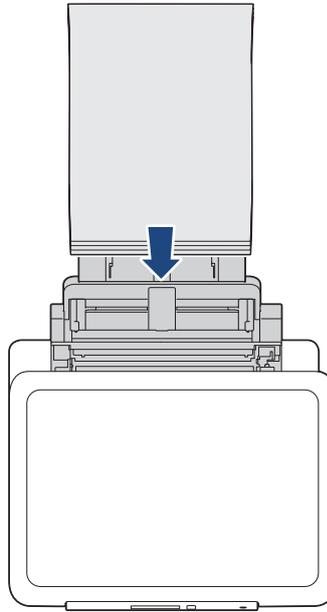
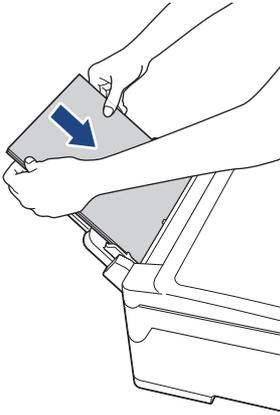
#### Landscape orientation



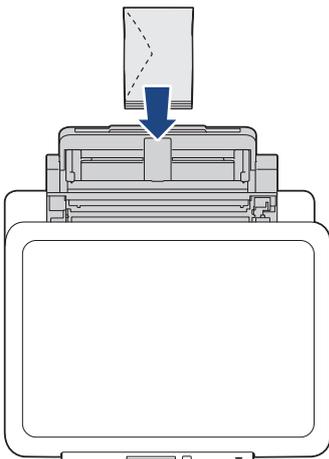
- Using A3, Ledger, B4 (JIS) <sup>1</sup>, Legal, Folio, Mexico Legal, India Legal, A5, A6, envelopes, Photo, Photo L, Photo 2L, B6 (JIS) <sup>1</sup>, or Index Card

#### Portrait orientation

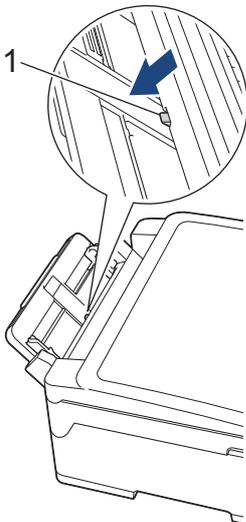
<sup>1</sup> Supported only in some countries.



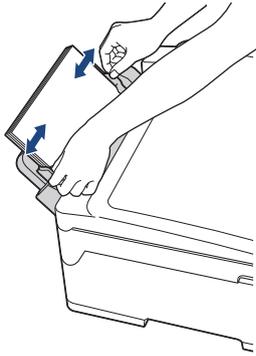
When using envelopes, load the envelopes with the printing surface *face up* and the flap on the left as shown in the illustration.



If you are having difficulty loading paper in the MP tray, push the release lever (1) towards the back of the machine, and then load the paper.



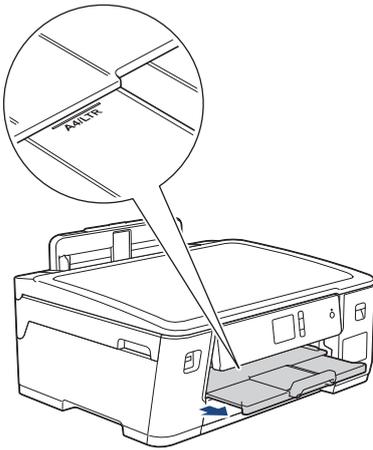
5. Using both hands, gently adjust the MP tray paper guides to fit the paper.



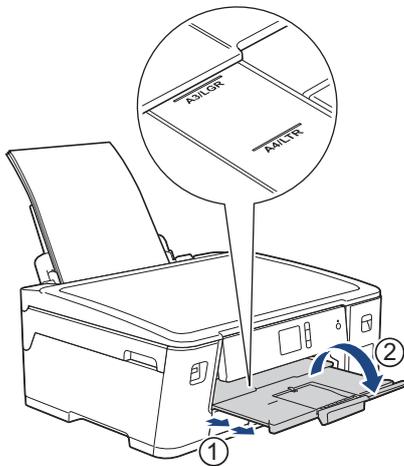
- DO NOT press the paper guides too tightly against the paper. Doing this may cause the paper to fold and jam.
- Place the paper in the centre of the MP tray between the paper guides. If the paper is not centred, pull it out and insert it again at the centre position.

6. Do one of the following:

- When using A4 or Letter size, or smaller size paper  
Pull out the paper support until it locks into place.



- When using paper larger than A4 or Letter size, or envelopes  
Pull out the paper support (1) until it locks into place, and then unfold the paper support flap (2).



7. Change the paper size setting in the machine's menu, if needed.



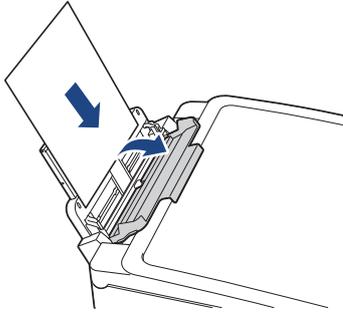
Make sure printing has finished before you close the MP tray.

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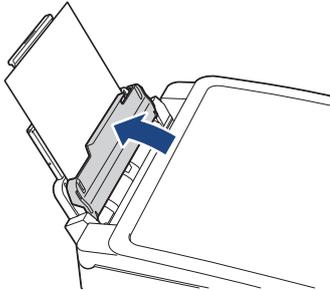
## NOTE

(For some countries) An MP tray cover is attached with your machine. The cover is removable and designed to prevent dust from entering the machine through the slot when you are using the MP tray. Follow these steps to load the paper in the MP tray using the MP tray cover.

1. Open the MP tray.
2. Pull the top of the MP tray cover slightly towards the front of the machine, and gently load the paper in the MP tray with the printing surface *face up*.



3. Push the top of the MP tray cover until it is leaning against the MP tray.



### Related Information

- [Load Paper](#)

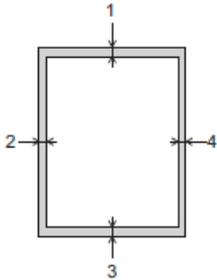
#### Related Topics:

- [Choose the Right Print Media](#)
  - [Error and Maintenance Messages](#)
-

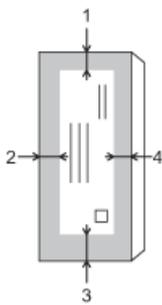
## Unprintable Area

The unprintable area depends on the settings in the application you are using. The figures below show the unprintable areas on cut-sheet paper and envelopes. The machine can print in the shaded areas of cut-sheet paper only when the Borderless print feature is available and turned on.

### Cut-Sheet Paper



### Envelopes



	Top (1)	Left (2)	Bottom (3)	Right (4)
Cut-Sheet	3 mm	3 mm	3 mm	3 mm
Envelopes	12 mm	3 mm	12 mm	3 mm



The Borderless print feature is not available for envelopes and 2-sided printing.

### ✓ Related Information

- [Load Paper](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)

## Paper Settings

- [Change the Paper Size and Paper Type](#)
- [Change the Check Paper Size Setting](#)
- [Set a Default Tray Based on Your Task](#)
- [Change Paper Tray Priority](#)

## Change the Paper Size and Paper Type

Set the Paper Size and Paper Type settings for the paper tray.

- To get the best print quality, set the machine for the type of paper you are using.
  - When you change the size of the paper you load in the tray, you must change the Paper Size setting on the LCD at the same time.
1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting].
  2. Press the tray option you want.
  3. Press [Paper Type].
  4. Press ▲ or ▼ to display the paper type options, and then press the option you want.
  5. Press [Paper Size].
  6. Press ▲ or ▼ to display the paper size options, and then press the option you want.
  7. Press .



The machine ejects paper with the printed surface face up onto the paper tray at the front of the machine. When you use glossy paper, remove each sheet at once to prevent smudging or paper jams.



### Related Information

- [Paper Settings](#)

#### Related Topics:

- [Load A4, Letter, or Executive Size Paper in Tray #1](#)
- [Load Photo Paper in Paper Tray #1](#)
- [Load Envelopes in Paper Tray #1](#)
- [Acceptable Paper and Other Print Media](#)
- [Error and Maintenance Messages](#)
- [Paper Handling and Printing Problems](#)

## Change the Check Paper Size Setting

If this setting is set to [On] and you pull the paper tray out of the machine or load paper in the MP Tray, the LCD displays a message asking if you want to change the Paper Size and Paper Type settings.

The default setting is [On].

1. Press  [Settings] > [All Settings] > [General Setup].
2. Press [Tray Setting].
3. Press ▲ or ▼ to display the [Check Paper] option, and then press it.
4. Press [On] or [Off].
5. Press .

### Related Information

- [Paper Settings](#)

#### Related Topics:

- [Load A4, Letter, or Executive Size Paper in Tray #1](#)
- [Load Photo Paper in Paper Tray #1](#)
- [Load Envelopes in Paper Tray #1](#)
- [Error and Maintenance Messages](#)

## Set a Default Tray Based on Your Task

Change the default tray the machine uses for each mode.

[Auto Tray Select] sets your machine to feed paper from the most appropriate tray for the paper type and size you have set.

The machine feeds paper from the most appropriate tray using the tray priority order you have set.



Some trays are not available depending on your model.

1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting].
  - For printing photos, press [Tray Setting: JPEG Print (Media)] > [Tray Use].
2. Press the tray option you want.
3. Press .



### Related Information

- [Paper Settings](#)

## Change Paper Tray Priority

Change the default tray priority the machine uses for each mode.

When [Auto Tray Select] is selected in the tray select settings, the machine will feed paper from the most appropriate tray for the paper type and size according to the tray priority setting.

1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting].
2. Press the [Tray Setting: Print] or [Tray Setting: JPEG Print (Media)] option.
3. Press [Tray Priority].
4. Press the option you want.
5. Press .



### Related Information

- [Paper Settings](#)

## Acceptable Paper and Other Print Media

The print quality can be affected by the type of paper you use in the machine.

To get the best print quality for the settings you have selected, always set the Paper Type to match the type of paper you load.

You can use plain paper, inkjet paper (coated paper), glossy paper, recycled paper and envelopes.

We recommend testing various paper types before buying large quantities.

For best results, use Brother paper.

- When you print on inkjet paper (coated paper) and glossy paper, be sure to select the correct print media in the **Basic** tab of the printer driver or in the Paper Type setting on the machine.
- When you print on Brother Photo paper, load one extra sheet of the same photo paper in the paper tray.
- When using photo paper, remove each sheet at once to prevent smudging or paper jams.
- Avoid touching the printed surface of the paper immediately after printing; the surface may not be completely dry and may stain your fingers.



### Related Information

- [Load Paper](#)
  - [Recommended Print Media](#)
  - [Handle and Use Print Media](#)
  - [Choose the Right Print Media](#)

### Related Topics:

- [Change the Paper Size and Paper Type](#)
- [Paper Handling and Printing Problems](#)

## Recommended Print Media

For the best print quality, we recommend using the Brother paper listed in the table.

If Brother paper is not available in your country, we recommend testing various paper types before purchasing large quantities.

### Brother paper

Paper Type	Item
A3 Plain	BP60PA3
A3 Glossy Photo	BP71GA3
A3 Inkjet (Matte)	BP60MA3
A4 Plain	BP60PA
A4 Glossy Photo	BP71GA4
A4 Inkjet (Matte)	BP60MA
10 x 15 cm Glossy Photo	BP71GP



### Related Information

- [Acceptable Paper and Other Print Media](#)

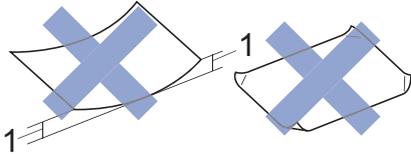
## Handle and Use Print Media

- Store paper in its original packaging and keep it sealed. Keep the paper flat and away from moisture, direct sunlight and heat.
- Avoid touching the shiny (coated) side of photo paper.
- Some envelope sizes require that you set margins in the application. Make sure you do a test print first before printing many envelopes.

### IMPORTANT

DO NOT use the following kinds of paper:

- Damaged, curled, wrinkled, or irregularly shaped



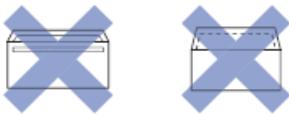
1. **2 mm or greater curl may cause jams to occur.**

- Extremely shiny or highly textured
- Paper that cannot be arranged uniformly when stacked
- Paper made with a short grain

DO NOT use envelopes that:

- Are loosely constructed
- Have windows
- Are embossed (have raised writing on them)
- Have clasps or staples
- Are pre-printed on the inside
- Are self-adhesive
- Have double flaps

#### Self-adhesive Double flaps



You may experience paper feed problems caused by the thickness, size and flap shape of the envelopes you are using.



### Related Information

- [Acceptable Paper and Other Print Media](#)

#### Related Topics:

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

## Choose the Right Print Media

- Paper Type and Size for Each Operation
- Paper Orientation and Capacity of the Paper Trays
- Use the User Defined Paper Size Option in the Printer Driver
- Paper Weight and Thickness
- Load A4, Letter, or Executive Size Paper in Tray #1
- Load Photo Paper in Paper Tray #1
- Load Envelopes in Paper Tray #1
- Load Paper in the Multi-purpose Tray (MP Tray)

## Paper Type and Size for Each Operation

Paper Type	Paper Size		Usage	
			JPEG Print	Printer
Cut-Sheet	A3	297 x 420 mm	Yes	Yes
	A4	210 x 297 mm	Yes	Yes
	Ledger	279.4 x 431.8 mm	Yes	Yes
	Letter	215.9 x 279.4 mm	Yes	Yes
	Legal	215.9 x 355.6 mm	-	Yes
	Mexico Legal	215.9 x 339.85 mm	-	Yes
	India Legal	215 x 345 mm	-	Yes
	Folio	215.9 x 330.2 mm	-	Yes
	Executive	184.1 x 266.7 mm	-	Yes
	B4 (JIS) <sup>1</sup>	257 x 364 mm	-	Yes
	B5 (JIS) <sup>1</sup>	182 x 257 mm	-	Yes
	B6 (JIS) <sup>1</sup>	128 x 182 mm	-	Yes
	A5	148 x 210 mm	-	Yes
	A6	105 x 148 mm	-	Yes
Cards	Photo	10 x 15 cm	Yes	Yes
	Photo L	9 x 13 cm	-	Yes
	Photo 2L	13 x 18 cm	Yes	Yes
	Index Card	13 x 20 cm	-	Yes
Envelopes	C5 Envelope	162 x 229 mm	-	Yes
	DL Envelope	110 x 220 mm	-	Yes
	Com-10	104.7 x 241.3 mm	-	Yes
	Monarch	98.4 x 190.5 mm	-	Yes

<sup>1</sup> Supported only in some countries.



### Related Information

- [Choose the Right Print Media](#)

#### Related Topics:

- [Load Envelopes in Paper Tray #1](#)

## Paper Orientation and Capacity of the Paper Trays

	Paper Size <sup>1</sup>	Paper Types	No. of sheets
Paper Tray #1	<Landscape> A4, Letter, Executive, B5 (JIS) <Portrait> A3, Ledger, B4 (JIS), Legal, Mexico Legal, India Legal, Folio, A5, B6 (JIS), A6, Envelopes (C5, Com-10, DL, Monarch), Photo (10 x 15 cm), Photo L (9 x 13 cm), Photo 2L (13 x 18 cm), Index card (13 x 20 cm)	Plain Paper, Recycled Paper	250 <sup>2</sup>
		Inkjet Paper	20
		Glossy Paper, Photo	20
		Index Card	30
		Envelopes	10
Multi-purpose tray (MP tray) <sup>3</sup>	<Landscape> A4, Letter, Executive, B5 (JIS) <Portrait> A3, Ledger, B4 (JIS), Legal, Mexico Legal, India Legal, Folio, A5, B6 (JIS), A6, Envelopes (C5, Com-10, DL, Monarch), Photo (10 x 15 cm), Photo L (9 x 13 cm), Photo 2L (13 x 18 cm), Index card (13 x 20 cm)	Plain Paper, Recycled Paper	100 <sup>2</sup>
		Inkjet Paper	20 (Up to A4/Letter) 5 (Over A4/Letter)
		Glossy Paper, Photo	20 (Up to A4/Letter) 5 (Over A4/Letter)
		Index Card	50
		Envelopes	20 (Up to A4/Letter) 5 (Over A4/Letter)

<sup>1</sup> B6 (JIS), B5 (JIS) and B4 (JIS) size paper are supported only in some countries.

<sup>2</sup> When using plain paper 80 gsm

<sup>3</sup> We recommend using MP tray for glossy paper.



### Related Information

- [Choose the Right Print Media](#)

## Use the User Defined Paper Size Option in the Printer Driver

User Defined Size	Paper Orientation
<ul style="list-style-type: none"><li>Width: 88.9 mm - 297.0 mm</li><li>Height: 127.0 mm - 431.8 mm</li></ul>	Portrait
<ul style="list-style-type: none"><li>The user defined paper size option is available only for MP tray.</li></ul>	



### Related Information

- [Choose the Right Print Media](#)

## Paper Weight and Thickness

Paper Type		Weight	Thickness
Cut-Sheet	Plain Paper, Recycled Paper	64 to 120 gsm	0.08 to 0.15 mm
	Inkjet Paper	64 to 200 gsm	0.08 to 0.25 mm
	Glossy Paper <sup>1 2</sup>	Up to 220 gsm	Up to 0.25 mm
Cards	Photo Card <sup>1 2 3</sup>	Up to 200 gsm	Up to 0.25 mm
	Index Card	Up to 120 gsm	Up to 0.15 mm
Envelopes		80 to 95 gsm	Up to 0.52 mm

<sup>1</sup> BP71 260 gsm paper is specially designed for Brother inkjet machines.

<sup>2</sup> Up to 0.3 mm for MP Tray

<sup>3</sup> Up to 220 gsm for MP Tray



### Related Information

- [Choose the Right Print Media](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)

## Print

- [Print from Your Computer \(Windows\)](#)
- [Print from Your Computer \(Mac\)](#)
- [Print Data Directly from a USB Flash Drive](#)

## Print from Your Computer (Windows)

- [Print a Photo \(Windows\)](#)
- [Print a Document \(Windows\)](#)
- [Cancel a Print Job \(Windows\)](#)
- [Print More Than One Page on a Single Sheet of Paper \(N in 1\) \(Windows\)](#)
- [Print as a Poster \(Windows\)](#)
- [Print on Both Sides of the Paper Automatically \(Automatic 2-sided Printing\) \(Windows\)](#)
- [Print as a Booklet Automatically \(Windows\)](#)
- [Print a Colour Document in Greyscale \(Windows\)](#)
- [Prevent Smudged Printouts and Paper Jams \(Windows\)](#)
- [Use a Preset Print Profile \(Windows\)](#)
- [Change the Default Print Settings \(Windows\)](#)
- [Print Settings \(Windows\)](#)

## Print a Photo (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 media in the paper tray.

### IMPORTANT

- For best results, use Brother paper.
- When you print on Brother photo paper, load one extra sheet of the same photo paper in the paper tray.

4. Click the **Basic** tab.
5. Click the **Media Type** drop-down list, and then select the type of paper you are using.

### IMPORTANT

To get the best print quality for the settings you have selected, always set the **Media Type** option to match the type of paper you load.

6. Click the **Paper Size** drop-down list, and then select your paper size.
7. Select the **Borderless** check box, if needed.
8. For **Colour Mode**, select the **Natural** or **Vivid** option.
9. 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.

10. Type the number of copies (1-999) you want in the **Copies** field.
11. Change other printer settings, if needed.
12. Click **OK**.
13. Complete your print operation.



### Related Information

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

#### Related Topics:

- [Print Settings \(Windows\)](#)

## 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 **Basic** tab.
5. Click the **Media Type** drop-down list, and then select the type of paper you are using.

### IMPORTANT

To get the best print quality for the settings you have selected, always set the **Media Type** option to match the type of paper you load.

6. Click the **Paper Size** drop-down list, and then select your paper size.
7. For **Colour Mode**, select the **Natural** or **Vivid** option.
8. 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.

9. Type the number of copies (1-999) you want in the **Copies** field.
10. 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.
11. Change other printer settings, if needed.
12. Click **OK**.
13. Complete your print operation.



### Related Information

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

#### Related Topics:

- [Print Settings \(Windows\)](#)

## Cancel a Print Job (Windows)

If a print job was sent to the print queue and did not print, or was sent to the print queue in error, you may have to delete it to allow subsequent jobs to print.

1. Double-click the printer icon  in the task tray.
2. Select the print job you want to cancel.
3. Click the **Document** menu.
4. Select **Cancel**.
5. Click **Yes**.



### Related Information

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

#### Related Topics:

- [Monitor Machine Status from Your Computer \(Windows\)](#)
-

## Print More Than One Page on a Single Sheet of Paper (N in 1) (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. Click the **Basic** tab.
4. 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.

5. Click the **Multiple Page** drop-down list, and then select the **2 in 1**, **4 in 1**, **9 in 1**, or **16 in 1** option.
6. Click the **Page Order** drop-down list, and then select your page order.
7. Click the **Border Line** drop-down list, and then select your border line type.
8. Change other printer settings, if needed.
9. Click **OK**, and then complete your print operation.



### Related Information

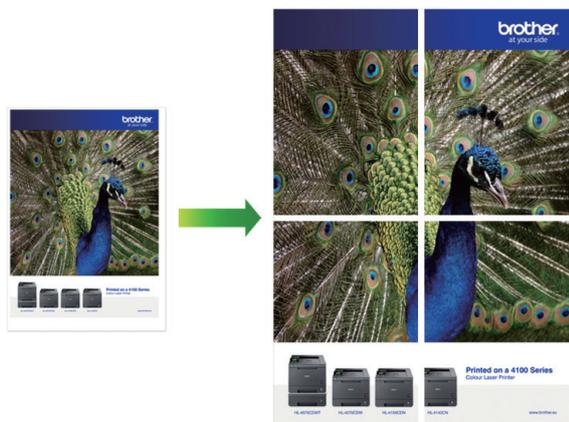
- [Print from Your Computer \(Windows\)](#)

#### Related Topics:

- [Print Settings \(Windows\)](#)

## Print as a Poster (Windows)

Enlarge your print size and print the document in poster mode.



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 **Basic** tab.
4. Click the **Multiple Page** drop-down list, and then select the **1 in 2x2 pages** or **1 in 3x3 pages** option.
5. Change other printer settings, if needed.
6. Click **OK**.
7. Complete your print operation.

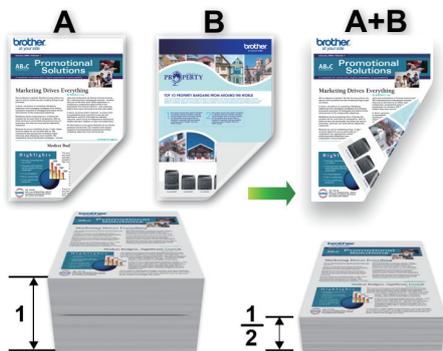
### ✓ Related Information

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

#### Related Topics:

- [Print Settings \(Windows\)](#)

## Print on Both Sides of the Paper Automatically (Automatic 2-sided Printing) (Windows)



- Make sure the jam clear cover is closed.
- If paper is curled, straighten it and put it back in the paper tray.
- Use regular paper. DO NOT use bond paper.
- If the paper is thin, it may wrinkle.

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 **Basic** tab.
4. 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.

5. Click the **2-sided / Booklet** drop-down list, and then select **2-sided**.
6. Click the **2-sided Settings** button.
7. Select one of the options from the **2-sided Type** menu.

When 2-sided is selected, four types of 2-sided binding are available for each orientation:

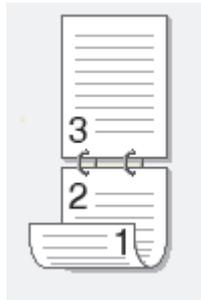
Option for Portrait	Description
<b>Long Edge (Left)</b>	
<b>Long Edge (Right)</b>	

Option for Portrait	Description
---------------------	-------------

Short Edge (Top)

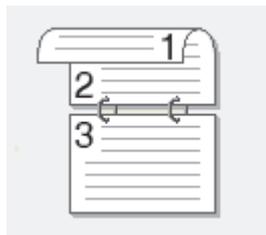


Short Edge (Bottom)

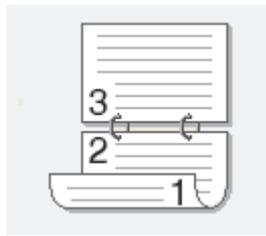


Option for Landscape	Description
----------------------	-------------

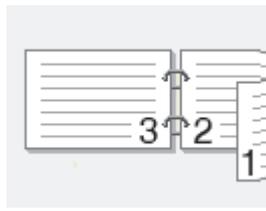
Long Edge (Top)



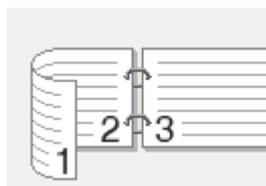
Long Edge (Bottom)



Short Edge (Right)



Short Edge (Left)



8. Select the **Binding Offset** check box if you want to specify the offset for binding in inches or millimetres.
9. Click **OK** to return to the printer driver window.
10. Change other printer settings, if needed.



The Borderless feature is not available when using this option.

11. Click **OK** again, and then complete your print operation.



## Related Information

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

### **Related Topics:**

- [Print Settings \(Windows\)](#)
  - [Print as a Booklet Automatically \(Windows\)](#)
-

## Print as a Booklet Automatically (Windows)

Use this option to print a document in booklet format using 2-sided printing. The document's pages will be arranged according to the correct page number and will allow you to fold at the centre of the print output without having to change the order of the printed pages.



- Make sure the jam clear cover is closed.
- If paper is curled, straighten it and put it back in the paper tray.
- Use regular paper. DO NOT use bond paper.
- If the paper is thin, it may wrinkle.

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 **Basic** tab.
4. 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.

5. Click the **2-sided / Booklet** drop-down list, and then select the **Booklet** option.
6. Click the **2-sided Settings** button.
7. Select one of the options from the **2-sided Type** menu.

There are two types of 2-sided binding directions available for each orientation:

Option for Portrait	Description
<b>Left Binding</b>	
<b>Right Binding</b>	

Option for Landscape	Description
----------------------	-------------

**Top Binding**



**Bottom Binding**



8. Select one of the options from the **Booklet Printing Method** menu.

Option	Description
<b>All Pages at Once</b>	Every page will be printed in booklet format (four pages to every piece of paper, two pages per side). Fold your printout in the middle to create the booklet. 
<b>Divide into Sets</b>	This option prints the whole booklet in smaller individual booklet sets, allowing you to fold at the centre of the smaller individual booklet sets without having to change the order of the printed pages. You can specify the number of sheets in each smaller booklet set (from 1-15). This option can be helpful when folding a printed booklet that has a large number of pages. 

9. Select the **Binding Offset** check box if you want to specify the offset for binding in inches or millimetres.

10. Click **OK** to return to the printer driver window.

11. Change other printer settings, if needed.



The Borderless feature is not available when using this option.

12. Click **OK**.

13. Complete your print operation.



### Related Information

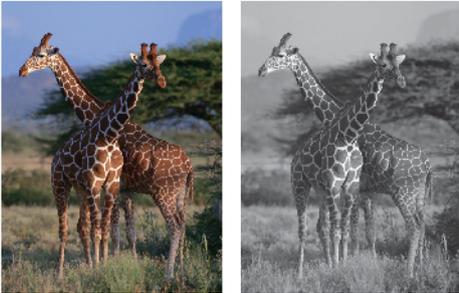
- [Print from Your Computer \(Windows\)](#)

**Related Topics:**

- [Print Settings \(Windows\)](#)
- [Print on Both Sides of the Paper Automatically \(Automatic 2-sided Printing\) \(Windows\)](#)

## Print a Colour Document in Greyscale (Windows)

Greyscale mode makes the print processing speed faster than colour mode. If your document contains colour, selecting Greyscale mode prints your document in 256 levels of greyscale.



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. For **Colour / Greyscale**, select **Greyscale**.
5. Change other printer settings, if needed.
6. Click **OK**.
7. Complete your print operation.



### Related Information

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

## Prevent Smudged Printouts and Paper Jams (Windows)

Some types of print media may need more drying time. Change the **Reduce Smudge** option if you have problems with smudged printouts or paper jams.

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 **Other Print Options** button.
5. Select the **Reduce Smudge** option on the left side of the screen.
6. Select one of the following options:

Media Type	Option	Description	
Plain Paper	2-sided Printing or Simplex Printing	Off	Select this mode to print at normal speed, using a normal amount of ink.
		Low	Select this mode to print at a slower speed, using a normal amount of ink.
		High	Select this mode to print at the same speed as <b>Low</b> , but using less ink.
Glossy Paper	Off / On	Select <b>Off</b> to print at normal speed, using a normal amount of ink. Select <b>On</b> to print at a slower speed, using less ink.	

7. Click **OK** to return to the printer driver window.
8. Click **OK**.
9. Complete your print operation.



### Related Information

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

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Change the Print Setting Options When Having Printing Problems](#)

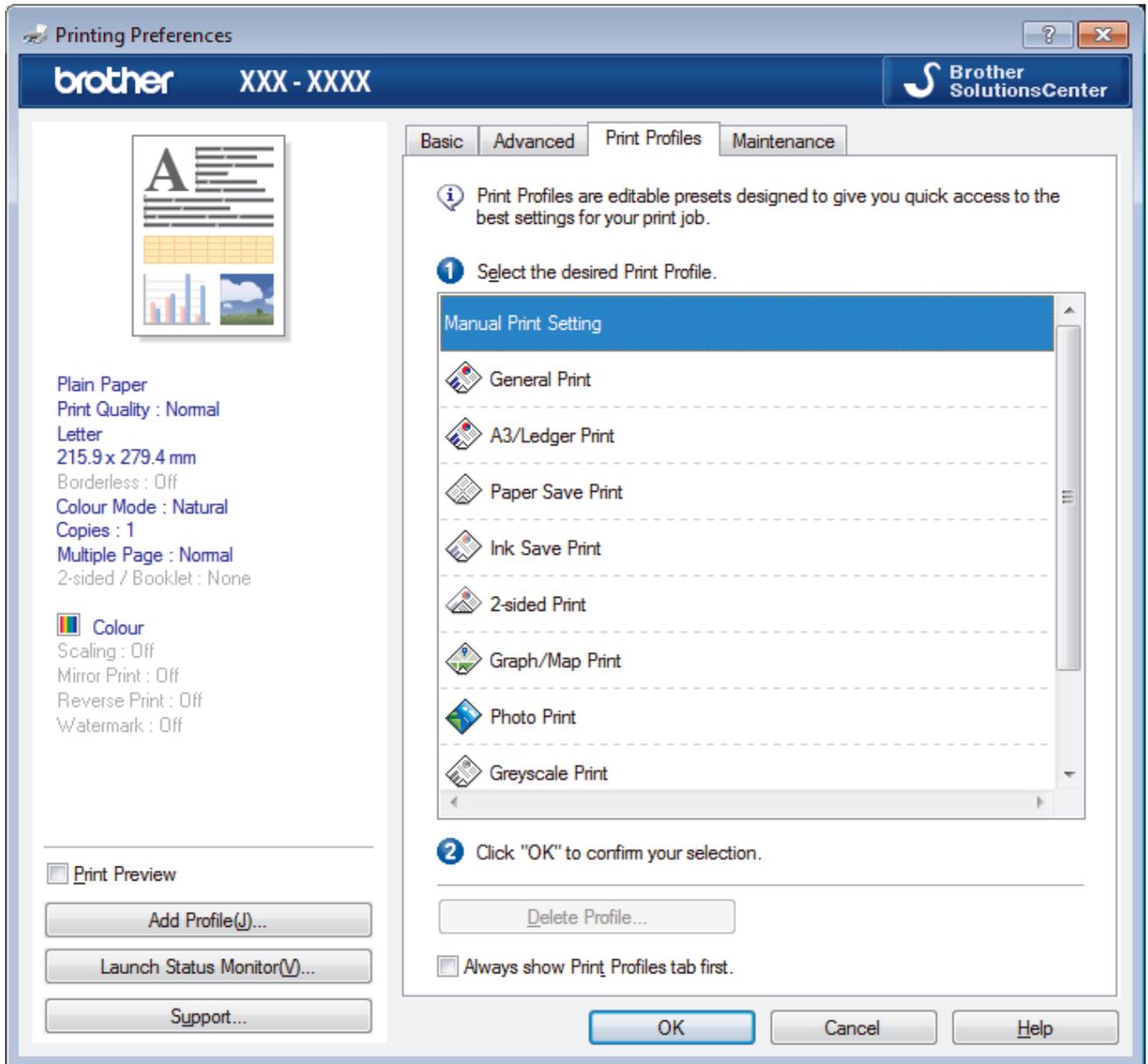
## Use a Preset Print Profile (Windows)

**Print Profiles** are presets designed to give you quick access to frequently-used printing configurations.

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 **Print Profiles** tab.



4. Select your profile from the print profile list.  
The profile settings are shown on the left side of the printer driver window.
5. Do one of the following:
  - If the settings are correct for your print job, click **OK**.
  - To change the settings, go back to the **Basic** or **Advanced** tab, change settings, and then click **OK**.



To display the **Print Profiles** tab at the front of the window the next time you print, select the **Always show Print Profiles tab first.** check box.



## Related Information

- [Print from Your Computer \(Windows\)](#)
  - [Create or Delete Your Print Profile \(Windows\)](#)

### Related Topics:

- [Print Settings \(Windows\)](#)
-

## Create or Delete Your Print Profile (Windows)

Add up to 20 new print profiles with customised settings.

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 **Basic** tab and the **Advanced** tab, and configure the print settings you want for the new Print Profile.
4. Click the **Print Profiles** tab.
5. Do one of the following:

### To create a new print profile:

- a. Click **Add Profile**.

The **Add Profile** dialog box appears.

- b. Type the new profile name in the **Name** field.
- c. Click the icon you want to use to represent this profile from the icon list.
- d. Click **OK**.

The new Print Profile name is added to the list in the **Print Profiles** tab.

### To delete a print profile that you created:

- a. Click **Delete Profile**.

The **Delete Profile** dialog box appears.

- b. Select the profile you want to delete.
- c. Click **Delete**.
- d. Click **Yes**.
- e. Click **Close**.



### Related Information

- [Use a Preset Print Profile \(Windows\)](#)

## 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.

1. Do one of the following:
  - For Windows Server 2008  
Click  (**Start**) > **Control Panel** > **Hardware and Sound** > **Printers**.
  - For Windows 7 and Windows Server 2008 R2  
Click  (**Start**) > **Devices and Printers**.
  - For Windows 8  
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 10 and Windows Server 2016  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** 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 Server 2012 R2  
Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**.
2. Right-click the **Brother XXX-XXXX** icon (where XXXX is your model name), and then select **Printer properties**. If printer driver options appear, select your printer driver.  
The printer driver dialog box appears.
3. Click the **General** tab, and then click the **Printing Preferences...** or **Preferences...** button.  
The printer driver dialog box appears.
4. Select the print settings you want to use as defaults for all of your Windows programs.
5. Click **OK**.
6. Close the printer properties dialog box.



### Related Information

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

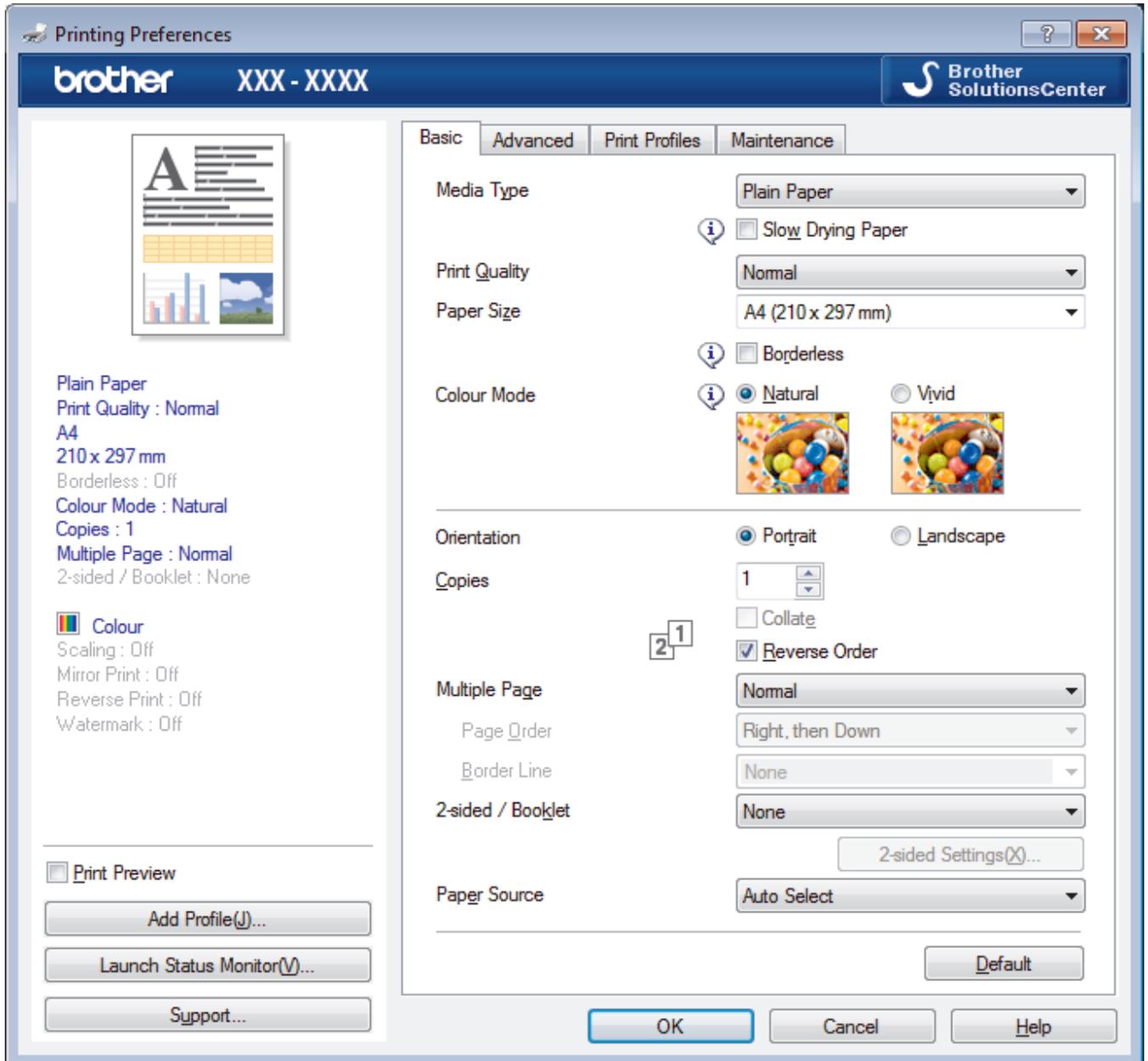
#### Related Topics:

- [Print Settings \(Windows\)](#)

## Print Settings (Windows)

- >> Basic Tab
- >> Advanced Tab

### Basic Tab



#### 1. Media Type

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

#### Slow Drying Paper

Select this option if you use a type of plain paper on which ink dries slowly. This option may cause slight blurring of the text.

#### 2. Print Quality

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

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### 3. Paper Size

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

#### Borderless

Select this option to print photos without borders. Because the image data is created slightly larger than the paper size you are using, this will cause some cropping of the photo edges.

You may not be able to select the Borderless option for some combinations of media type and quality, or from some applications.

### 4. Colour Mode

Select the colour mode to suit your preference.

### 5. 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.

### 6. 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 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.

#### Reverse Order

Select this option to print your document in reverse order. The last page of your document will be printed first.

### 7. 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.

### 8. 2-sided / Booklet

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

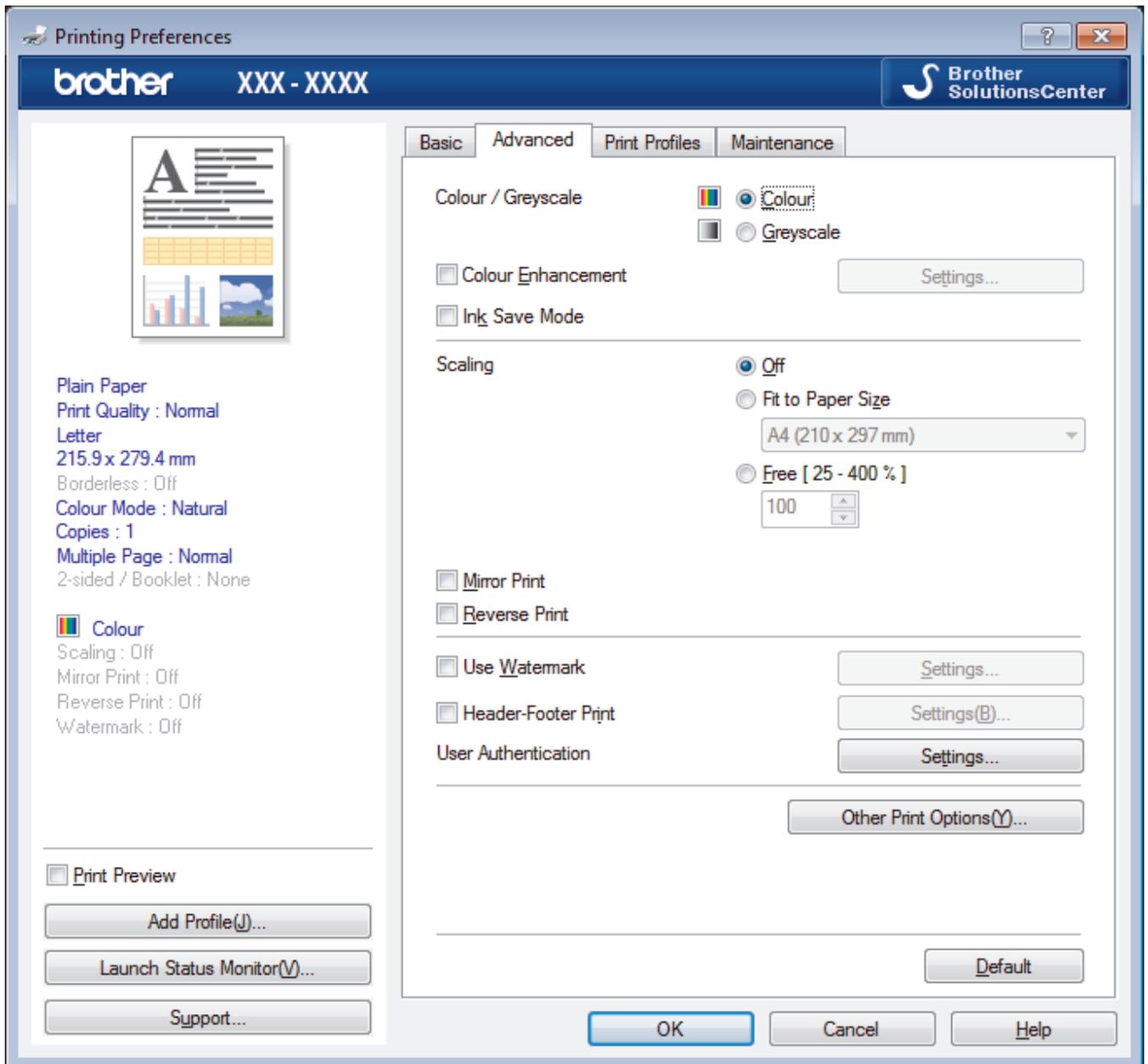
#### 2-sided Settings button

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

### 9. Paper Source

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

## Advanced Tab



### 1. Colour / Greyscale

Select colour or greyscale printing. The print speed is faster in greyscale mode than it is in colour mode. If your document contains colour and you select greyscale mode, your document will be printed using 256 levels of greyscale.

### 2. Colour Enhancement

Select this option to use the Colour Enhancement feature. This feature analyses your image to improve its sharpness, white balance and colour density. This process may take several minutes depending on the image size and your computer's specifications.

### 3. Ink Save Mode

Select this option to print using lighter colours and emphasise image outlines. The amount of ink that is saved varies, depending on the type of documents printed. Ink Save Mode may make your printouts look different than they appear on your screen.

The Ink Save Mode feature is supported by technology from Reallusion, Inc.



### 4. 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**

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

### **5. Mirror Print**

Select this option to reverse the printed image on the page horizontally from left to right.

### **6. Reverse Print**

Select this option to rotate the printed image 180 degrees.

### **7. 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.

### **8. Header-Footer Print**

Select this option to print the date, time and PC login user name on the document.

### **9. User Authentication**

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

### **10. Other Print Options button**

#### **Change Data Transfer Mode**

Select the print data transfer mode to improve print quality or print speed.

#### **Advanced Colour Settings**

Select the method that the machine uses to arrange dots to express halftones.

The printout colour can be adjusted to achieve the closest match to what appears on your computer screen.

#### **Reduce Smudge**

Some types of print media may need more drying time. Change this option if you have problems with smudged printouts or paper jams.

#### **Retrieve Printer's Colour Data**

Select this option to optimise the print quality using the machine's factory settings, which are set specifically for your Brother machine. Use this option when you have replaced the machine or changed the machine's network address.

#### **Print Archive**

Select this option to save the print data as a PDF file to your computer.

#### **Reduce Uneven Lines**

Select this option to adjust the print alignment if your printed text becomes blurred or images become faded.



## **Related Information**

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

### **Related Topics:**

- [Error and Maintenance Messages](#)
- [Paper Handling and Printing Problems](#)
- [Print a Photo \(Windows\)](#)
- [Print a Document \(Windows\)](#)
- [Print More Than One Page on a Single Sheet of Paper \(N in 1\) \(Windows\)](#)
- [Print as a Poster \(Windows\)](#)
- [Print on Both Sides of the Paper Automatically \(Automatic 2-sided Printing\) \(Windows\)](#)

- 
- [Print as a Booklet Automatically \(Windows\)](#)
  - [Use a Preset Print Profile \(Windows\)](#)
  - [Change the Default Print Settings \(Windows\)](#)
  - [Change the Print Setting Options When Having Printing Problems](#)
-

## Print from Your Computer (Mac)

- [Print a Photo \(Mac\)](#)
- [Print a Document \(Mac\)](#)
- [Print on Both Sides of the Paper Automatically \(Automatic 2-sided Printing\) \(Mac\)](#)
- [Print More Than One Page on a Single Sheet of Paper \(N in 1\) \(Mac\)](#)
- [Print a Colour Document in Greyscale \(Mac\)](#)
- [Prevent Smudged Printouts and Paper Jams \(Mac\)](#)
- [Print Options \(Mac\)](#)

## Print a Photo (Mac)



1. Make sure you have loaded the correct media in the paper tray.

### IMPORTANT

- For best results, use Brother paper.
- When you print on Brother photo paper, load one extra sheet of the same photo paper in the paper tray.

2. From an application, such as Apple Preview, click the **File** menu, and then select **Print**.
3. Select **Brother XXX-XXXX** (where XXXX is your model name).
4. Click the **Paper Size** pop-up menu, and then select your paper size.



To print photographs without margins, select a borderless paper size option.

5. Click the **Orientation** button that matches the way you want the photo to print.
6. Click the application pop-up menu, and then select **Print Settings**.  
The **Print Settings** options appear.
7. Click the **Media Type** pop-up menu, and then select the media type you want to use.

### IMPORTANT

To get the best print quality for the settings you have selected, always set the **Media Type** option to match the type of paper you load.

8. Change other printer settings, if needed.
9. Click **Print**.



### Related Information

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

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Print Options \(Mac\)](#)

## Print a Document (Mac)

1. Make sure you have loaded the correct size paper in the paper tray.
2. From an application, such as Apple TextEdit, click the **File** menu, and then select **Print**.
3. Select **Brother XXX-XXXX** (where XXXX is your model name).
4. Click the **Paper Size** pop-up menu, and then select your paper size.
5. Select the **Orientation** option that matches the way you want the document to print.
6. Click the application pop-up menu, and then select **Print Settings**.  
The **Print Settings** options appear.
7. Click the **Media Type** pop-up menu, and then select the media type you want to use.

### IMPORTANT

To get the best print quality for the settings you have selected, always set the **Media Type** option to match the type of paper you load.

8. Change other printer settings, if needed.
9. Click **Print**.



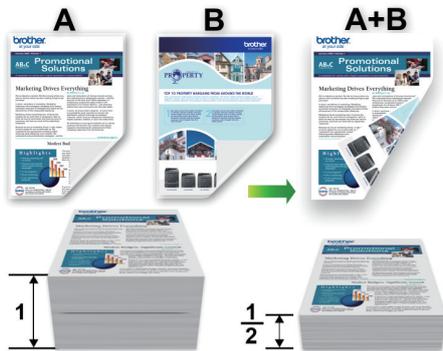
### Related Information

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

#### Related Topics:

- [Print Options \(Mac\)](#)

## Print on Both Sides of the Paper Automatically (Automatic 2-sided Printing) (Mac)



1. From an application, such as Apple TextEdit, click the **File** menu, and then select **Print**.
2. Select **Brother XXX-XXXX** (where XXXX is your model name).
3. Select the **Orientation** option that matches the way you want the document to print.
4. Click the application pop-up menu, and then select **Layout**.  
The **Layout** setting options appear.
5. In the **Two-Sided** section, select the **Short-Edge binding** or **Long-Edge binding** option.
6. Change other printer settings, if needed.



The Borderless feature is not available when using this option.

7. Click **Print**.



### Related Information

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

#### Related Topics:

- [Print Options \(Mac\)](#)

## Print More Than One Page on a Single Sheet of Paper (N in 1) (Mac)



1. From an application, such as Apple TextEdit, click the **File** menu, and then select **Print**.
2. Select **Brother XXX-XXXX** (where XXXX is your model name).
3. Click the application pop-up menu, and then select **Layout**.  
The **Layout** setting options appear.
4. Click the **Pages per Sheet** pop-up menu, and then select the number of pages to print on each sheet.
5. Select the **Layout Direction** option.
6. Click the **Border** pop-up menu, and then select your border line type.
7. Change other printer settings, if needed.
8. Click **Print**.



### Related Information

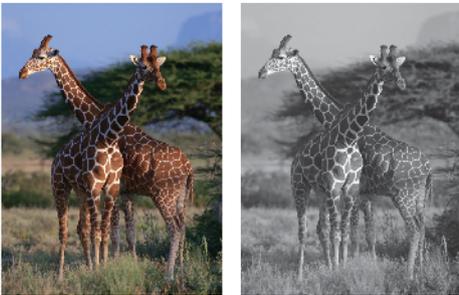
- [Print from Your Computer \(Mac\)](#)

#### Related Topics:

- [Print Options \(Mac\)](#)

## Print a Colour Document in Greyscale (Mac)

Greyscale mode makes the print processing speed faster than colour mode. If your document contains colour, selecting Greyscale mode prints your document in 256 levels of greyscale.



1. From an application, such as Apple TextEdit, click the **File** menu, and then select **Print**.
2. Select **Brother XXX-XXXX** (where XXXX is your model name).
3. Click the application pop-up menu, and then select **Print Settings**.  
The **Print Settings** options appear.
4. Click the **Color / Grayscale** pop-up menu, and then select the **Grayscale** option.
5. Change other printer settings, if needed.
6. Click **Print**.



### Related Information

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

## Prevent Smudged Printouts and Paper Jams (Mac)

Some types of print media may need more drying time. Change the **Reduce Smudge** option if you have problems with smudged printouts or paper jams.

1. From an application, such as Apple TextEdit, click the **File** menu, and then select **Print**.
2. Select **Brother XXX-XXXX** (where XXXX is your model name).
3. Click the application pop-up menu, and then select **Print Settings**.

The **Print Settings** options appear.

4. Click the **Advanced** print settings list.
5. Click the **Reduce Smudge** menu.
6. Select one of the following options:

Media Type	Option	Description	
Plain Paper	2-sided Printing or Simplex Printing	Off	Select this mode to print at normal speed, using a normal amount of ink.
		Low	Select this mode to print at a slower speed, using a normal amount of ink.
		High	Select this mode to print at the same speed as <b>Low</b> , but using less ink.
Glossy Paper	Off / On	Select <b>Off</b> to print at normal speed, using a normal amount of ink. Select <b>On</b> to print at a slower speed, using less ink.	

7. Change other printer settings, if needed.
8. Click **Print**.

### ✓ Related Information

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

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Change the Print Setting Options When Having Printing Problems](#)

## Print Options (Mac)

- >> Page Setup
- >> **Layout**
- >> Paper Handling
- >> Print Settings
- >> Color Settings

### Page Setup

Page Attributes

Format For: Brother XXX-XXXX  
Brother XXX-XXXX CUPS

Paper Size: A4  
210 by 297 mm

Orientation:  

Scale: 100%

Cancel OK

#### 1. Paper Size

Select the size of the paper 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. Scale

Type a value into the field to enlarge or reduce the pages in your document to fit the selected paper size.

## Layout

Printer: Brother XXX-XXXX

Presets: Default Settings

Copies: 1  Two-Sided

Pages:  All  
 From: 1 to: 1

Paper Size: A4 210 by 297 mm

Orientation:

Layout: Layout

Pages per Sheet: 1

Layout Direction:

Border: None

Two-Sided: Off

Reverse page orientation

Flip horizontally

? PDF Hide Details Cancel Print

### 1. Pages per Sheet

Select the number of pages to print on a single sheet of paper.

### 2. Layout Direction

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

### 3. Border

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

### 4. Two-Sided

Select whether to print on both sides of the paper.

### 5. Reverse page orientation

Select this option to rotate the printed image 180 degrees.

### 6. Flip horizontally

Select this option to reverse the printed image on the page horizontally from left to right.

## Paper Handling

Printer: Brother XXX-XXXX

Presets: Default Settings

Copies: 1  Two-Sided

Pages:  All  
 From: 1 to: 1

Paper Size: A4 210 by 297 mm

Orientation:

Paper Handling

Collate pages

Pages to Print: All pages

Page Order: Automatic

Scale to fit paper size

Destination Paper Size: Suggested Paper: A4

Scale down only

? PDF Hide Details Cancel Print

### 1. Collate pages

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 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.

### 2. Pages to Print

Select which pages you want to print (even pages or odd pages).

### 3. Page Order

Select the page order.

### 4. Scale to fit paper size

Select this option to enlarge or reduce the pages in your document to fit the selected paper size.

### 5. Destination Paper Size

Select the paper size to print on.

### 6. Scale down only

Select this option if you want to reduce the pages in your document when they are too large for the selected paper size. If this option is selected and the document is formatted for a paper size that is smaller than the paper size you are using, the document will be printed at its original size.

## Print Settings

Printer: Brother XXX-XXXX

Presets: Default Settings

Copies: 1  Two-Sided

Pages:  All  
 From: 1 to: 1

Paper Size: A4 210 by 297 mm

Orientation:  Portrait  Landscape

Print Settings

Media Type: Plain Paper  Slow Drying Paper

Print Quality: Normal

Color / Grayscale:  Color  Grayscale

Paper Source: Auto Select

► Advanced

? PDF Hide Details Cancel Print

### 1. Media Type

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

### 2. Slow Drying Paper

Select this option if you use a type of plain paper on which ink dries slowly. This option may cause slight blurring of the text.

### 3. Print Quality

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

### 4. Color / Grayscale

Select colour or greyscale printing. The print speed is faster in greyscale mode than it is in colour mode. If your document contains colour and you select greyscale mode, your document will be printed using 256 levels of greyscale.

### 5. Paper Source

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

### 6. Advanced

#### Change Data Transfer Mode

Select the print data transfer mode to improve print quality or print speed.

#### Reduce Uneven Lines

Select this option to adjust the print alignment if your printed text becomes blurred or images become faded.

#### Reduce Smudge

Some types of print media may need more drying time. Change this option if you have problems with smudged printouts or paper jams.

## Other Print Options

### Paper Thickness

Select the appropriate paper thickness.

### Bi-Directional Printing

Select this option to increase the print speed. When this option is selected, the print head prints in both directions. When this option is cleared, the print head prints in only one direction, resulting in higher quality printouts but causing slower print speeds.

Sometimes, the movement of the print head may vary due to environmental conditions. This may be seen when you print vertical lines and they do not align. If you encounter this problem, turn off the Bi-Directional Printing feature.

## Color Settings

Printer: Brother XXX-XXXX

Presets: Default Settings

Copies: 1  Two-Sided

Pages:  All  
 From: 1 to: 1

Paper Size: A4 210 by 297 mm

Orientation:

Color Settings

Color Mode:  Natural  
 Vivid  
 None

Advanced Color Settings

Color Enhancement

Brightness 0

Contrast 0

Red 0

Green 0

Blue 0

Halftone Pattern: Dither

1 of 1

PDF Hide Details Cancel Print

### 1. Color Mode

Select the colour mode to suit your preference.

### 2. Advanced Color Settings

Click the disclosure triangle to view the Advanced Colour Settings. Select the Colour Enhancement check box, and then set the options using the sliders. This process may take several minutes depending on the size of the image and the specifications of your computer.

## ✓ Related Information

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

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**Related Topics:**

- [Error and Maintenance Messages](#)
  - [Paper Handling and Printing Problems](#)
  - [Print a Photo \(Mac\)](#)
  - [Print a Document \(Mac\)](#)
  - [Print on Both Sides of the Paper Automatically \(Automatic 2-sided Printing\) \(Mac\)](#)
  - [Print More Than One Page on a Single Sheet of Paper \(N in 1\) \(Mac\)](#)
  - [Change the Print Setting Options When Having Printing Problems](#)
-

## **Print Data Directly from a USB Flash Drive**

- [Compatible USB Flash Drives](#)
- [Print Photos Directly from a USB Flash Drive](#)

## Compatible USB Flash Drives

Your Brother machine has media drive (slot) for use with common data storage.

### 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 Media	
USB Flash Drive	

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 Photos Directly from a USB Flash Drive

Even if your machine is *not* connected to your computer, you can print photos directly from a USB Flash memory drive.

- [Important Information about Photo Printing](#)
- [Print Photos from a USB Flash Drive on the Brother Machine](#)

## Important Information about Photo Printing

Your machine is designed to be compatible with modern digital camera image files and USB flash drives. Read the points below to avoid errors:

- The image file extension must be .JPG (other image file extensions like .JPEG, .TIF, .GIF and so on will not be recognised).
- Direct photo printing must be performed separately from photo printing operations using the computer. (Simultaneous operation is not available.)
- The machine can read up to 999 files <sup>1</sup> on a USB flash drive.

Be aware of the following:

- When printing an index or image, the machine will print all the valid images, even if one or more images have been corrupted. Corrupted images will not be printed.
- Your machine supports USB flash drives that have been formatted by Windows.



### Related Information

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

<sup>1</sup> The folder inside USB flash drives is also counted.

## **Print Photos from a USB Flash Drive on the Brother Machine**

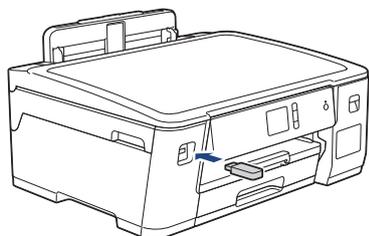
- [Preview and Print Photos from a USB Flash Drive](#)
- [Print a Photo Index Sheet \(Thumbnails\) from a USB Flash Drive](#)
- [Print Photos by Image Number](#)
- [Print Photos with Auto Cropping](#)
- [Print Borderless Photos from a USB Flash Drive](#)
- [Print the Date from Your Photo's Data](#)
- [Print Settings for Photos](#)

## Preview and Print Photos from a USB Flash Drive

Preview your photos on the LCD before you print them. Print images that are stored on a USB flash drive.

- If your photos are large files, there may be a delay before each photo is displayed.

1. Put a USB flash drive in the USB slot.



2. Press [JPEG Print] > [Select Files].
3. Press ◀ or ▶ to display the photo you want to print, and then press it.



To print all photos, press [Print All], and then press [Yes] to confirm.

4. Enter the number of copies in one of the following ways:
  - Press [-] or [+] on the touchscreen.
  - Press **x01** to display the keyboard on the touchscreen, and then enter the number of copies using the touchscreen keyboard. Press [OK].
5. Press [OK].
6. Repeat the last three steps until you have selected all the photos you want to print.
7. Press [OK].
8. Read and confirm the displayed list of options.
9. To change the print settings, press [Print Settings].  
When finished, press [OK].
10. Press [Start].



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

#### Related Topics:

- [Print Settings for Photos](#)

## Print a Photo Index Sheet (Thumbnails) from a USB Flash Drive

Print a photo Index Sheet to see small preview versions of all pictures on your USB flash drive.



- The machine assigns numbers for images (such as No.1, No.2, No.3, and so on).  
The machine does not recognise any other numbers or file names that your digital camera or computer has used to identify the pictures.
- Only file names that are 20 characters or less will be printed correctly on the index sheet.
- File names cannot be printed correctly if they contain non-alphanumeric characters, but non-alphanumeric characters do not affect photo print settings.

1. Put a USB flash drive in the USB slot.
2. Press [JPEG Print] > [Index Print] > [Print Index Sheet].
3. If you want to change the print settings, press [Print Settings].

When finished, press [OK].

Option	Description
Paper Type	Select the paper type.
Paper Size	Select the paper size.

4. Press [Start].



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

#### Related Topics:

- [Print Photos by Image Number](#)

## Print Photos by Image Number

Before you can print an individual image, you must print the photo Index Sheet (thumbnails) to know the image number.

1. Put a USB flash drive in the USB slot.
2. Press [JPEG Print] > [Index Print] > [Print Photos].
3. Enter the image numbers you want to print using the photo Index Sheet. After you have selected the image numbers, press [OK].



- Enter multiple numbers at one time using a comma or a hyphen. For example, enter **1, 3, 6** to print images No.1, No.3 and No.6. Print a range of images using a hyphen. For example, enter **1-5** to print images No.1 to No.5.
- Enter up to 12 characters (including commas and hyphens) for the image numbers you want to print.

4. Enter the number of copies in one of the following ways:
  - Press [-] or [+] on the touchscreen.
  - Press  x01 to display the keyboard on the touchscreen, and then enter the number of copies using the touchscreen keyboard. Press [OK].
5. To change the print settings, press [Print Settings].  
When finished, press [OK].
6. Press [Start].



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

#### Related Topics:

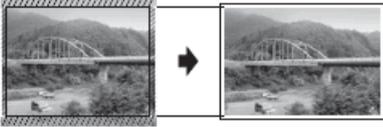
- [Print a Photo Index Sheet \(Thumbnails\) from a USB Flash Drive](#)
- [Print Settings for Photos](#)

## Print Photos with Auto Cropping

If your photo is too long or too wide to fit the space in your layout, part of the image will be cropped.

- The factory setting is On. To print the whole image, change this setting to Off.
- If you set the [Cropping] setting to Off, set the [Borderless] setting to Off, also.

### Cropping: On



### Cropping: Off



1. Put a USB flash drive in the USB slot.
2. Press [JPEG Print] > [Select Files].
3. Press ◀ or ▶ to display each photo. When the photo you want appears, press it, and then press [OK].
4. Press [OK].
5. Press [Print Settings] > [Cropping].
6. Press [On] (or [Off]).
7. When finished, press  or [OK].
8. Press [Start].



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

#### Related Topics:

- [Other Problems](#)

## Print Borderless Photos from a USB Flash Drive

This feature expands the printable area to the edges of the paper. Printing time will be slower.

1. Put a USB flash drive in the USB slot.
2. Press [JPEG Print] > [Select Files].
3. Press ◀ or ▶ to display each photo. When the photo you want appears, press it, and then press [OK].
4. Press [OK].
5. Press [Print Settings] > [Borderless].
6. Press [On] (or [Off]).
7. When finished, press  or [OK].
8. Press [Start].



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

#### Related Topics:

- [Other Problems](#)

## Print the Date from Your Photo's Data

Print the date if it is already in your photo's information. The date will be printed on the lower-right corner. To use this setting, the photo must include the date.

1. Put a USB flash drive in the USB slot.
2. Press [JPEG Print] > [Select Files].
3. Press ◀ or ▶ to display each photo. When the photo you want appears, press it, and then press [OK].
4. Press [OK].
5. Press [Print Settings] > [Date Print].
6. Press [On] (or [Off]).
7. When finished, press  or [OK].
8. Press [Start].



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

## Print Settings for Photos

Press the [Print Settings] option to display the settings shown in the table.

Option	Description
Print Quality	Select the print resolution for your type of document. When you select the <b>Inkjet Paper</b> option in the <b>Paper Type</b> setting, you can select only <b>Fine</b> .
Paper Type	Select the paper type.
Paper Size	Select the paper size.
Tray Select	Select the tray.
Print Layout	Select the print layout.
Brightness	Adjust the brightness.
Contrast	Adjust the contrast. Increasing the contrast will make an image look sharper and more vivid.
Cropping	Crop the image around the margin to fit the paper size or print size. Turn this feature off when you want to print whole images or prevent unwanted cropping.
Borderless	Expand the printable area to fit the edges of the paper.
Date Print	Print the date on your photo.
Set New Default	Save the print settings you use most often by setting them as the defaults.
Factory Reset	Restore any changed print settings back to the factory settings.



### Related Information

- [Print Photos from a USB Flash Drive on the Brother Machine](#)

#### Related Topics:

- [Preview and Print Photos from a USB Flash Drive](#)
- [Print Photos by Image Number](#)

## Network

- [Configure Network Details Using the Control Panel](#)
- [Supported Basic Network Features](#)
- [Network Management Software and Utilities](#)
- [Additional Methods of Configuring Your Brother Machine for a Wireless Network](#)
- [Advanced Network Features](#)
- [Technical Information for Advanced Users](#)

## 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 management utilities, such as BRAdmin Light (Windows), BRAdmin Professional (Windows) and Web Based Management, to configure and change your Brother machine's network settings.  
See *Related Information: Learn about Network Management Software and Utilities*.

1. Press  [\[Settings\]](#) > [\[All Settings\]](#) > [\[Network\]](#).
2. Press [▲](#) or [▼](#) to display the network option, 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

- [Network](#)

#### Related Topics:

- [Settings Tables \(2.7"\(67.5 mm\) Touchscreen models\)](#)
- [Learn about Network Management Software and Utilities](#)

## Supported Basic Network Features

The print server 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 7 Windows 8 Windows 10	Windows Server 2008/2008 R2/2012/2012 R2/2016	macOS
Printing	Yes	Yes	Yes
BRAdmin Light <sup>1 3</sup>	Yes	Yes	
BRAdmin Professional <sup>2 3</sup>	Yes	Yes	
Web Based Management <sup>3</sup>	Yes	Yes	Yes
Status Monitor	Yes		Yes
Driver Deployment Wizard	Yes	Yes	



### Related Information

- [Network](#)

<sup>1</sup> BRAdmin Light is available as a download from your model's page at [support.brother.com](http://support.brother.com).

<sup>2</sup> BRAdmin Professional is available as a download from your model's page at [support.brother.com](http://support.brother.com).

<sup>3</sup> The default login password to manage machine settings is **initpass**. We recommend you change it to protect your machine from unauthorised access.

## Network Management Software and Utilities

Configure and change your Brother machine's network settings using a management utility.

- [Learn about Network Management Software and Utilities](#)
- [Change Machine Settings from Your Computer](#)

## Learn about Network Management Software and Utilities

### 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). Type your machine's IP address into your web browser to access and change your print server settings.

### BRAdmin Light (Windows)

BRAdmin Light is a utility for the initial setup of Brother network-connected devices. This utility can search for Brother products on your network, view the status and configure the basic network settings, such as IP address.

Go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com) to download BRAdmin Light.



- If using Windows Firewall, or the firewall function of an anti-spyware or antivirus application, temporarily disable them. When you are sure you can print, configure the software settings following the instructions.

### BRAdmin Professional (Windows)

BRAdmin Professional is a utility for more advanced management of network-connected Brother devices. This utility can search for Brother products on your network and view the device status from an easy-to-read Windows Explorer-style screen that changes colour to identify the status of each device. You can configure network and device settings, and update device firmware from a Windows computer on your LAN. BRAdmin Professional can also log activity of Brother devices on your network and export the log data.



- Go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com) to download the latest version of Brother's BRAdmin Professional utility.
- Node name: The node name appears in the current BRAdmin Professional window. The default node name is "BRNxxxxxxxxxxxx" for a wired network or "BRWxxxxxxxxxxxx" for a wireless network (where "xxxxxxxxxxxx" is your machine's MAC Address / Ethernet address).
- If using Windows Firewall, or the firewall function of an anti-spyware or antivirus application, temporarily disable them. When you are sure you can print, configure the software settings following the instructions.



### Related Information

- [Network Management Software and Utilities](#)

#### Related Topics:

- [Change Machine Settings Using Web Based Management](#)

## Additional Methods of Configuring Your Brother Machine for a Wireless Network

To connect your machine to your wireless network, we recommend using the Brother installation disc.

- [Before Configuring Your Brother Machine for a Wireless Network](#)
- [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](#)
- [Use Wi-Fi Direct®](#)

## Before Configuring Your Brother Machine for a Wireless Network

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 the Brother 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 the Brother 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 you do not know the security information (for example, Network Name (SSID) and Network Key), consult the router manufacturer, your system administrator, or your Internet provider.



### Related Information

- [Additional Methods of Configuring Your Brother Machine for a Wireless Network](#)

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

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



Routers or access points that support WPS are marked with this symbol:



1. Press  [Settings] > [All Settings] > [Network] > [WLAN] > [WPS].
2. When [Enable WLAN?] appears, press [Yes].  
The wireless setup wizard starts. To cancel, press [No].
3. When the touchscreen instructs you to start WPS, press the WPS button on your wireless access point/router. Then press [OK] on your machine. Your machine automatically tries to connect to your wireless network.

If your wireless device is connected successfully, the LCD displays [Connected].

You have completed the wireless network setup. To install the **Full Driver & Software Package** necessary for operating your machine, insert the Brother installation disc into your computer, or go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).



### Related Information

- [Additional Methods of Configuring Your Brother Machine for a Wireless Network](#)

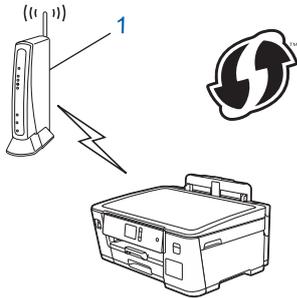
## Configure Your Machine for a Wireless Network Using the PIN Method of Wi-Fi Protected Setup™ (WPS)

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.

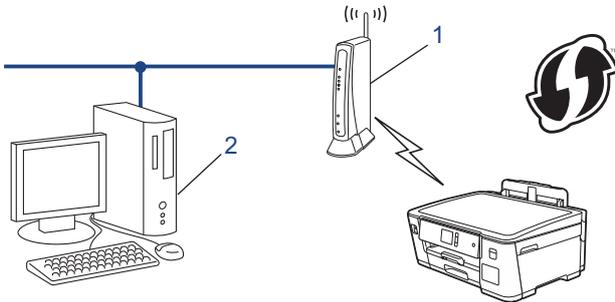
### Type A

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.



 Routers or access points that support WPS are marked with this symbol:



1. Press  [Settings] > [All Settings] > [Network] > [WLAN] > [WPS w/ PIN Code].
2. When [Enable WLAN?] appears, press [Yes].  
The wireless setup wizard starts. 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 will 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, or Windows 10 computer as a Registrar, complete the following steps:**

6. Do one of the following:

- Windows 7

Click  (**Start**) > **Devices and Printers** > **Add a device**.

- Windows 8

Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings** > **Control Panel** > **Hardware and Sound** > **Devices and Printers** > **Add a device**.

- Windows 10

Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **Add a device**.



- To use a Windows 7, Windows 8, 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, 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 **Full Driver & Software Package** necessary for operating your machine, insert the Brother installation disc into your computer or go to your model's **Downloads** page on the Brother Solutions Center 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**.



## Related Information

- [Additional Methods of Configuring Your Brother Machine for a Wireless Network](#)

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

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)				
Communication Mode	Authentication Method	Encryption Mode	Network Key	
Infrastructure	Open System	NONE	-	
		WEP		
	Shared Key	WEP		
		WPA/WPA2-PSK	AES	
			TKIP	

For example:

Network Name (SSID)			
HELLO			
Communication Mode	Authentication Method	Encryption Mode	Network Key
Infrastructure	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] > [Setup Wizard].
3. When [Enable WLAN?] appears, press [Yes].  
The wireless setup wizard starts. To cancel, press [No].
4. The machine searches for your network and displays a list of available SSIDs. Press ▲ or ▼ to display the [<New SSID>] option, and then press it.
5. Press [OK].
6. Enter the SSID name, and then press [OK].



For more information about how to enter text, see the *Appendix*.

7. Press [Infrastructure].
8. Select the Authentication Method, and then press it.
9. Do one of the following:
  - If you selected the [Open System] option, press either [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 either [TKIP+AES] or [AES].  
Enter the WPA key, and then press [OK].



- For more information about how to enter text, see the *Appendix*.
- Your Brother machine supports the use of the first WEP key only.

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

If your wireless device is connected successfully, the LCD displays [Connected].

You have completed the wireless network setup. To install the **Full Driver & Software Package** necessary for operating your machine, insert the Brother installation disc into your computer, or go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).



### Related Information

- [Additional Methods of Configuring Your Brother Machine for a Wireless Network](#)

#### Related Topics:

- [I Cannot Complete the Wireless Network Setup Configuration](#)
-

## Configure Your Machine for an Enterprise Wireless Network

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)

Communication Mode	Authentication Method	Encryption Mode	User ID	Password
Infrastructure	LEAP	CKIP		
		AES		
	EAP-FAST/NONE	TKIP		
		AES		
	EAP-FAST/MS-CHAPv2	TKIP		
		AES		
	EAP-FAST/GTC	TKIP		
		AES		
	PEAP/MS-CHAPv2	TKIP		
		AES		
	PEAP/GTC	TKIP		
		AES		
	EAP-TTLS/CHAP	TKIP		
		AES		
	EAP-TTLS/MS-CHAP	TKIP		
		AES		
	EAP-TTLS/MS-CHAPv2	TKIP		
		AES		
EAP-TTLS/PAP	TKIP			
	AES			
EAP-TLS	TKIP			-
	AES			-

For example:

Network Name (SSID)
HELLO

Communication Mode	Authentication Method	Encryption Mode	User ID	Password
Infrastructure	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] > [Setup Wizard].
3. When [Enable WLAN?] appears, press [Yes].  
The wireless setup wizard starts. To cancel, press [No].
4. The machine searches for your network and displays a list of available SSIDs. Press ▲ or ▼ to display the [<New SSID>] option, and then press it.
5. Press [OK].
6. Enter the SSID name, and then press [OK].



For more information about how to enter text, see the *Appendix*.

7. Press [Infrastructure].
8. Select the Authentication Method, and then press it.
9. Do one of the following:
  - If you selected the [LEAP] option, enter the user ID, and then press [OK]. Enter the Password, and then press [OK].
  - If you selected the [EAP-FAST], [PEAP] or [EAP-TTLS] option, select the Inner Authentication method [NONE], [CHAP], [MS-CHAP], [MS-CHAPv2], [GTC] or [PAP].



Depending on your Authentication method, the Inner Authentication method selections 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].  
The machine will display a list of available Client Certificates, and then select the certificate.  
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].

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

If your wireless device is connected successfully, the LCD displays [Connected].

You have completed the wireless network setup. To install **Full Driver & Software Package** necessary for operating your device, insert the Brother installation disc into your computer or go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).



## Related Information

- [Additional Methods of Configuring Your Brother Machine for a Wireless Network](#)

## Use Wi-Fi Direct®

- [Print from Your Mobile Device Using Wi-Fi Direct](#)
- [Configure Your Wi-Fi Direct Network](#)
- [I Cannot Complete the Wireless Network Setup Configuration](#)

## Print from Your Mobile Device Using Wi-Fi Direct

Wi-Fi Direct is one of the wireless configuration methods developed by the Wi-Fi Alliance®. It allows you to configure a secured wireless network between your Brother machine and a mobile device, such as an Android™ device, Windows device, iPhone, iPod touch, or iPad, without using an access point. Wi-Fi Direct supports wireless network configuration using the one-push or PIN Method of Wi-Fi Protected Setup™ (WPS). You can also configure a wireless network by manually setting a SSID and password. Your Brother machine's Wi-Fi Direct feature supports WPA2™ security with AES encryption.



1. Mobile device
2. Your Brother machine



- Although the Brother machine can be used in both a wired (supported models only) and wireless network, 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 and Wi-Fi Direct connection can be used at the same time.
- The Wi-Fi Direct supported device can become a Group Owner (G/O). When configuring the Wi-Fi Direct network, the Group Owner (G/O) serves as an access point.



### Related Information

- [Use Wi-Fi Direct®](#)

## Configure Your Wi-Fi Direct Network

Configure your Wi-Fi Direct network settings from your machine's control panel.

- [Wi-Fi Direct Network Configuration Overview](#)
- [Configure Your Wi-Fi Direct Network Using the One-Push Method](#)
- [Configure Your Wi-Fi Direct Network Using the One-Push Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Wi-Fi Direct Network Using the PIN Method](#)
- [Configure Your Wi-Fi Direct Network Using the PIN Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Wi-Fi Direct Network Manually](#)

## Wi-Fi Direct Network Configuration Overview

The following instructions offer five methods for configuring your Brother machine in a wireless network environment. Select the method you prefer for your environment.

Check your mobile device for configuration.

1. Does your mobile device support Wi-Fi Direct?

Option	Description
Yes	Go to Step 2
No	Go to Step 3

2. Does your mobile device support one-push configuration for Wi-Fi Direct?

Option	Description
Yes	See <i>Related Information</i> : Configure Your Wi-Fi Direct Network Using the One-Push Method
No	See <i>Related Information</i> : Configure Your Wi-Fi Direct Network Using the PIN Method

3. Does your mobile device support Wi-Fi Protected Setup™ (WPS)?

Option	Description
Yes	Go to Step 4
No	See <i>Related Information</i> : Configure Your Wi-Fi Direct Network Manually

4. Does your mobile device support one-push configuration for Wi-Fi Protected Setup™ (WPS)?

Option	Description
Yes	See <i>Related Information</i> : Configure Your Wi-Fi Direct Network Using the One-Push Method of Wi-Fi Protected Setup™ (WPS)
No	See <i>Related Information</i> : Configure Your Wi-Fi Direct Network Using the PIN Method of Wi-Fi Protected Setup™ (WPS)

To use Brother iPrint&Scan functionality in a Wi-Fi Direct network configured by one-push configuration using Wi-Fi Direct or by PIN Method configuration using Wi-Fi Direct, the device you use to configure Wi-Fi Direct must be running Android™ 4.0 or greater.

### Related Information

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

#### Related Topics:

- [Configure Your Wi-Fi Direct Network Using the One-Push Method](#)
- [Configure Your Wi-Fi Direct Network Using the PIN Method](#)
- [Configure Your Wi-Fi Direct Network Manually](#)
- [Configure Your Wi-Fi Direct Network Using the One-Push Method of Wi-Fi Protected Setup™ \(WPS\)](#)
- [Configure Your Wi-Fi Direct Network Using the PIN Method of Wi-Fi Protected Setup™ \(WPS\)](#)

## Configure Your Wi-Fi Direct Network Using the One-Push Method

If your mobile device supports Wi-Fi Direct, follow these steps to configure a Wi-Fi Direct network:



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

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Push Button].
2. Activate Wi-Fi Direct on your mobile device (see your mobile device's user's guide for instructions) when [Activate Wi-Fi Direct on other device. Then Press [OK].] appears. Press [OK] on your Brother machine.  
This will start the Wi-Fi Direct setup.
3. Do one of the following:
  - When your Brother machine is the Group Owner (G/O), connect your mobile device to the machine directly.
  - When your Brother machine is not the Group Owner (G/O), it will display available device names with which to configure a Wi-Fi Direct network. Select the mobile device to which you want to connect. Search for available devices again by pressing [Rescan].

If your mobile device connects successfully, the machine displays [Connected]. You have completed the Wi-Fi Direct network setup.



### Related Information

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

#### Related Topics:

- [Wi-Fi Direct Network Configuration Overview](#)

## Configure Your Wi-Fi Direct Network Using the One-Push Method of Wi-Fi Protected Setup™ (WPS)

If your mobile device supports WPS (PBC; Push Button Configuration), follow these steps to configure a Wi-Fi Direct network:



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

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Group Owner] > [On].
2. Press [Push Button].
3. Activate your mobile device's WPS one-push configuration method (see your mobile device's user's guide for instructions). When [Activate Wi-Fi Direct on other device. Then Press [OK].] appears on the machine's LCD, press [OK] on your machine.

This will start the Wi-Fi Direct setup.

If your mobile device connects successfully, the machine displays [Connected]. You have completed the Wi-Fi Direct network setup.



### Related Information

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

#### Related Topics:

- [Wi-Fi Direct Network Configuration Overview](#)

## Configure Your Wi-Fi Direct Network Using the PIN Method

If your mobile device supports the PIN Method of Wi-Fi Direct, follow these steps to configure a Wi-Fi Direct network:



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

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [PIN Code].
2. Activate Wi-Fi Direct on your mobile device (see your mobile device's user's guide for instructions) when [Activate Wi-Fi Direct on other device. Then Press [OK].] appears. Press [OK] on your Brother machine.  
This will start the Wi-Fi Direct setup.
3. Do one of the following:
  - When your Brother machine is the Group Owner (G/O), it will wait for a connection request from your mobile device. When [PIN Code] appears, enter the PIN displayed on your mobile device in the machine. Press [OK]. Follow the instructions.  
If the PIN is displayed on your Brother machine, enter the PIN in your mobile device.
  - When your Brother machine is not the Group Owner (G/O), it will display available device names with which to configure a Wi-Fi Direct network. Select the mobile device to which you want to connect. Search for available devices again by pressing [Rescan].  
Do one of the following:
    - Press [Display PIN Code] to display the PIN on your machine and enter the PIN in your mobile device. Follow the instructions.
    - Press [Input PIN Code] to enter a PIN shown on your mobile device in the machine, and then press [OK]. Follow the instructions.

If your mobile device does not display a PIN, press  on your Brother machine. Go back to step 1 and try again.

If your mobile device connects successfully, the machine displays [Connected]. You have completed the Wi-Fi Direct network setup.



### Related Information

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

#### Related Topics:

- [Wi-Fi Direct Network Configuration Overview](#)

## Configure Your Wi-Fi Direct Network Using the PIN Method of Wi-Fi Protected Setup™ (WPS)

If your mobile device supports the PIN Method of Wi-Fi Protected Setup™ (WPS), follow these steps to configure a Wi-Fi Direct network:



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

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Group Owner] > [On] > [PIN Code].
2. When [Activate Wi-Fi Direct on other device. Then Press [OK].] is displayed, activate your mobile device's WPS PIN configuration method (see your mobile device's user's guide for instructions), and then press [OK] on your Brother machine.  
This will start the Wi-Fi Direct setup.
3. The machine will wait for a connection request from your mobile device. When [PIN Code] appears, enter the PIN displayed on your mobile device in the machine. Press [OK].

If your mobile device connects successfully, the machine displays [Connected]. You have completed the Wi-Fi Direct network setup.



### Related Information

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

#### Related Topics:

- [Wi-Fi Direct Network Configuration Overview](#)

## Configure Your Wi-Fi Direct Network Manually

If your mobile device does not support Wi-Fi Direct or WPS, you must configure a Wi-Fi Direct network manually.

1. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Manual].
2. The machine will display the SSID name and Password. Go to your mobile device's wireless network settings screen, select the SSID name, and then enter the password.

If your mobile device connects successfully, the machine displays [Connected]. You have completed the Wi-Fi Direct network setup.



### Related Information

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

#### Related Topics:

- [Wi-Fi Direct Network Configuration Overview](#)

## Advanced Network Features

- [Print the Network Configuration Report](#)
- [Synchronize Time with the SNTP Server Using Web Based Management](#)

## 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] > [Yes].

The machine prints the current Network Configuration Report.



### Related Information

- [Advanced Network Features](#)

#### Related Topics:

- [Access Web Based Management](#)
- [Where Can I Find My Brother Machine's Network Settings?](#)
- [Use the Network Connection Repair Tool \(Windows\)](#)
- [I Want to Check that My Network Devices are Working Correctly](#)
- [Configure IEEE 802.1x Authentication for a Wired or a Wireless Network Using Web Based Management \(Web Browser\)](#)
- [Error and Maintenance Messages](#)

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

The Simple Network Time Protocol (SNTP) is used to synchronize the time used by the machine for authentication with the SNTP time server. (This is not the time displayed on the machine's LCD.) You can automatically or manually synchronize 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 synchronize the time used by the machine with the SNTP time server.

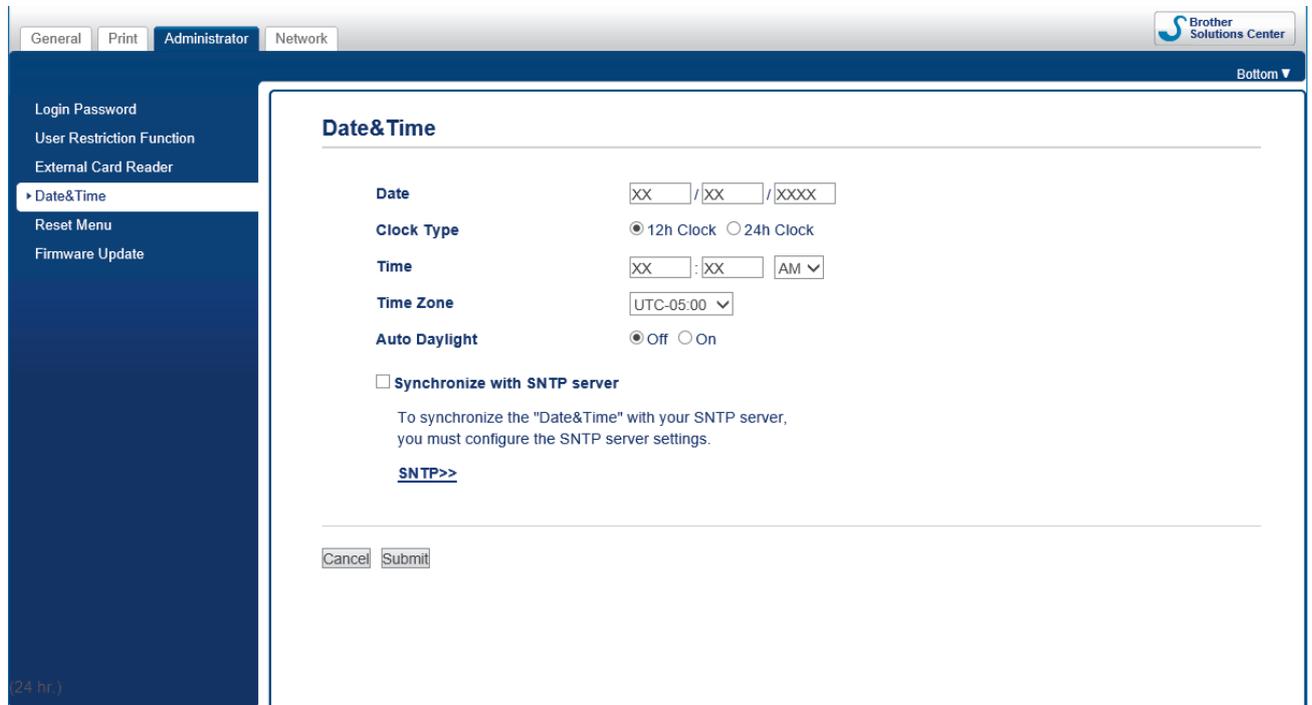
This feature is not available in some countries.

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 the machine prompts you for a password, type it, and then click .
4. Click the **Administrator** tab.
5. Click **Date&Time** in the left navigation bar.



The screenshot shows the web management interface with the 'Administrator' tab selected. The left navigation bar has 'Date&Time' highlighted. The main content area is titled 'Date&Time' and contains the following settings:

- Date:** Three input fields for day, month, and year (format: XX/XX/XXXX).
- Clock Type:** Radio buttons for '12h Clock' (selected) and '24h Clock'.
- Time:** Two input fields for hour and minute, followed by a dropdown for 'AM' or 'PM'.
- Time Zone:** A dropdown menu currently showing 'UTC-05:00'.
- Auto Daylight:** Radio buttons for 'Off' (selected) and 'On'.
- Synchronize with SNTP server:** An unchecked checkbox.

Below the checkbox, there is a note: "To synchronize the 'Date&Time' with your SNTP server, you must configure the SNTP server settings." and a link labeled 'SNTP>>'. At the bottom of the form are 'Cancel' and 'Submit' buttons.

6. 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.

7. Select the **Synchronize with SNTP server** check box.
8. Click **Submit**.



### Related Information

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

## Configure the SNTP Protocol Using Web Based Management

Configure the SNTP protocol to synchronize 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 the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Protocol** menu in the left navigation bar.
6. Select the **SNTP** check box to activate the settings.
7. Click **Submit**.
8. Restart your Brother machine to activate the configuration.
9. Next to the SNTP check box, click **Advanced Settings**.
10. Configure the settings.

Option	Description
<b>Status</b>	Displays whether the SNTP protocol is enabled or disabled.
<b>Synchronization Status</b>	Confirm the latest synchronization 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 synchronization attempts (1-168 hours).

11. Click **Submit**.

### Related Information

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

## Technical Information for Advanced Users

- [Reset the Network Settings to Factory Default](#)
- [Print the WLAN Report](#)

## Reset the Network Settings to Factory Default

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



- This feature restores all wired (supported models only) and wireless network settings to the factory settings.
- You can also reset the print server to its factory settings using BRAdmin Light, BRAdmin Professional, or Web Based Management.

1. Press  [Settings] > [All Settings] > [Network] > [Network Reset].
2. The message confirming reset will be displayed. Press [OK] for two seconds.  
The machine will restart.



### Related Information

- [Technical Information for Advanced Users](#)

## Print the WLAN Report

The WLAN Report reflects 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] > [Yes].

The machine will print the WLAN Report.

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

- [Technical Information for Advanced Users](#)
  - [Wireless LAN Report Error Codes](#)

#### Related Topics:

- [My Brother Machine Cannot Print over the Network](#)
- [I Want to Check that My Network Devices are Working Correctly](#)
- [Configure IEEE 802.1x Authentication for a Wired or a Wireless Network Using Web Based Management \(Web Browser\)](#)

## Wireless LAN Report Error Codes

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	The wireless setting is not activated. Change the wireless setting to ON. If a network cable is connected to your machine, disconnect it and change the wireless setting of your machine to ON.
TS-02	The wireless access point/router cannot be detected. 1. Check the following two points: <ul style="list-style-type: none"> <li>Unplug the power to your wireless access point/router, wait for 10 seconds, and then plug it back in.</li> <li>If your WLAN access point/router is using MAC address filtering, confirm that the MAC address of the Brother machine is allowed in the filter.</li> </ul> 2. If you manually entered the SSID and security information (SSID/authentication method/encryption method/Network Key), the information may be incorrect. Reconfirm the SSID and security information and re-enter the correct information as necessary. This device does not support a 5 GHz SSID/ESSID and you must select a 2.4 GHz SSID/ESSID. Make sure the access point/router is set to 2.4 GHz or 2.4 GHz/5 GHz mixed mode.
TS-03	The wireless network and security setting you entered may be incorrect. Reconfirm the wireless network settings. If you do not know this information, ask your network administrator.
TS-04	The Authentication/Encryption methods used by the selected wireless access point/router are not supported by your machine. Change the authentication and encryption methods of the wireless access point/router. Your machine supports the following authentication methods: <ul style="list-style-type: none"> <li>WPA-Personal TKIP or AES</li> <li>WPA2-Personal TKIP or AES</li> <li>Open WEP or None (without encryption)</li> <li>Shared key WEP</li> </ul> If your problem is not solved, the SSID or network settings you entered may be incorrect. Confirm the wireless network settings.
TS-05	The security information (SSID/Network Key) is incorrect. Confirm the SSID and Network Key.
TS-06	The wireless security information (Authentication method/Encryption method/Network Key) is incorrect. Confirm the wireless security information (Authentication method/Encryption method/Network Key).
TS-07	The machine cannot detect a WLAN access point/router that has WPS enabled. If you want to connect with WPS, you must operate both your machine and the WLAN access point/router. Confirm the connection method for WPS on WLAN access point/router and try starting again. If you do not know how to operate your WLAN access point/router using WPS, see the documentation provided with your WLAN access point/router, ask the manufacturer of your WLAN access point/router, or ask your network administrator.

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Error Code	Problem and Recommended Solutions
TS-08	Two or more WLAN access points that have WPS enabled are detected. <ul style="list-style-type: none"><li>• Confirm that only one WLAN access point/router within range has the WPS method active and try again.</li><li>• Try again after a few minutes to avoid interference from other access points.</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.

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## Related Information

- [Print the WLAN Report](#)

### Related Topics:

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

## Security

- [Before Using Network Security Features](#)
- [Secure Function Lock 3.0](#)
- [Use Active Directory Authentication](#)
- [Use LDAP Authentication](#)
- [Manage Your Network Machine Securely Using SSL/TLS](#)
- [Manage Your Network Machine Securely Using IPsec](#)
- [Send an Email Securely](#)
- [Use IEEE 802.1x Authentication for a Wired or a Wireless Network](#)

## Before Using Network Security Features

Your Brother 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 FTP and TFTP protocols. Accessing the machine using these protocols is not secure.

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### Related Information

- [Security](#)
-

## Secure Function Lock 3.0

Brother's Secure Function Lock 3.0 increases security by restricting the functions available on your Brother 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 an External IC Card Reader](#)

## 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 or BRAdmin Professional (Windows):

- **Print**

Print includes print jobs sent via AirPrint, Google Cloud Print™ and Brother iPrint&Scan.

If you register users' logon names in advance, the users will not need to enter their passwords when they use the print function.

- **Media**
- **Web Connect** (supported models only)
- **Page Limits (\*)**
- **Color Print**
- **Page Counters**
- **Card ID (NFC ID)** (supported models only)



### Related Information

- [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 the machine prompts you for a password, type it, and then click .
4. Click the **Administrator** tab.
5. Click the **Restriction Management** or **User Restriction Function** menu in the left navigation bar.
6. Select **Secure Function Lock**.
7. Click **Submit**.
8. Click the **Restricted Functions** menu in the left navigation bar.
9. In the **User List / Restricted Functions** field, type a group name or user name.
10. In the **Print** and the other columns, select a check box to allow or clear a check box to restrict the function listed.
11. To configure the maximum page count, select the **On** check box in the **Page Limits** column, and then type the maximum number in the **Max. Pages** field.
12. Click **Submit**.
13. Click the **User List** menu in the left navigation bar.
14. In the **User List** field, type the user name.
15. In the **PIN Number** field, type a four-digit password.
16. To register the user's Card ID, type the card number in the **Card ID (NFC ID)** field (available only for certain models) .
17. Select **User List / Restricted Functions** from the drop-down list for each user.
18. Click **Submit**.



### Related Information

- [Secure Function Lock 3.0](#)

#### Related Topics:

- [Register Your Machine with Google Cloud Print Using Web Based Management](#)

## 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 Google Cloud Print™, Brother iPrint&Scan, and CUPS driver (Mac).

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 the machine prompts you for a password, type it, and then click .
4. Click the **Administrator** tab.
5. Click the **Restriction Management** or **User Restriction Function** menu in the left navigation bar.
6. Select **Secure Function Lock**.
7. Click **Submit**.
8. Click the **Restricted Functions** menu in the left navigation bar.
9. In the **Public Mode** row, select a check box to allow or clear a check box to restrict the function listed.
10. Click **Submit**.



### Related Information

- [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.

### Last Counter Record

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

### Counter Auto Reset

Click **Counter Auto Reset** to configure the time interval you want between page counter reset. Choose a daily, weekly, or monthly interval.



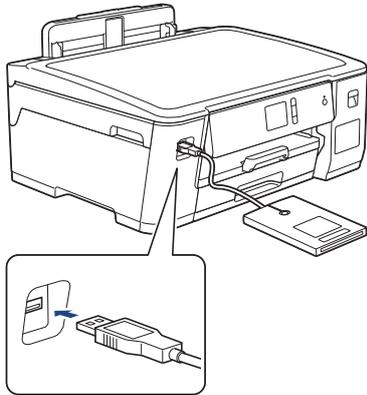
### Related Information

- [Secure Function Lock 3.0](#)

## 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 the machine prompts you for a password, type it, and then click .
4. Click the **Administrator** tab.
5. Click the **External Card Reader** menu, and then enter the necessary information.
6. Click **Submit**.
7. Restart your Brother machine to activate the configuration.
8. Unplug the power cord from the electrical socket.
9. Connect the card reader to your machine, and then plug the machine's power cord into the electrical socket.



10. Touch the card to the card reader when using card authentication.

### Related Information

- [Secure Function Lock 3.0](#)

## 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 Brother 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.

You can change the Active Directory Authentication settings using Web Based Management or BRAdmin Professional (Windows).



### 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 the machine prompts you for a password, type it, and then click .
4. Click the **Administrator** tab.
5. Click the **User Restriction Function** menu in the left navigation bar.
6. Select **Active Directory Authentication**.
7. Click **Submit**.
8. Select the **Active Directory Authentication** menu in the left navigation bar.
9. 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).

10. 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, use the touchscreen to 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 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 Brother 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.

You can change the LDAP Authentication settings using Web Based Management or BRAdmin Professional (Windows).



### 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 the machine prompts you for a password, type it, and then click .
4. Click the **Administrator** tab.
5. Click the **User Restriction Function** menu in the left navigation bar.
6. Select **LDAP Authentication**.
7. Click **Submit**.
8. Click the **LDAP Authentication** menu in the left navigation bar.
9. 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.
<b>LDAP Search Root</b>	Type the LDAP search root directory.
<b>Attribute of Name (Search Key)</b>	Type the attribute you want to use as a search key.

10. 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, use the touchscreen to 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](#)

## Manage Your Network Machine Securely Using SSL/TLS

- [Certificates and Web Based Management](#)

## Certificates and Web Based Management

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

- [Supported Security Certificate Features](#)
- [Create and Install a Certificate](#)
- [Manage Multiple Certificates](#)

## Supported Security Certificate Features

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

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

The Brother 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

- [Certificates and Web Based Management](#)

#### Related Topics:

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

## Create and Install a Certificate

- [Step by Step Guide for Creating and Installing a Certificate](#)
- [Create and Install a Self-signed Certificate](#)
- [Create and Install a Certificate from a Certificate Authority \(CA\)](#)
- [Import and Export a CA Certificate](#)

## 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).

These are a brief summary of the actions required, based on the option you choose.

### 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

- [Create and Install a Certificate](#)

## Create and Install a Self-signed Certificate

- [Create a Self-signed Certificate](#)
- [Install the Self-signed Certificate for Windows users with Administrator Rights](#)
- [Import and Export the Self-signed Certificate on your Brother Machine](#)

## 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **Certificate** menu in the left navigation bar.
7. Click **Create Self-Signed Certificate**.
8. 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.
9. Select your setting from the **Public Key Algorithm** drop-down list. The default setting is **RSA(2048bit)**.
10. Select your setting from the **Digest Algorithm** drop-down list. The default setting is **SHA256**.
11. Click **Submit**.
12. Click the **Network** tab.
13. Click the **Protocol** menu in the left navigation bar.
14. Click **HTTP Server Settings**.
15. Select the certificate you want to configure from the **Select the Certificate** drop-down list.
16. Click **Submit**.
17. Click **Yes** to restart your print server.

The self-signed certificate is created and saved in your machine's memory.

To use SSL/TLS communication, the self-signed certificate must be installed on your computer.



### Related Information

- [Create and Install a Self-signed Certificate](#)

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

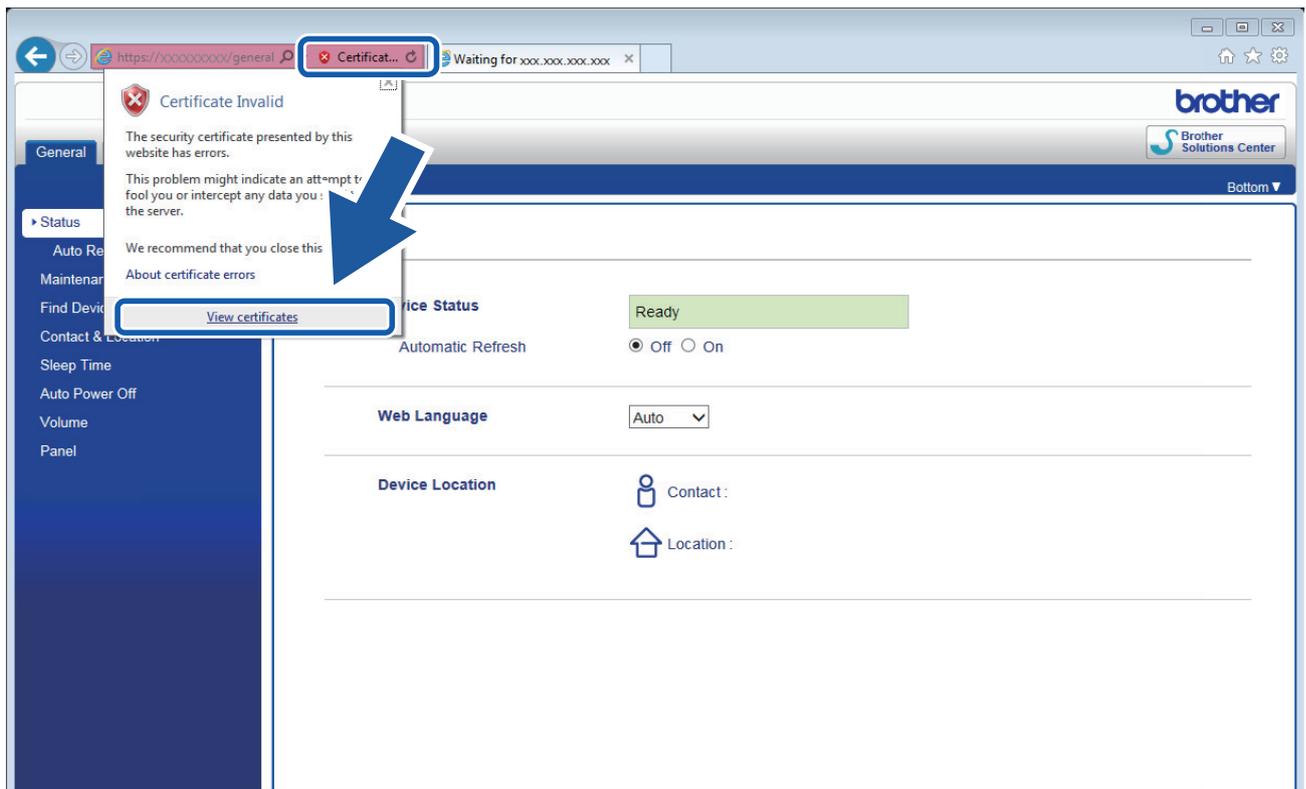
The following steps are for Microsoft Internet Explorer. If you use another web browser, consult the documentation for your web browser to get help with installing certificates.

1. Do one of the following:
  - (Windows 7 and Windows Server 2008)  
Click  (**Start**) > **All Programs**.
  - (Windows 8 )  
Right-click the  (**Internet Explorer**) icon on the taskbar.
  - (Windows 10 and Windows Server 2016)  
Click  > **Windows Accessories**.
  - (Windows Server 2012 and Windows Server 2012 R2)  
Click  (**Internet Explorer**), and then right-click the  (**Internet Explorer**) icon that appears on the taskbar.
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 **Continue to this website (not recommended)**.
5. Click **Certificate Error**, and then click **View certificates**.



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

The self-signed certificate is now installed on your computer, and SSL/TLS communication is available.



### Related Information

- [Create and Install a Self-signed Certificate](#)

#### Related Topics:

- [Import the Self-signed Certificate](#)
-

## **Import and Export the Self-signed Certificate on your Brother Machine**

You can store the self-signed certificates on your Brother machine and manage them by importing and exporting.

- [Import the Self-signed Certificate](#)
- [Export the Self-signed Certificate](#)

## Import the 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **Certificate** menu in the left navigation bar.
7. Click **Import Certificate and Private Key**.
8. Browse to the file you want to import.
9. Type the password if the file is encrypted, and then click **Submit**.

The self-signed certificate is imported to your machine.

To use SSL/TLS communication, the self-signed certificate must also be installed on your computer. Contact your network administrator.



### Related Information

- [Import and Export the Self-signed Certificate on your Brother Machine](#)

#### Related Topics:

- [Install the Self-signed Certificate for Windows users with Administrator Rights](#)

## Export the 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **Certificate** menu in the left navigation bar.
7. Click **Export** shown with **Certificate List**.
8. If you want to encrypt the file, type a password in the **Enter password** field.  
If the **Enter password** field is blank, your output file will not be encrypted.
9. Type the password again in the **Retype password** field, and then click **Submit**.
10. Click ▼ next to **Save**, and then specify the location where you want to save the file.

The self-signed certificate is exported to your computer.

You can also import the self-signed certificate to your computer.



### Related Information

- [Import and Export the Self-signed Certificate on your Brother Machine](#)

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

## 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **Certificate** menu in the left navigation bar.
7. Click **Create CSR**.
8. 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 printer 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**.

9. Select your setting from the **Public Key Algorithm** drop-down list. The default setting is **RSA(2048bit)**.
10. Select your setting from the **Digest Algorithm** drop-down list. The default setting is **SHA256**.
11. 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.

---

12. Click **Save**.

13. Click ▼ next to **Save**, and then specify the location where you want to save the file.



- 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, 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. For more detailed information, go to your model's **FAQs & Troubleshooting** page on the Brother support website at [support.brother.com](http://support.brother.com). Search for "SSL".
- 



### Related Information

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

## Install a Certificate on Your Brother 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. If you do not, the CSR you create 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .

4. Click the **Network** tab.

5. Click the **Security** tab.

6. Click the **Certificate** menu in the left navigation bar.

7. Click **Install Certificate**.

8. Browse to the file that contains the certificate issued by the CA, and then click **Submit**.

The certificate has been created successfully 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 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **Certificate** menu in the left navigation bar.
7. Click **Import Certificate and Private Key**.
8. Browse to the file you want to import.
9. Type the password if the file is encrypted, and then click **Submit**.

The certificate and private key are imported to your machine.

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



### 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **Certificate** menu in the left navigation bar.
7. Click **Export** shown with **Certificate List**.
8. Enter the password if you want to encrypt the file.  
If a blank password is used, the output is not encrypted.
9. Enter the password again for confirmation, and then click **Submit**.
10. Click ▼ next to **Save**, and then specify the location where you want to save the file.

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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **CA Certificate** menu in the left navigation bar.
7. Click **Import CA Certificate**.
8. Browse to the file you want to import.
9. 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **CA Certificate** menu in the left navigation bar.
7. Select the certificate you want to export and click **Export**.
8. Click **Submit**.
9. 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 UP on Brother Machine
Self-signed Certificate or Certificate Issued by a CA	5
CA Certificate	6

We recommend storing one less certificate 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

- [Certificates and Web Based Management](#)

## Manage Your Network Machine Securely Using 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 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 Brother machine is configured for IPsec communication.
  - The computer connected to your Brother 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.



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

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### Related Information

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

## Configure IPsec Using Web Based Management

The IPsec connection conditions are comprised of 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 the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **IPsec** menu in the left navigation bar.
7. 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 <b>Main</b> mode, the processing speed is slow, but the security is high. In <b>Aggressive</b> mode, the processing speed is faster than <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 box 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 on 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 on 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> .

8. 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

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

## 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 the machine prompts you for a password, type it, and then click .

4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click the **IPsec Address Template** menu in the left navigation bar.

The Template List appears, displaying 10 Address Templates.

Click the **Delete** button to delete an **Address Template**. When an **Address Template** is in use, it cannot be deleted.

7. Click the **Address Template** that you want to create. The **IPsec Address Template** appears.
8. 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 standardized 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 standardized 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>

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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.

9. Click **Submit**.



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

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### Related Information

- [Manage Your Network Machine Securely Using 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 the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Security** tab.
6. Click **IPsec Template** in the left navigation bar.  
The Template List appears, displaying 10 IPsec Templates.  
Click the **Delete** button to delete an **IPsec Template**. When an **IPsec Template** is in use, it cannot be deleted.
7. Click **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)** you select.
8. In the **Template Name** field, type a name for the template (up to 16 characters).
9. 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.
10. Click **Submit**.



### Related Information

- [Manage Your Network Machine Securely Using 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	<p>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.</p> <hr/> <p> The default template differs depending on whether you chose <b>Main</b> or <b>Aggressive</b> for <b>Negotiation Mode</b> on the <b>IPsec</b> configuration screen.</p>
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> 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>
Encapsulating Security	<ul style="list-style-type: none"> <li>• <b>Protocol</b> Select <b>ESP</b>, <b>AH</b>, or <b>AH+ESP</b>.</li> </ul> <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 is comprised of 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>

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



## 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 is comprised of 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
	 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>, <b>Certificates</b>, <b>EAP - MD5</b>, or <b>EAP - MS-CHAPv2</b>.</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>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
Template Name	Type a name for the template (up to 16 characters).
Use Prefixed Template	Select <b>Custom</b> .
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>Select <b>Manual</b>.</p>
Authentication Key (ESP, AH)	<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/>
Code key (ESP)	<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/>
SPI	<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>✎ - ESP is a protocol for carrying out encrypted communication using IPsec. ESP encrypts the payload (communicated contents) and adds additional information. The IP packet is comprised of 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> <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>✎ 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.</li> </ul>

 **Related Information**

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

## 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 the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Protocol** menu in the left navigation bar.
6. In the **SMTP** field, click **Advanced Settings** and make sure the status of **SMTP** is **Enabled**.
7. Configure the **SMTP** 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).
8. When finished, click **Submit**.  
The **Test Send E-mail Configuration** dialog box appears.
9. 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 Brother 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 (available for certain models).



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

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### 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).



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

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### Related Information

- [Send an Email Securely](#)
-

## Send an Email Securely Using SSL/TLS

Your Brother machine supports SSL/TLS communication methods. To use email server that is using SSL/TLS communication, you must configure 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](#)

## 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 a 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 a 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 that has been 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:

- BRAdmin Professional (Wired and wireless network)
- Wireless setup wizard from the control panel (Wireless network)
- Wireless setup wizard on the installation disc (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://brnxxxxxxxxxxxx

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

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Do one of the following:

Option	Description
Wired network	Click the <b>Wired</b> tab, and then select <b>Wired 802.1x Authentication</b> in the left navigation bar.
Wireless network	Click the <b>Wireless</b> tab, and then select <b>Wireless (Enterprise)</b> in the left navigation bar.

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 that has been 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, that has been 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 that has been 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:

- [Print the Network Configuration Report](#)
- [Print the WLAN Report](#)
- [Supported Security Certificate Features](#)

<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

### LEAP (Wireless network)

Lightweight Extensible Authentication Protocol (LEAP) is a proprietary EAP method developed by Cisco Systems, Inc., which uses a user ID and password for authentication.

### 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](#)

## Mobile/Web Connect

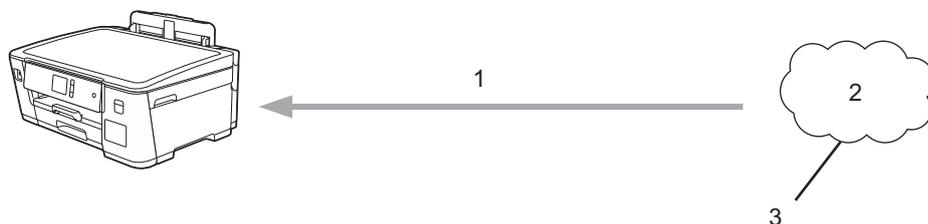
- [Brother Web Connect](#)
- [Google Cloud Print](#)
- [AirPrint](#)
- [Mobile Printing for Windows](#)
- [Mopria® Print Service](#)
- [Brother iPrint&Scan for Mobile Devices](#)

## Brother Web Connect

- [Brother Web Connect Overview](#)
- [Online Services Used with Brother Web Connect](#)
- [Conditions for Using Brother Web Connect](#)
- [Set Up Brother Web Connect](#)
- [Download and Print Documents Using Brother Web Connect](#)

## Brother Web Connect Overview

Certain websites provide services that allow users to upload and view images and files on the website. Your Brother machine can download and print images that are already uploaded to these services.



1. Printing
2. Photos, images, documents and other files
3. Web Service

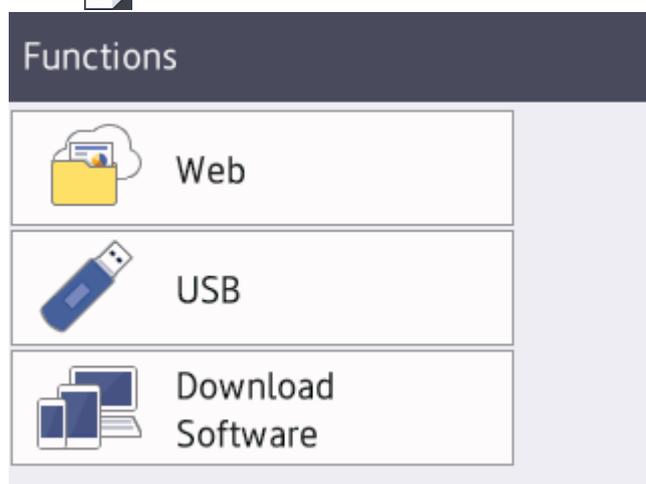
To use Brother Web Connect, your Brother machine must be connected to a network that has access to the Internet, through either a wired or wireless connection.

For network setups that use a proxy server, the machine must also be configured to use a proxy server. If you are unsure of your network configuration, check with your network administrator.



A proxy server is a computer that serves as an intermediary between computers without a direct Internet connection, and the Internet.

Press  [Functions] > [Web] on the touchscreen to use Brother Web Connect.



### Related Information

- [Brother Web Connect](#)

## Online Services Used with Brother Web Connect

Use Brother Web Connect to access online services from your Brother machine. Some of these web services offer business versions.

To use Brother Web Connect, you must have an account with the online service you want to use. If you do not already have an account, use a computer to access the service's website and create an account.

### Google Drive™

An online document storage, editing, sharing and file synchronisation service.

URL: [drive.google.com](http://drive.google.com)

### Evernote®

An online file storage and management service.

URL: [www.evernote.com](http://www.evernote.com)

### Dropbox

An online file storage, sharing and synchronisation service.

URL: [www.dropbox.com](http://www.dropbox.com)

### OneDrive

An online file storage, sharing and management service.

URL: <https://onedrive.live.com>

### Box

An online document editing and sharing service.

URL: [www.box.com](http://www.box.com)

### OneNote

An online document editing and sharing service.

URL: [www.onenote.com](http://www.onenote.com)

For more information about any of these services, refer to the respective service's website.

The following table describes which file types can be used with each Brother Web Connect feature:

Accessible Services	Google Drive™ Evernote® Dropbox Box OneDrive OneNote
Download and print images	JPEG PDF DOC DOCX XLS XLSX PPT PPTX



- Not all services are available in all countries.

- For Hong Kong, Taiwan and Korea

Brother Web Connect supports only file names written in English. Files named in the local language will not be downloaded.

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## Related Information

- [Brother Web Connect](#)
-

## Conditions for Using Brother Web Connect

- [Brother Software Installation for Using Brother Web Connect](#)
- [Configure the Proxy Server Settings Using the Machine's Control Panel](#)
- [Configure the Proxy Server Settings Using Web Based Management](#)

## Brother Software Installation for Using Brother Web Connect

The initial installation of Brother Web Connect requires a computer that has access to the Internet and has the Brother machine's software installed.

### Windows

To install the Brother software and connect your machine to a wireless or wired network, see the *Quick Setup Guide*.

### Mac

To install the **Full Driver & Software Package**, go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).



### Related Information

- [Conditions for Using Brother Web Connect](#)
-

## Configure the Proxy Server Settings Using the Machine's Control Panel

If your network uses a proxy server, the following proxy server information must be configured on the machine:

- Proxy server address
- Port number
- User Name
- Password

1. Press  [Settings] > [All Settings] > [Network] > [Web Connect Settings] > [Proxy Settings] > [Proxy Connection].
2. Press [On].
3. Press the option that you want to set, and then enter the proxy server information.  
Press [OK].
4. Press .

### Related Information

- [Conditions for Using Brother Web Connect](#)

## Configure the Proxy Server Settings Using Web Based Management

If your network uses a proxy server, the following proxy server information must be configured using Web Based Management:

- Proxy server address
- Port number
- User Name
- Password



We recommend Microsoft Internet Explorer 11 and Microsoft Edge for Windows, and Safari 10/11 for Mac. Make sure that JavaScript and Cookies are always enabled in whichever browser you use.

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 the machine prompts you for a password, type it, and then click .
4. Click the **Network** tab.
5. Click the **Protocol** menu in the left navigation bar.
6. Make sure the **Proxy** check box is selected, and then click **Submit**.
7. In the **Proxy** field, click **Advanced Settings**.
8. Enter the proxy server information.
9. Click **Submit**.



### Related Information

- [Conditions for Using Brother Web Connect](#)

## Set Up Brother Web Connect

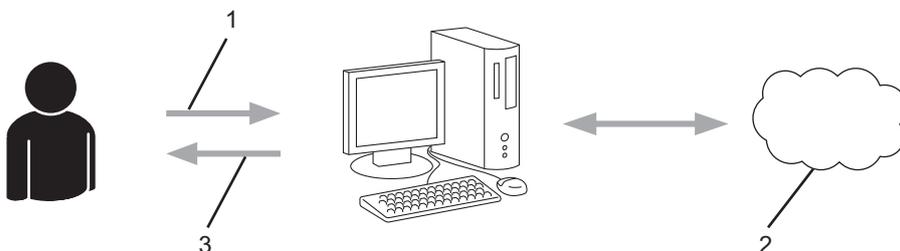
- [Brother Web Connect Setup Overview](#)
- [Create an Account for Each Online Service Before Using Brother Web Connect](#)
- [Apply for Brother Web Connect Access](#)
- [Register an Account on Your Brother Machine for Brother Web Connect](#)

## Brother Web Connect Setup Overview

Configure the Brother Web Connect settings using the following procedure:

### Step 1: Create an account with the service you want to use.

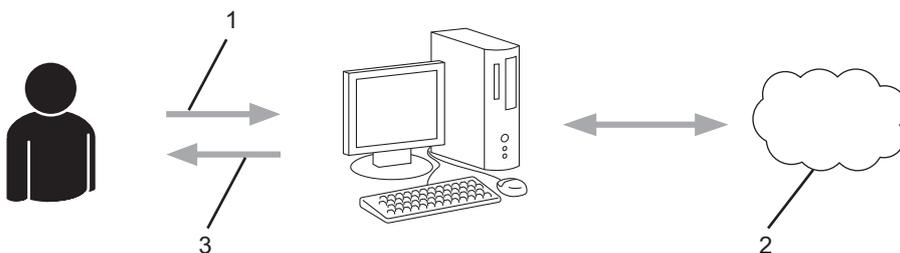
Access the service's website using a computer and create an account. (If you already have an account, there is no need to create an additional account.)



1. User registration
2. Web Service
3. Obtain account

### Step 2: Apply for Brother Web Connect access.

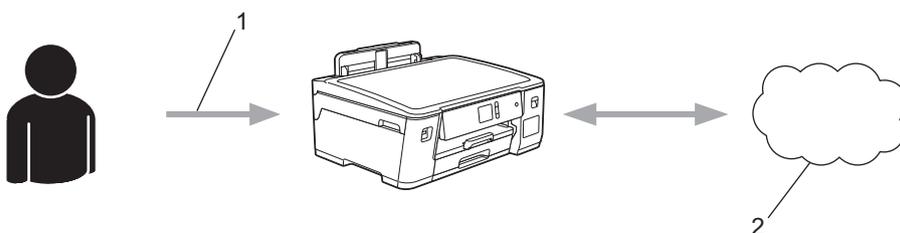
Start Brother Web Connect access using a computer and obtain a temporary ID.



1. Enter account information
2. Brother Web Connect application page
3. Obtain temporary ID

### Step 3: Register your account information on your machine so you can access the service you want to use.

Enter the temporary ID to enable the service on your machine. Specify the account name as you would like it to be displayed on the machine, and enter a PIN if you would like to use one.



1. Enter temporary ID
2. Web Service

Your Brother machine can now use the service.



## Related Information

- [Set Up Brother Web Connect](#)

## Create an Account for Each Online Service Before Using Brother Web Connect

To use Brother Web Connect to access an online service, you must have an account with that online service. If you do not already have an account, use a computer to access the service's website and create an account. After creating an account, log on and use the account once with a computer before using the Brother Web Connect feature. Otherwise, you may not be able to access the service using Brother Web Connect.

If you already have an account, there is no need to create an additional account.

After you finish creating an account with the online service you want to use, apply for Brother Web Connect access.



### Related Information

- [Set Up Brother Web Connect](#)
-

## Apply for Brother Web Connect Access

To use Brother Web Connect to access online services, you must first apply for Brother Web Connect access using a computer that has the Brother Software installed.

1. Access the Brother Web Connect application website:

Option	Description
Windows 7	Click  ( <b>Start</b> ) > <b>All Programs</b> > <b>Brother</b> > <b>Brother Utilities</b> , and then click the drop-down list and select your model name (if not already selected). Click <b>Do More</b> in the left navigation bar, and then click <b>Brother Web Connect</b> .
Windows 8 Windows 10	Launch  ( <b>Brother Utilities</b> ), and then click the drop-down list and select your model name (if not already selected). Click <b>Do More</b> in the left navigation bar, and then click <b>Brother Web Connect</b> .
Windows 8.1	Move your mouse to the lower left corner of the <b>Start</b> screen and click  (if you are using a touch-based device, swipe up from the bottom of the <b>Start</b> screen to bring up the <b>Apps</b> screen).  Click  ( <b>Brother Utilities</b> ), and then click the drop-down list and select your model name (if not already selected). Click <b>Do More</b> in the left navigation bar, and then click <b>Brother Web Connect</b> .
Mac	Click <b>Go</b> in the <b>Finder</b> bar, <b>Applications</b> > <b>Brother</b> > <b>Utilities</b> > <b>Brother Web Connect</b> .



You can also access the website directly:

Type [bwc.brother.com](http://bwc.brother.com) into your web browser's address bar.

The Brother Web Connect page launches.

2. Select the service you want to use.

### Get connected with Brother Web Connect

Click on one of the following services to be used on your machine to obtain a temporary ID. Business versions of the web services are also supported including: OneDrive for business, Dropbox for business, Google apps for work, Evernote business and Box for business.



OneNote



OneDrive



Box



Connect to Google Drive™



EVERNOTE



Dropbox

The actual screen may differ from the screen shown above.

3. Follow the on-screen instructions and apply for access.

When finished, your temporary ID will appear.

## Get connected with Brother Web Connect

### Finished the registration.

Please enter the following temporary ID on the LCD screen of your machine.

**Temporary ID (11 digits)**

**XXX XXXX XXXX**

NOTE : The temporary ID will expire in 24 hours.

[TOP](#)

4. Make a note of your temporary ID, as you will need it to register accounts to the machine. The temporary ID is valid for 24 hours.
5. Close the web browser.

Now that you have a Brother Web Connect access ID, you must register this ID on your machine, and then use your machine to access the web service you want to use.



### Related Information

- [Set Up Brother Web Connect](#)

## Register an Account on Your Brother Machine for Brother Web Connect

You must enter your Brother Web Connect account information and configure your machine so that it can use Brother Web Connect to access the service you want.

- You must apply for Brother Web Connect access to register an account on your machine.
- Before you register an account, confirm that the correct date and time are set on the machine's control panel.

1. Press [Functions] > [Web].



- If information regarding the Internet connection appears on the machine's LCD, read the information and press [OK].
- Occasionally, updates or announcements about Brother Web Connect's features will appear on the LCD. Read the information, and then press [OK].

2. Press ▲ or ▼ to display the service with which you want to register.

Press the service name.

3. If information regarding Brother Web Connect appears, press [OK].

4. Press [Register/Delete] > [Register Account].

5. The machine will prompt you to enter the temporary ID you received when you applied for Brother Web Connect access.

Press [OK].

6. Enter the temporary ID using the LCD, and then press [OK].



An error message will appear on the LCD if the information you entered does not match the temporary ID you received when you applied for access, or if the temporary ID has expired. Either enter the temporary ID correctly, or apply for access again and receive a new temporary ID.

7. The machine will prompt you to enter the account name that you want to be displayed on the LCD.

Press [OK].

8. Enter the name using the LCD, and then press [OK].

9. Do one of the following:

- To set a PIN for the account, press [Yes]. (A PIN prevents unauthorised access to the account.) Enter a four-digit number, and then press [OK].
- If you do not want to set a PIN, press [No].



When the account information you entered appears, confirm that it is correct.

10. Press [Yes] to register your information as entered.

11. Press [OK].

Account registration is complete and your machine can now access the service.

12. Press .



### Related Information

- [Set Up Brother Web Connect](#)

## Download and Print Documents Using Brother Web Connect

Documents that have been uploaded to your account can be downloaded directly to your machine and printed. Documents that other users have uploaded to their own accounts for sharing can also be downloaded to your machine and printed, as long as you have viewing privileges for those documents. Certain services allow guest users to view documents that are public. When accessing a service or an account as a guest user, you can view documents that the owner has made public, that is, documents with no viewing restrictions.

To download other users' documents, you must have access privileges to view the corresponding albums or documents.

If you are a restricted user for Web Connect due to the Secure Function Lock feature (available for certain models), you cannot download the data.

The Secure Function Lock Page Limit feature applies to the print job using Web Connect.



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For Hong Kong, Taiwan and Korea

Brother Web Connect supports only file names written in English. Files named in the local language will not be downloaded.

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### Related Information

- [Brother Web Connect](#)
    - [Download and Print Using Web Services](#)
-

## Download and Print Using Web Services

1. Press [Functions] > [Web].



- If information regarding the Internet connection appears on the machine's LCD, read the information and press [OK].
- Occasionally, updates or announcements about Brother Web Connect's features will appear on the LCD. Read the information, and then press [OK].

2. Press ▲ or ▼ to display the service that hosts the document you want to download and print.

Press the service name.

3. Press ▲ or ▼ to display your account name, and then press it. If the PIN entry screen appears, enter the four-digit PIN and press [OK].

4. Press ▲ or ▼ to display the desired album, and then press it.



- An album is a collection of documents. However, the actual term may differ depending on the service you use. When using Evernote®, you must select the notebook, and then select the note.
- Some services do not require documents to be saved in albums. For documents not saved in albums, select [See Unsorted Files] to select documents. You cannot download documents from other users if the documents are not saved in an album.

5. Press the thumbnail of the document you want to print. Confirm the document on the LCD and press [OK]. Select additional documents to print (you can select up to 10 documents).

6. When finished, press [OK].

7. Follow the on-screen instructions to complete this operation.



### Related Information

- [Download and Print Documents Using Brother Web Connect](#)

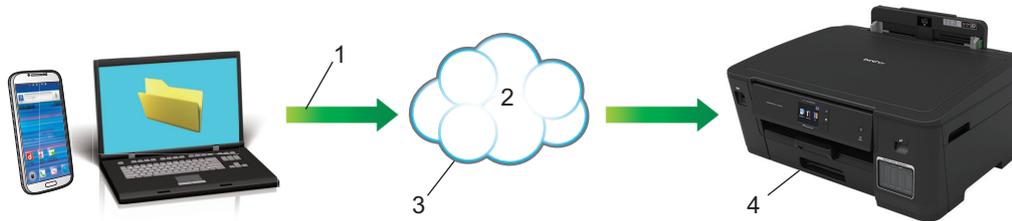
## Google Cloud Print

- [Google Cloud Print Overview](#)
- [Before Using Google Cloud Print](#)
- [Print from Google Chrome™ or Chrome OS™](#)
- [Print from Google Drive™ for Mobile](#)
- [Print from Gmail™ Webmail Service for Mobile](#)

## Google Cloud Print Overview

Google Cloud Print™ is a Google service that allows you to print to a printer registered to your Google account using a network-compatible device (such as a mobile phone or computer) without installing the printer driver on the device.

Printing from Android™ apps requires installing the Google Cloud Print™ app from the Google Play™ Store.



1. Print request
2. Internet
3. Google Cloud Print™
4. Printing



### Related Information

- [Google Cloud Print](#)

## Before Using Google Cloud Print

- [Network Settings for Using Google Cloud Print](#)
- [Register Your Machine with Google Cloud Print Using Google Chrome™](#)
- [Register Your Machine with Google Cloud Print Using Web Based Management](#)

## Network Settings for Using Google Cloud Print

In order to use Google Cloud Print™, your Brother machine must be connected to a network that has access to the Internet, either through a wired or wireless connection. To connect and configure your machine correctly, see the *Quick Setup Guide* or related topics in this guide.



### Related Information

- [Before Using Google Cloud Print](#)
-

## Register Your Machine with Google Cloud Print Using Google Chrome™

Make sure you have already created a Google Account. If you do not have an account, use a computer or mobile device to access the Google website (<https://accounts.google.com/signup>) and create an account. Make sure your Brother machine is idle before starting the registration process.



The steps in this section are examples for Windows users.

Screens on your computer may vary depending on your operating system and environment.

1. Open Google Chrome™ on your computer.
2. Sign in to your Google Account.
3. Click the Google Chrome™ menu icon, and then **Settings > Show advanced settings...**
4. Click **Google Cloud Print > Manage**.
5. Follow the on-screen instructions to register your machine.
6. When a confirmation message appears on your machine, press the [OK] button.



If the confirmation message does not appear on your machine's LCD, repeat these steps.

7. When your Brother machine is successfully registered, it will appear in the **My devices** field.



### Related Information

- [Before Using Google Cloud Print](#)

## Register Your Machine with Google Cloud Print Using Web Based Management

Make sure you have already created a Google Account. If you do not have an account, use a computer or mobile device to access the Google website (<https://accounts.google.com/signup>) and create an account.

Make sure your Brother machine is idle before starting the registration process.

Before you begin to register your machine, confirm that the correct date and time are set on the machine's control panel. See *Related Information*.

1. Confirm that your Brother machine is connected to the same network as your computer or mobile device.
2. Start your web browser.  
Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is the IP address of the machine or the print server name). For example: https://192.168.1.2  
  
If the machine prompts you for a password, type it, and then click .
3. Click the **Network** tab.
4. Click the **Protocol** menu in the left navigation bar.
5. Make sure that **Google Cloud Print** is selected, and then click **Advanced Settings**.
6. Make sure that **Status** is set to **Enabled**. Click **Register**.
7. When a confirmation message appears on your machine's LCD, press [OK].



If the confirmation message does not appear on your machine's LCD, repeat these steps.

8. Click **Google**.
9. The sign-in screen for Google Cloud Print™ appears. Sign in with your Google Account and follow the on-screen instructions to register your machine.
10. When you have finished registering your machine, return to the Web Based Management screen and make sure that **Registration Status** is set to **Registered**.



If your machine supports the Secure Function Lock feature, printing via Google Cloud Print™ is possible even if PC print for each user is restricted. To restrict printing via Google Cloud Print™, disable Google Cloud Print™ using Web Based Management or set the Secure Function Lock feature to Public Mode, and then restrict print for public users. See *Related Information*.



### Related Information

- [Before Using Google Cloud Print](#)

#### Related Topics:

- [Set the Date and Time](#)
- [Configure Secure Function Lock 3.0 Using Web Based Management](#)

## Print from Google Chrome™ or Chrome OS™

1. Make sure your Brother machine is turned on.
2. Open the web page that you want to print.
3. Click the Google Chrome™ menu icon.
4. Click **Print**.
5. Select your machine from the printer list.
6. Change print options, if needed.
7. Click **Print**.



### Related Information

- [Google Cloud Print](#)
-

## Print from Google Drive™ for Mobile

1. Make sure your Brother machine is turned on.
2. Access Google Drive™ from your Android™ or iOS device's web browser.
3. Open the document that you want to print.
4. Tap the menu icon.
5. Tap **Print**.
6. Select your machine from the printer list.
7. Change print options, if needed.
8. Tap  or **Print**.



### Related Information

- [Google Cloud Print](#)

## Print from Gmail™ Webmail Service for Mobile

1. Make sure your Brother machine is turned on.
2. Access the Gmail™ webmail service from your Android™ or iOS device's web browser.
3. Open the email that you want to print.
4. Tap the menu icon.



If **Print** appears beside the attachment name, you can also print the attachment. Tap **Print**, and then follow the instructions on your mobile device.

5. Tap **Print**.
6. Select your machine from the printer list.
7. Change print options, if needed.
8. Tap  or **Print**.



### Related Information

- [Google Cloud Print](#)

## 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](#)

## Before Using AirPrint (macOS)

Before printing using macOS, add your Brother 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 Brother 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 \(macOS\)](#)

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

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

### Related Information

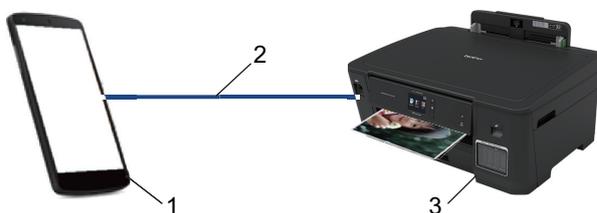
- [Print Using AirPrint](#)

#### **Related Topics:**

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

## Mobile Printing for Windows

Mobile printing for Windows is a function to print wirelessly from your Windows mobile device. You can connect to the same network that your Brother machine is connected to and print without installing the printer driver on the device. Many Windows apps support this function.



1. Windows mobile device (Windows 10 Mobile or later)
2. Wi-Fi® Connection
3. Your Brother machine

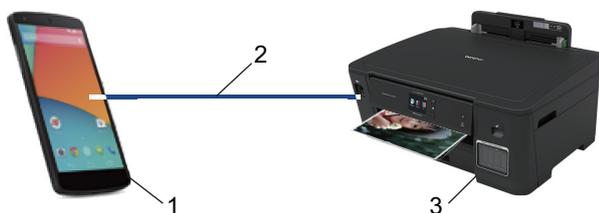


### Related Information

- [Mobile/Web Connect](#)

## Mopria® Print Service

Mopria® Print Service is a print feature on Android™ mobile devices (Android™ version 4.4 or later) developed by the Mopria® Alliance. With this service, you can connect to the same network as your machine and print without additional setup. Many native Android™ apps support printing.



1. Android™ 4.4 or later
2. Wi-Fi® Connection
3. Your Brother Machine

You must download the Mopria® Print Service from the Google Play™ Store and install it on your Android™ device. Before using this service, you must turn it on.



### Related Information

- [Mobile/Web Connect](#)

## Brother iPrint&Scan for Mobile Devices

Use Brother iPrint&Scan to print from various mobile devices.

- For Android™ Devices

Brother iPrint&Scan allows you to use features of your Brother machine directly from your Android™ device, without using a computer.

Download and install Brother iPrint&Scan from the Google Play™ Store app.

- For all iOS supported devices including iPhone, iPad and iPod touch

Brother iPrint&Scan allows you to use features of your Brother machine directly from your iOS device.

Download and install Brother iPrint&Scan from the App Store.

- For Windows Devices

Brother iPrint&Scan allows you to use features of your Brother machine directly from your Windows device, without using a computer.

Download and install Brother iPrint&Scan from the Microsoft Store.

For more detailed information, visit [support.brother.com/ips](http://support.brother.com/ips).



### Related Information

- [Mobile/Web Connect](#)

#### Related Topics:

- [Brother iPrint&Scan for Windows and Mac](#)

## Brother iPrint&Scan for Windows and Mac

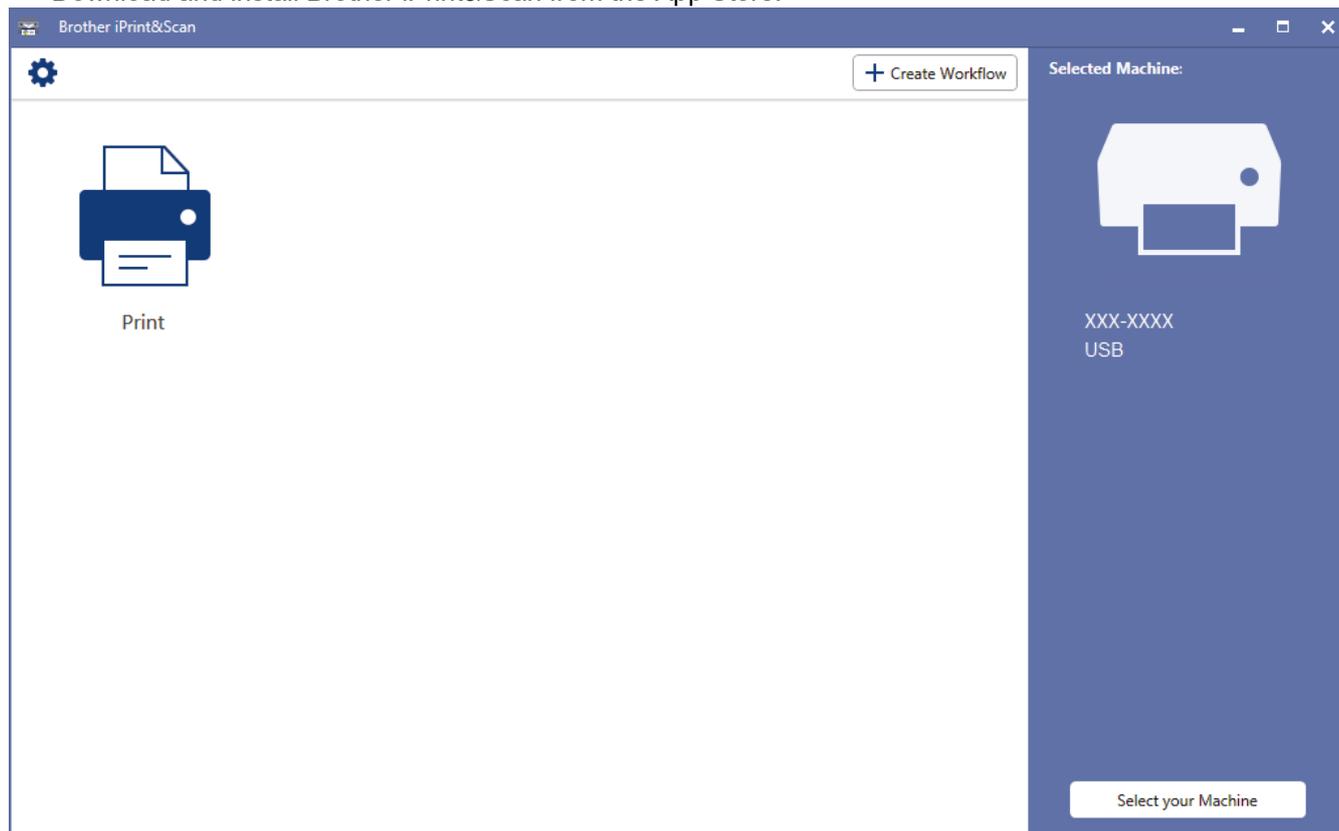
- [Brother iPrint&Scan Overview](#)

## Brother iPrint&Scan Overview

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 on the Brother Solutions Center 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.



### Related Information

- [Brother iPrint&Scan for Windows and Mac](#)

#### Related Topics:

- [Brother iPrint&Scan for Mobile Devices](#)

## Troubleshooting

If you think there is a problem with your machine, first check each of the items below, then try to identify the problem, and follow our troubleshooting tips.

You can correct most problems yourself. If you need additional help, the Brother Solutions Center offers the latest **FAQs & Troubleshooting** tips.

Visit us at [support.brother.com](http://support.brother.com).

Click **FAQs & Troubleshooting** and search for your model name.

First, check the following:

- The machine's power cord is connected correctly and the machine's power is on.
- All of the machine's protective parts have been removed.
- The Top Cover and the Jam Clear Cover are fully closed.
- Paper is inserted 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.
- (For network models) The access point (for wireless), router, or hub is turned on and its link button is blinking.
- The machine's LCD is displaying 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](#)
- [Printer Jam or Paper Jam](#)
- [If You Are Having Difficulty with Your Machine](#)
- [Check the Machine Information](#)
- [Reset Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Other Problems](#)
- [Network Problems](#)
- [Google Cloud Print Problems](#)
- [AirPrint Problems](#)

## 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.

You can correct most errors and perform routine maintenance yourself. If you need more tips, go to your model's **FAQs & Troubleshooting** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).



- *Related Information* references are at the bottom of this page.

Error Message	Cause	Action
B&W Print Only	<p>The amount of remaining ink in one or more of the ink tanks (except black) is low.</p> <p>This error message may appear if the ink dot counter is incorrect even if some ink remains.</p> <p>While this message appears on the LCD, each operation works in the following way: If this message appears on the LCD, the print operation works as follows:</p> <ul style="list-style-type: none"> <li>• Printing If the media type is set to <b>Plain Paper</b> in the <b>Basic</b> tab, and <b>Greyscale</b> is chosen in the <b>Advanced</b> tab of the printer driver, you can use the machine as a monochrome printer.</li> </ul>	<p>Refill the ink tank.</p> <p>When you refill the ink tank, fill the ink up to the upper line, or fill with all of the ink in the bottle if it does not exceed the upper line.</p> <p>A message may appear on the LCD to verify whether the ink tanks were refilled. Reset the ink dot counter for the refilled colour.</p> <p>See <i>Related Information: Refill the Ink Tanks</i>.</p> <p>The machine may stop all print operations and you may not be able to use the machine until you refill the ink tank in the following cases:</p> <ul style="list-style-type: none"> <li>• If you unplug the machine.</li> <li>• If you select the <b>Slow Drying Paper</b> option on the machine or in the printer driver.</li> </ul>
Check the ink levels, If there is ink in all 4 ink tanks, Press [OK].	<p>A certain amount of ink is consumed in operations;</p> <p>Look through the window of the ink tank to confirm the actual amount of remaining ink.</p>	<p>If the remaining ink level is at or below the lower line under the minimum fill mark, refill the ink tank.</p>
Connection Error	<p>Other devices are trying to connect to the Wi-Fi Direct network at the same time.</p>	<p>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.</p>
Connection Failed	<p>The Brother machine and your mobile device cannot communicate during the Wi-Fi Direct network configuration.</p>	<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> <li>• If you are using the PIN Method of WPS, make sure you have entered the correct PIN.</li> </ul>
Cover is Open.	<p>The top cover is not locked in the closed position.</p>	<p>Lift the top cover and then close it again.</p> <p>Make sure the interface cable (if used) has been guided correctly through the cable channel and out the back of the machine.</p>
	<p>The ink tank cover is not locked in the closed position.</p>	<p>Firmly close the ink tank cover until it locks into place.</p>

Error Message	Cause	Action
Data Remaining in Memory	Print data is left in the machine's memory.	Press  . The machine will cancel the job and clear it from the memory. Try to print again.
High Temperature	The room temperature is too high.	After cooling the room, allow the machine to cool down to room temperature. Try again when the machine has cooled down.
Hub is Unusable.	A hub or USB flash drive with hub has been connected to the USB direct interface.	Hubs, including a USB flash drive with a built-in hub, are not supported. Unplug the device from the USB direct interface.
Ink Absorber NearFull	The ink absorber box is nearly full.	The ink absorber box must be replaced soon. Contact Brother customer service or your local Brother dealer. <ul style="list-style-type: none"> <li>The ink absorber box absorbs the small amount of ink emitted during print head cleaning.</li> </ul>
Ink Absorber Pad Full	The ink absorber box is full. These components are periodic maintenance items that may require replacement after a period of time to ensure optimum performance from your Brother machine. Because these components are periodic maintenance items, the replacement is not covered under the warranty. The need to replace these items and the time period before replacement is dependent on the number of purges and flushes required to clean the ink system. These boxes acquire amounts of ink during the different purging and flushing operations. The number of times a machine purges and flushes for cleaning varies depending on different situations. For example, frequently powering the machine on and off will cause numerous cleaning cycles since the machine automatically cleans upon power up. The use of non-Brother ink may cause frequent cleanings because non-Brother ink could cause poor print quality which is resolved by cleaning. The more cleaning the machine requires, the faster these boxes will fill up.  Repairs resulting from the use of non-Brother supplies may not be covered under the stated product warranty.	The ink absorber box must be replaced. Contact Brother customer service or your local Brother Authorised Service Centre to have your machine serviced.
Ink Low	The amount of remaining ink in one or more of the ink tanks is low.  This error message may appear if the ink dot counter is incorrect even if some ink remains.	Look through the window of the ink tank to confirm the actual amount of remaining ink.  If the remaining ink level is at or below the lower line under the minimum fill mark, refill the ink tank.  A message may appear on the LCD to verify whether the ink tanks were refilled. Reset the ink dot counter for the refilled colour.  <i>See Related Information: Refill the Ink Tanks.</i>
Jam Front/Rear	The paper is jammed in the machine.	Remove the jammed paper.

Error Message	Cause	Action
Jam Front Jam Rear Jam MP Tray Jam Front/MP Tray Repeat Jam XX		See <i>Related Information: Printer Jam or Paper Jam</i> .  If there is a repeat paper jam, try another paper jam clear operation. See <i>Related Information: Remove Paper Scraps</i> .
	The paper guides are not set to the correct paper size.	Make sure the paper guides are set to the correct paper size.
	The machine's paper support is not set correctly.	Make sure the paper support is fully inserted into the machine. See <i>Related Information: Paper is Jammed in the Front of the Machine</i> .
	Paper dust has accumulated on the surface of the paper pick-up rollers.	Clean the paper pick-up rollers. See <i>Related Information: Clean the Paper Pick-up Rollers</i> .
Low Temperature	The room temperature is too low.	After warming the room, allow the machine to warm up to room temperature. Try again when the machine has warmed up.
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>
No File	The USB flash drive in the media drive does not contain a .JPG file.	Put the correct USB flash drive into the slot again.
No Paper Fed	The machine is out of paper or paper is not correctly loaded in the paper tray.	Do one of the following: <ul style="list-style-type: none"> <li>• Refill the paper tray, and then follow the LCD instructions.</li> <li>• Remove and reload the paper, and then follow the LCD instructions.</li> </ul> See <i>Related Information: Load Paper</i> .
	The paper was not inserted in the centre position of the MP tray.	Remove the paper and reinsert it in the centre of the MP tray, and then follow the LCD instructions. See <i>Related Information: Load Paper in the Multi-purpose Tray (MP Tray)</i> .
	The Jam Clear Cover is not closed correctly.	Make sure the Jam Clear Cover is closed evenly at both ends. See <i>Related Information: Printer Jam or Paper Jam</i> .
	Paper dust has accumulated on the surface of the paper pick-up rollers.	Clean the paper pick-up rollers. See <i>Related Information: Clean the Paper Pick-up Rollers</i> .

Error Message	Cause	Action
Out of Memory	The machine's memory is full.	Press  and reduce the print resolution.
Paper Size Mismatch	<p>The paper size setting does not match the size of paper in the tray.</p> <p><b>-OR-</b></p> <p>The paper orientation is not correct for the paper size.</p> <p><b>-OR-</b></p> <p>You did not set the paper guides in the tray to the indicators for the paper size you are using.</p>	<ol style="list-style-type: none"> <li>1. Check that the paper size you selected on the machine's display matches the size of the paper in the tray. <i>See Related Information: Change the Paper Size and Paper Type.</i></li> <li>2. Make sure you loaded the paper in the correct orientation and set the paper guides at the indicators for your paper size. <i>See Related Information: Load Paper.</i></li> <li>3. After you have checked the paper size and the paper orientation, follow the LCD instructions.</li> </ol> <p>If printing from your computer, make sure the paper size you selected in the printer driver matches the size of paper in the tray. <i>See Related Information: Print Settings (Windows) or Print Options (Mac).</i></p>
Paper Tray #1 not detected	The paper tray is not completely inserted.	Slowly push the paper tray completely into the machine.
	Paper or a foreign object has prevented the paper tray from being inserted correctly.	Pull the paper tray out of the machine, and remove the jammed paper or foreign object. If you cannot find or remove the jammed paper, see <i>Related Information: Printer Jam or Paper Jam.</i>
Refill Ink	<p>The amount of remaining ink in one or more of the ink tanks is low. The machine will stop all print operations.</p> <p>This error message may appear if the ink dot counter is incorrect even if some ink remains.</p>	<p>Refill the ink tank.</p> <p>When you refill the ink tank, fill the ink up to the upper line, or fill with all of the ink in the bottle if it does not exceed the upper line.</p> <p>A message may appear on the LCD to verify whether the ink tanks were refilled. Reset the ink dot counter for the refilled colour.</p> <p><i>See Related Information: Refill the Ink Tanks.</i></p>
Repetitive No Paper Fed	Paper dust has accumulated on the surface of the paper pick-up rollers.	<p>Clean the paper pick-up rollers.</p> <p><i>See Related Information: Clean the Paper Pick-up Rollers.</i></p>
Repetitive Paper Jams	A foreign object, such as a paper clip or a piece of ripped paper, is in the machine.	<p>Remove any foreign objects and paper scraps in the machine.</p> <p><i>See Related Information: Remove Paper Scraps.</i></p>
The maximum number of devices are already connected using Wi-Fi Direct.	The maximum number of mobile devices are already connected to the Wi-Fi Direct network when the Brother machine is the Group Owner (G/O).	<p>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.</p> <p><i>See Related Information: Print the Network Configuration Report.</i></p>

Error Message	Cause	Action
Touchscreen Init. Failed	The touchscreen was pressed before the power on initialisation was completed.	Make sure nothing is touching or resting on the touchscreen, especially when plugging the machine in.
	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 the debris.
Tray #1 Settings MP Tray Settings	This message is displayed when the setting to confirm the paper type and size is enabled.	To not display this confirmation message, change the setting to Off. <i>See Related Information: Change the Check Paper Size Setting.</i>
Unable to Clean XX Unable to Initialize XX Unable to Print XX	The machine has a mechanical problem. <b>-OR-</b> A foreign object, such as a paper clip or a piece of ripped paper, is in the machine.	Open the top cover and remove any foreign objects and paper scraps from inside the machine. If the error message continues, disconnect the machine from the power for several minutes, and then reconnect it. You can try additional paper jam clear operations. <i>See Related Information: Remove Paper Scraps.</i>
Unusable Device Disconnect device from front connector & turn machine off & then on	A broken device is connected to the USB direct interface.	Unplug the device from the USB direct interface, then press  to turn the machine off and then on again.
Unusable Device Please disconnect USB device.	A USB device or USB flash drive that is not supported has been connected to the USB direct interface.	Unplug the device from the USB direct interface. Turn the machine off and then on again.
Wrong Tray Settings	The machine's Paper Size and Tray Use settings do not match the size of paper in the tray you are using.	Follow the instructions on the touchscreen and try to print again.
		Configure the paper size setting for the tray according to the LCD instructions.



## Related Information

- [Troubleshooting](#)
  - [Error Messages When Using the Brother Web Connect Feature](#)

### Related Topics:

- [Touchscreen LCD Overview](#)
- [Print the Network Configuration Report](#)
- [Refill the Ink Tanks](#)
- [Change the Check Paper Size Setting](#)
- [Load Paper](#)
- [Printer Jam or Paper Jam](#)
- [Paper is Jammed in the Front of the Machine](#)
- [Remove Paper Scraps](#)
- [Clean the Paper Pick-up Rollers](#)
- [Change the Paper Size and Paper Type](#)
- [Print Settings \(Windows\)](#)
- [Print Options \(Mac\)](#)
- [Load Paper in the Multi-purpose Tray \(MP Tray\)](#)



## Error Messages When Using the Brother Web Connect Feature

Your Brother machine displays an error message if an error occurs. The most common error messages are shown in the following chart.

You can correct most errors yourself. If you need more tips, go to your model's **FAQs & Troubleshooting** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).

### Connection Error

Error Messages	Cause	Action
Connection Error 02 Network is not connected. Check that the machine is connected to the network.	The machine is not connected to a network.	<ul style="list-style-type: none"> <li>Verify that the network connection is good.</li> <li>If the Web option was pressed soon after the machine was turned on, the network connection may not have been established yet. Wait and try again.</li> </ul>
Connection Error 03 Connection failed to server. Check network settings.	<ul style="list-style-type: none"> <li>Network or server settings are incorrect.</li> <li>There is a problem with the network or server.</li> </ul>	<ul style="list-style-type: none"> <li>Confirm that network settings are correct, or wait and try again later.</li> <li>If the Web option was pressed soon after the machine was turned on, the network connection may not have been established yet. Wait and try again.</li> </ul>
Connection Error 07 Connection failed to server. Set the correct Date&Time.	Date and time settings are incorrect.	Set the date and time correctly. Note that if the machine's power cord is disconnected, the date and time settings may have reset to factory settings.

### Authentication Error

Error Messages	Cause	Action
Authentication Error 01 Incorrect PIN code. Enter PIN correctly.	The PIN you entered to access the account is incorrect. The PIN is the four-digit number that was entered when registering the account to the machine.	Enter the correct PIN.
Authentication Error 02 Incorrect or expired ID, or this temporary ID is already used. Enter correctly or reissue temporary ID. Temporary ID is valid for 24 hours after it is issued.	The temporary ID that was entered is incorrect.	Enter the correct temporary ID.
	The temporary ID that was entered has expired. A temporary ID is valid for 24 hours.	Apply for Brother Web Connect access again and receive a new temporary ID, and then use the new ID to register the account to the machine.
Authentication Error 03 Display name has already been registered. Enter another display name.	The name you entered as the display name has already been registered to another service user.	Enter a different display name.

---

## Server Error

Error Messages	Cause	Action
Server Error 01 Authentication failed. Do the following: 1. Go to <a href="http://bwc.brother.com">http://bwc.brother.com</a> to get a new temporary ID. 2. Press OK and enter your new temporary ID in the next screen.	The machine's authentication information (needed to access the service) has expired or is invalid.	Apply for Brother Web Connect access again to receive a new temporary ID, and then use the new ID to register the account to the machine.
Server Error 03 Failed to upload. Unsupported file or corrupt data. Confirm data of file.	The file you are trying to upload may have one of the following problems: <ul style="list-style-type: none"><li>• The file exceeds the service's limit on number of pixels, file size, etc.</li><li>• The file type is not supported.</li><li>• The file is corrupted.</li></ul>	The file cannot be used: <ul style="list-style-type: none"><li>• Check the service's size or format restrictions.</li><li>• Save the file as a different type.</li><li>• If possible, get a new, uncorrupted version of the file.</li></ul>
Server Error 13 Service temporarily unavailable. Try again later.	There is a problem with the service and it cannot be used now.	Wait and try again. If you get the message again, access the service from a computer to confirm if it is unavailable.



### Related Information

- [Error and Maintenance Messages](#)
-

## Printer Jam or Paper Jam

Locate and remove the jammed paper.

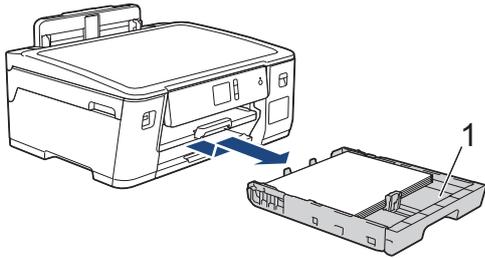
- [Paper is Jammed in the Front of the Machine](#)
- [Paper is Jammed in the Back of the Machine](#)
- [Remove Paper Scraps](#)
- [Error and Maintenance Messages](#)
- [Paper Handling and Printing Problems](#)

## Paper is Jammed in the Front of the Machine

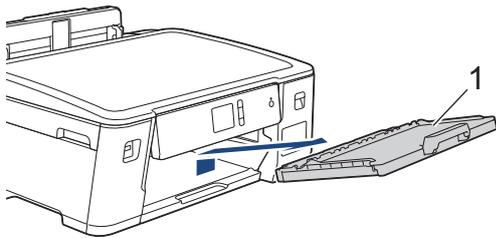
If the LCD displays the following paper jam messages, follow these steps:

- [Jam Front/Rear], [Repeat Jam Front/Rear]
- [Jam Front], [Repeat Jam Front]
- [Jam Front/MP Tray], [Repeat Jam Front/MP Tray]

1. Unplug the machine from the electrical socket.
2. If the paper is loaded in the MP tray, remove the paper.
3. Pull Tray #1 (1) completely out of the machine as shown by the arrow.

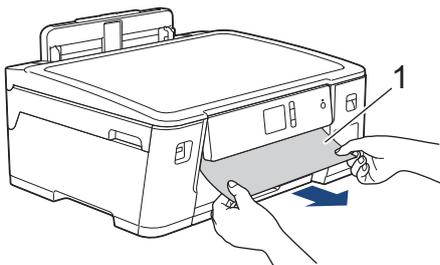


If your LCD error message was repeat paper jam messages, for example [Repeat Jam Front/Rear], lift the paper support (1), and then pull it at an angle completely out of the machine as shown by the arrow.



When finished, continue with the next step.

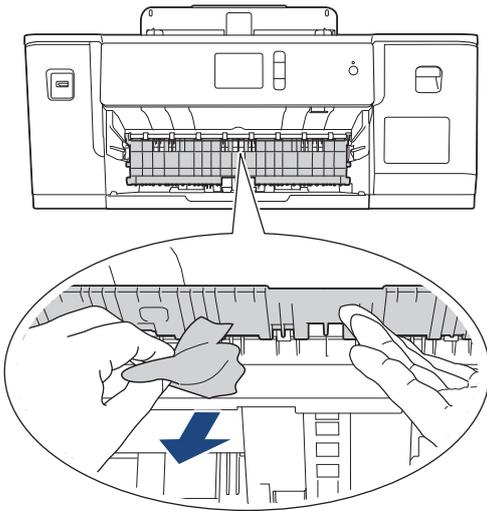
4. Slowly pull out the jammed paper (1).



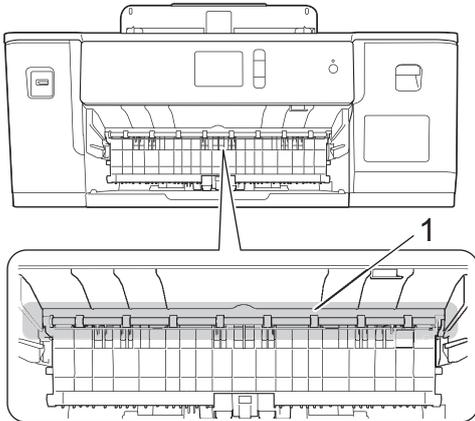


If your LCD error message was repeat paper jam messages, for example [Repeat Jam Front/Rear], do the following:

- a. Lift the Jam Clear Flap, and remove the jammed paper.

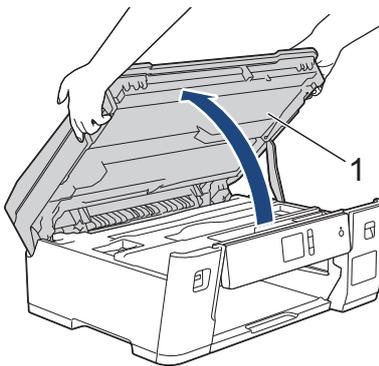


- b. Make sure you look carefully inside (1) for any scraps of paper.

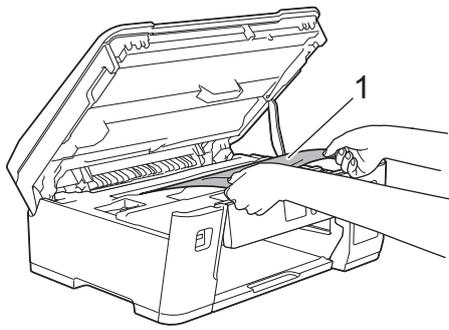


When finished, continue with the next step.

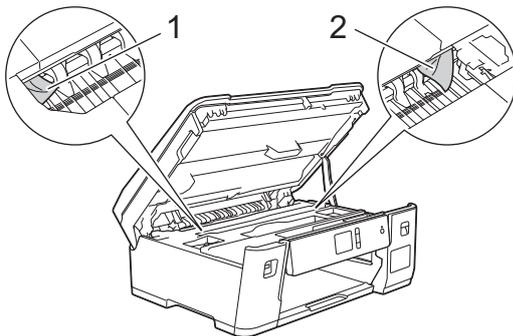
5. Using both hands, use the finger holds on each side of the machine to lift the top cover (1) into the open position.



6. Slowly pull the jammed paper (1) out of the machine.



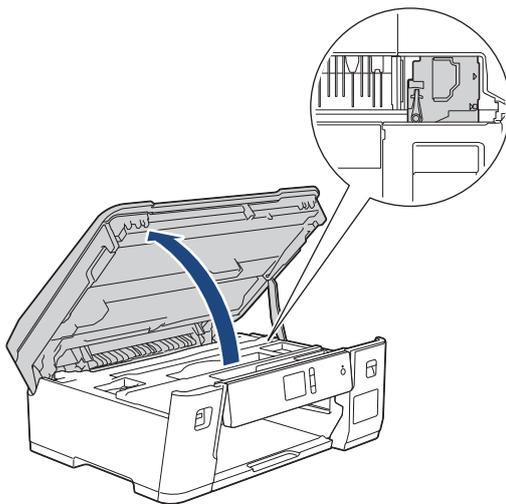
If your LCD error message was repeat paper jam messages, for example [Repeat Jam Front/Rear], move the print head (if necessary) to take out any paper remaining in this area. Make sure pieces of paper are not left in the corners of the machine (1) and (2).



When finished, continue with the next step.

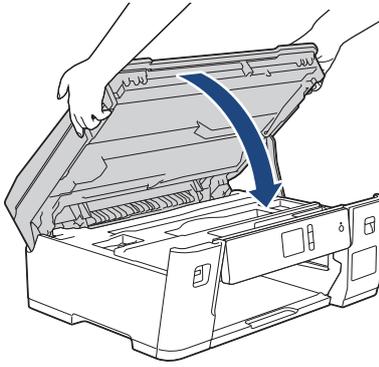
## IMPORTANT

- If the print head is in the right corner as shown in the illustration, you cannot move the print head. Close the top cover, and then reconnect the power cord. Open the top cover again, and then hold down  until the print head moves to the centre. Then unplug the machine from the power source and take out the paper.

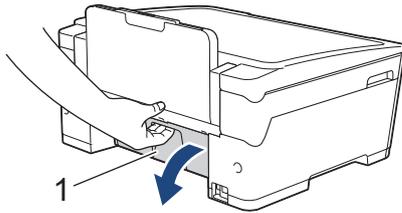


- If the paper is jammed under the print head, unplug the machine from the power source, and then move the print head to take out the paper.
- If ink gets on your skin or clothing, immediately wash it off with soap or detergent.

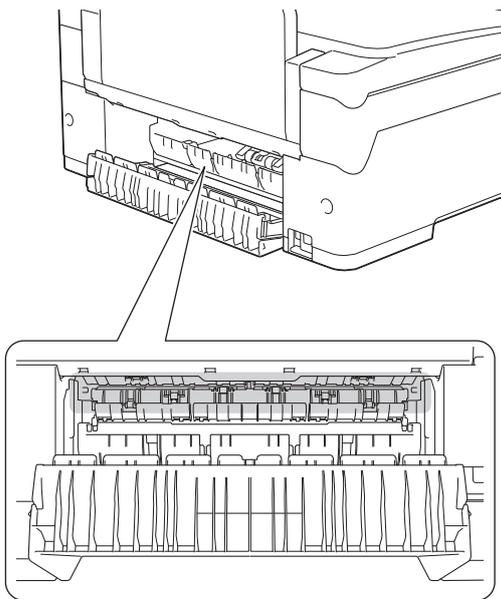
7. Gently close the top cover using the finger holds on each side.



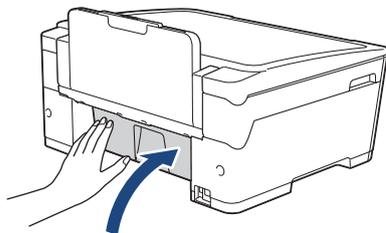
8. If your LCD error message was [Jam Front/Rear] or [Repeat Jam Front/Rear], do the following:
- Open the Jam Clear Cover (1) at the back of the machine.



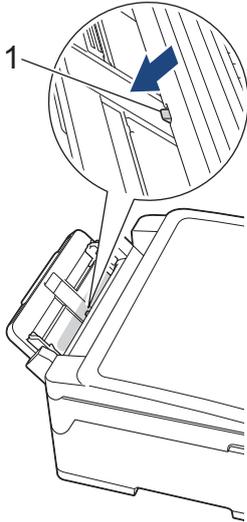
- Make sure you look carefully inside for jammed paper and slowly pull it out of the machine.



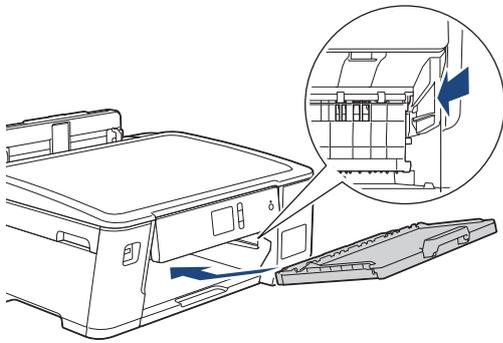
- Close the Jam Clear Cover. Make sure the cover is closed completely.



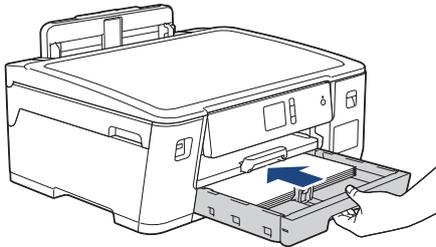
9. If your LCD error message was [Jam Front/MP Tray] or [Repeat Jam Front/MP Tray], make sure you look carefully inside the MP tray for jammed paper. Push the release lever (1) towards the back of the machine, and then slowly pull the jammed paper out of the MP tray.



10. If your LCD error message was repeat paper jam messages, for example [Repeat Jam Front/Rear], and you removed the paper support, put it firmly back in the machine. Make sure you fit the paper support into the channels.



11. Slowly push Tray #1 completely into the machine.



12. Reconnect the power cord.



If there is a repeat paper jam, a small piece of paper may be stuck in the machine.  
See *Related Information: Remove Paper Scraps*.



### Related Information

- [Printer Jam or Paper Jam](#)

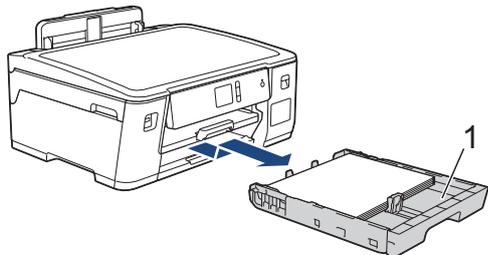
#### Related Topics:

- [Error and Maintenance Messages](#)
- [Remove Paper Scraps](#)

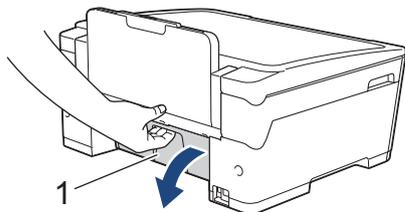
## Paper is Jammed in the Back of the Machine

If the LCD displays the following paper jam messages, follow these steps:

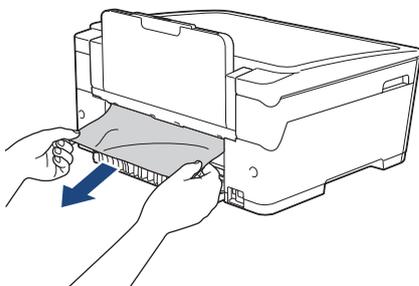
- [Jam Rear], [Repeat Jam Rear]
  - [Jam MP Tray], [Repeat Jam MP Tray]
1. Unplug the machine from the electrical socket.
  2. If the paper is loaded in the MP tray, remove the paper.
  3. Pull Tray #1 (1) completely out of the machine as shown by the arrow.



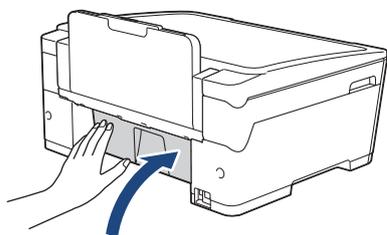
4. If your LCD error message was [Jam Rear], [Repeat Jam Rear], do the following:
  - a. Open the Jam Clear Cover (1) at the back of the machine.



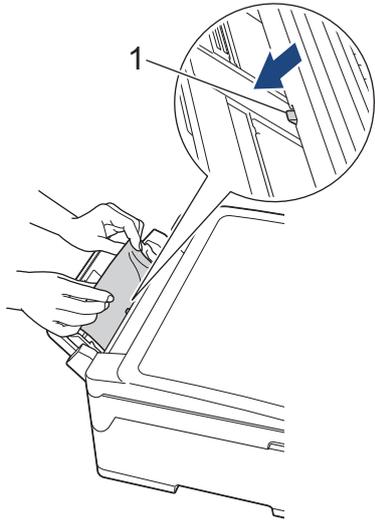
- b. Slowly pull the jammed paper out of the machine.



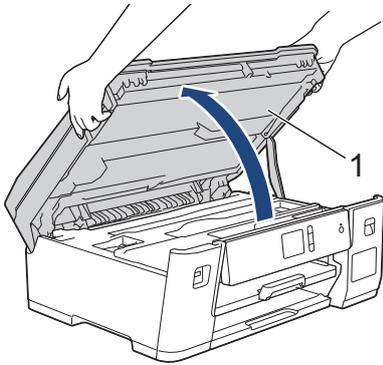
- c. Close the Jam Clear Cover. Make sure the cover is closed completely.



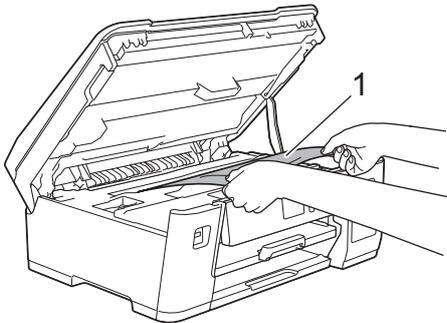
5. If your LCD error message was [Jam MP Tray] or [Repeat Jam MP Tray], push the release lever (1) towards the back of the machine, and then slowly pull the jammed paper out of the MP tray.



6. Using both hands, use the finger holds on each side of the machine to lift the top cover (1) into the open position.

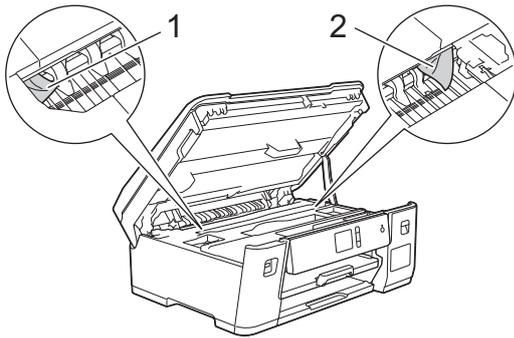


7. Slowly pull the jammed paper (1) out of the machine.





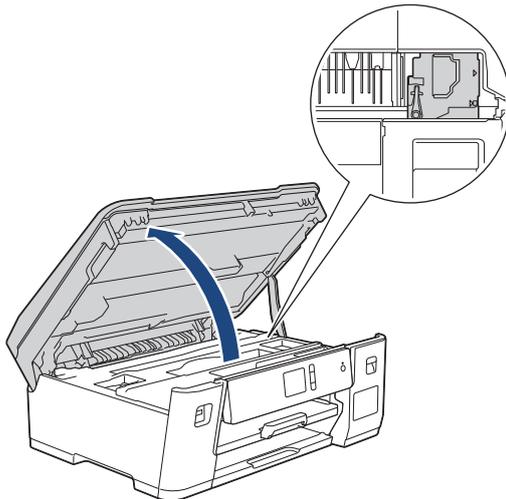
If your LCD error message was repeat paper jam messages, for example [Repeat Jam Rear], move the print head (if necessary) to take out any paper remaining in this area. Make sure pieces of paper are not left in the corners of the machine (1) and (2).



When finished, continue with the next step.

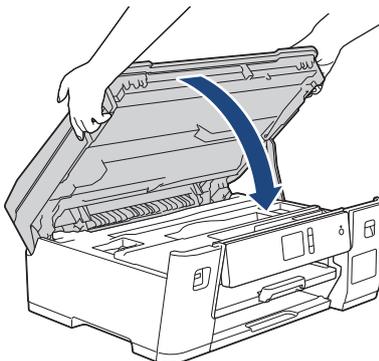
## IMPORTANT

- If the print head is in the right corner as shown in the illustration, you cannot move the print head. Close the top cover, and then reconnect the power cord. Open the top cover again, and then hold down  until the print head moves to the centre. Then unplug the machine from the power source and take out the paper.



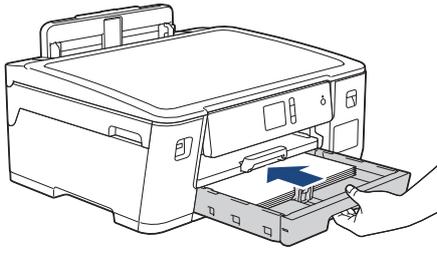
- If the paper is jammed under the print head, unplug the machine from the power source, and then move the print head to take out the paper.
- If ink gets on your skin or clothing, immediately wash it off with soap or detergent.

8. Gently close the top cover using the finger holds on each side.



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9. Slowly push Tray #1 completely into the machine.



10. Reconnect the power cord.



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If there is a repeat paper jam, a small piece of paper may be stuck in the machine.

See *Related Information: Remove Paper Scraps*.

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### Related Information

- [Printer Jam or Paper Jam](#)

#### Related Topics:

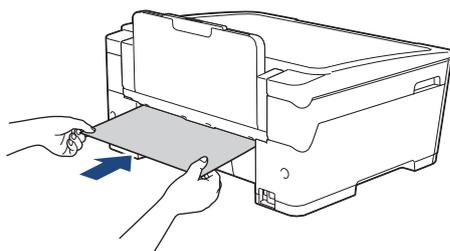
- [Remove Paper Scraps](#)
-

## Remove Paper Scraps

1. If you repeatedly experience paper jams (3 times or more), the LCD displays a message asking if you want to remove the scraps.  
Press [Yes] to return to the Home screen.
2. Press  [Settings] > [Maintenance] > [Remove Paper Scraps].
3. Follow the instructions on the LCD to locate and remove the jammed paper.



During the procedure, you must insert the Maintenance sheet (included with your machine) into the machine in Landscape orientation through the opening as shown, until you feel it grab the paper. (If you do not have the Maintenance sheet, use one sheet of A4 or Letter size thicker paper, such as glossy paper.)



### Related Information

- [Printer Jam or Paper Jam](#)

#### Related Topics:

- [Error and Maintenance Messages](#)
- [Paper Handling and Printing Problems](#)
- [Paper is Jammed in the Front of the Machine](#)
- [Paper is Jammed in the Back of the Machine](#)

## If You Are Having Difficulty with Your Machine



For technical help, you must contact Brother customer support.

If you think there is a problem with your machine, check the following topics. You can correct most problems yourself.

If you need additional help, go to your model's **FAQs & Troubleshooting** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com).

Using non-Brother supplies may affect the print quality, hardware performance, and machine reliability.

- [Paper Handling and Printing Problems](#)
- [Other Problems](#)
- [Network Problems](#)
- [Google Cloud Print Problems](#)
- [AirPrint Problems](#)

## Paper Handling and Printing Problems

If, after reading this table, you still need help, go to the Brother Solutions Center at [support.brother.com](http://support.brother.com).

>> [Printing Difficulties](#)

>> [Print Quality Difficulties](#)

>> [Paper Handling Difficulties](#)

### Printing Difficulties

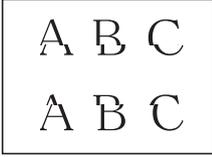
Difficulties	Suggestions
No printout	<p>Check that the correct printer driver has been installed and selected.</p> <p>Check to see if the machine's display is showing an error message. See <i>Related Information: Error and Maintenance Messages</i>.</p> <p>Check that the machine is online:</p> <ul style="list-style-type: none"> <li>Windows Server 2008 Click  (Start) &gt; Control Panel &gt; Hardware and Sound &gt; Printers. Right-click <b>Brother XXX-XXXX</b> (where XXXX is your model name). Make sure <b>Use Printer Online</b> is not listed. If it is listed, click this option to set the driver Online.</li> <li>Windows 7 and Windows Server 2008 R2 Click  (Start) &gt; Devices and Printers. Right-click <b>Brother XXX-XXXX</b> (where XXXX is your model name) 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.</li> <li>Windows 8 Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings &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> (where XXXX is your model name). 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.</li> <li>Windows 10 and Windows Server 2016 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> (where XXXX is your model name). 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.</li> <li>Windows Server 2012 Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings &gt; Control Panel</b>. In the <b>Hardware</b> group, click <b>View devices and printers</b>. Right-click the <b>Brother XXX-XXXX</b> (where XXXX is your model name). 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.</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>. Right-click the <b>Brother XXX-XXXX</b> (where XXXX is your model name). 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.</li> </ul> <p>Look through the window of the ink tank to confirm the actual amount of remaining ink. If the remaining ink level is at or below the lower line under the minimum fill mark, refill the ink tank.</p>

Difficulties	Suggestions
	<p>A message may appear on the LCD to verify whether the ink tanks were refilled. Select <b>Yes</b> to reset the ink dot counter for the refilled colour. Select <b>No</b> for the non-refilled colours.</p> <p>See <i>Related Information: Refill the Ink Tanks</i>.</p> <p>If old, unprinted data remains in the printer driver spooler, it will prevent new print jobs from printing. Open the printer icon and delete all data as follows:</p> <ul style="list-style-type: none"> <li>• Windows Server 2008 Click  (<b>Start</b>) &gt; <b>Control Panel</b> &gt; <b>Hardware and Sound</b> &gt; <b>Printers</b>.</li> <li>• Windows 7 and Windows Server 2008 R2 Click  (<b>Start</b>) &gt; <b>Devices and Printers</b> &gt; <b>Printers and Faxes</b>.</li> <li>• Windows 8 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> &gt; <b>Printers</b>.</li> <li>• Windows 10 and Windows Server 2016 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> &gt; <b>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 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> &gt; <b>Printers</b>.</li> <li>• Mac Click the <b>System Preferences</b> &gt; <b>Printers &amp; Scanners</b>.</li> </ul>
The headers or footers appear when the document is displayed on the screen but do not appear when the document is printed.	<p>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.</p> <p>See <i>Related Information: Unprintable Area</i>.</p>
Cannot perform 'Page Layout' printing.	<p>Check that the paper size setting in the application and in the printer driver are the same.</p>
Print speed is too slow.	<p>Try changing the printer driver setting. The highest resolution needs longer data processing, sending and printing time. Try the other quality settings in the printer driver as follows:</p> <ul style="list-style-type: none"> <li>• Windows In the printer driver, clear the <b>Colour Enhancement</b> check box on the <b>Advanced</b> tab.</li> <li>• Mac In the printer driver, select <b>Color Settings</b>, click <b>Advanced Color Settings</b>, and make sure you clear the <b>Color Enhancement</b> check box.</li> </ul> <p>Turn the Borderless feature off. Borderless printing is slower than normal printing. See <i>Related Information: Print Settings (Windows) or Print a Photo (Mac)</i>.</p> <p>Turn the Quiet Mode setting off. Print speed is slower in Quiet Mode. See <i>Related Information: Reduce Printing Noise</i>.</p>

## Print Quality Difficulties

Difficulties	Suggestions
Poor print quality	<p>Check the print quality.</p> <p>See <i>Related Information: Check the Print Quality</i>.</p>

Difficulties	Suggestions
	<p>Make sure the Media Type setting in the printer driver or the Paper Type setting in the machine's menu matches the type of paper you are using.            See <i>Related Information: Change the Paper Size and Paper Type</i>.            See <i>Related Information: Print Settings (Windows) or Print Options (Mac)</i>.</p> <p>Make sure the ink is fresh. The following may cause ink to clog:</p> <ul style="list-style-type: none"> <li>• The expiration date written on the bottle package has passed.</li> <li>• The ink bottle may not have been stored correctly before use. Store the ink bottle on a level surface in a cool, dark place.</li> </ul> <p>Make sure you are using Brother Original ink designed for your model. Brother does not recommend using non-Brother Original ink, or refilling with ink other than Brother Original ink.</p> <p>Make sure you are using one of the recommended types of paper.            See <i>Related Information: Acceptable Paper and Other Print Media</i>.</p> <p>The recommended environment for your machine is between 20 °C to 33 °C.</p>
<p>White lines appear in text or graphics.</p> 	<p>Clean the print head.            See <i>Related Information: Clean the Print Head from Your Brother Machine</i>.            See <i>Related Information: Clean the Print Head from Your Computer (Windows) or Clean the Print Head from Your Computer (Mac)</i>.</p> <p>Check and adjust the paper feed.            See <i>Related Information: Correct the Paper Feed to Clear Vertical Lines</i>.</p> <p>Make sure you are using Brother Original ink designed for your model.</p> <p>Try using the recommended types of paper.            See <i>Related Information: Acceptable Paper and Other Print Media</i>.</p> <p>To prolong print head life, provide the best ink economy and maintain print quality, we do not recommend frequently unplugging the machine and/or leaving the machine unplugged for extended periods of time. We recommend using  to power down the machine. Using  allows minimal power to the machine, resulting in periodic, but less frequent, cleaning of the print head.</p>
<p>Dark lines appear at regular intervals.</p> 	<p>Check and adjust the paper feed.            See <i>Related Information: Correct the Paper Feed to Clear Vertical Lines</i>.</p>
<p>The machine prints blank pages.</p>	<p>Check the print quality.            See <i>Related Information: Check the Print Quality</i>.</p> <p>Make sure you are using Brother Original ink designed for your model.</p> <p>To prolong print head life, provide the best ink economy and maintain print quality, we do not recommend frequently unplugging the machine and/or leaving the machine unplugged for extended periods of time. We recommend using  to power down the machine. Using  allows minimal power to the machine, resulting in periodic, but less frequent, cleaning of the print head.</p>
<p>Characters and lines are blurred.</p>	<p>Check the printing alignment.            See <i>Related Information: Check the Print Alignment from Your Brother Machine</i>.            See <i>Related Information: Check the Print Alignment from Your Computer (Windows) or Check the Print Alignment from Your Computer (Mac)</i>.</p>

Difficulties	Suggestions
	<p>Change the print setting options. See <i>Related Information: Change the Print Setting Options When Having Printing Problems.</i></p>
Printed text or images are skewed.	<p>Make sure the paper is loaded correctly in the paper tray and the paper guides are adjusted correctly. See <i>Related Information: Load Paper.</i></p>
	<p>Make sure the Jam Clear Cover is closed correctly.</p>
Smudge or stain at the top centre of the printed page.	<p>Make sure the paper is not too thick or curled. See <i>Related Information: Acceptable Paper and Other Print Media.</i></p>
Printing appears dirty or ink seems to run.	<p>Make sure you are using the recommended types of paper. Do not handle the paper until the ink is dry. See <i>Related Information: Acceptable Paper and Other Print Media.</i></p>
	<p>Make sure the printing surface is face down in the paper tray.</p>
	<p>Make sure you are using Genuine Brother Ink designed for your model. Make sure you are using Brother Original ink designed for your model.</p>
	<p>If you are using photo paper, make sure the glossy side of the photo paper is face down in the tray and you have set the correct paper type. If you are printing a photo from your computer, set the Media Type in the printer driver.</p>
Ink is smudged or wet when using glossy photo paper.	<p>Be sure to check the front and back of the paper. Place the glossy surface (printing surface) face down. See <i>Related Information: Change the Paper Size and Paper Type.</i></p>
	<p>If you use glossy photo paper, make sure the paper type setting is correct.</p>
Stains appear on the reverse side or at the bottom of the page.	<p>Make sure the printer platen is not dirty with ink. See <i>Related Information: Clean the Machine's Printer Platen.</i></p>
	<p>Make sure you are using Genuine Brother Ink designed for your model. Make sure you are using Brother Original ink designed for your model.</p>
	<p>Make sure you are using the paper support flap. See <i>Related Information: Load Paper.</i></p>
	<p>Make sure the paper feed rollers are not dirty with ink. See <i>Related Information: Clean the Paper Feed Rollers.</i></p>
The printouts are wrinkled.	<ul style="list-style-type: none"> <li>• Windows In the printer driver, select the <b>Advanced</b> tab, click <b>Other Print Options</b>, and then click <b>Advanced Colour Settings</b>. Clear the <b>Bi-Directional Printing</b> check box.</li> <li>• Mac In the printer driver, select <b>Print Settings</b>, click <b>Advanced</b>, select <b>Other Print Options</b>, and clear the <b>Bi-Directional Printing</b> check box.</li> </ul>
	<p>Make sure you are using Genuine Brother Ink designed for your model. Make sure you are using Brother Original ink designed for your model.</p>
	<p>Change the Reduce Smudge option in your printer driver properties or preferences. See <i>Related Information: Prevent Smudged Printouts and Paper Jams (Windows) or Prevent Smudged Printouts and Paper Jams (Mac).</i></p>
Smudge or stain on the reverse side of the page when using the automatic 2-sided printing feature.	<p>Change the Reduce Smudge option in your printer driver properties or preferences. See <i>Related Information: Prevent Smudged Printouts and Paper Jams (Windows) or Prevent Smudged Printouts and Paper Jams (Mac).</i></p>

## Paper Handling Difficulties

Difficulties	Suggestions
The machine does not feed paper.	Make sure the paper tray is pushed in all the way until it locks into place.

Difficulties	Suggestions
	<p>Make sure the Jam Clear Cover at the back of the machine is closed.</p> <p>If the machine's LCD displays a Paper Jam message and you still have a problem, see <i>Related Information: Error and Maintenance Messages</i>.</p> <p>If the paper tray is empty, load a new stack of paper into the paper tray.</p> <p>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 put it back in the paper tray.</p> <p>Reduce the amount of paper in the paper tray, and then try again.</p> <p>Clean the paper pick-up rollers. See <i>Related Information: Clean the Paper Pick-up Rollers</i>.</p> <p>Make sure that the paper is within specifications for the machine. See <i>Related Information: Paper Weight and Thickness</i>.</p>
Photo paper does not feed correctly.	When you print on Brother Photo paper, load one extra sheet of the same photo paper in the paper tray. An extra sheet has been included in the paper package for this purpose.
Machine feeds multiple pages.	<ul style="list-style-type: none"> <li>• Make sure the paper is loaded correctly in the paper tray.</li> <li>• Remove all the paper from the tray and fan the stack of paper well, then put it back in the tray.</li> <li>• Make sure you do not push the paper in too far.</li> </ul> <p>See <i>Related Information: Load Paper</i>.</p> <p>Make sure the Jam Clear Cover is closed correctly. See <i>Related Information: Printer Jam or Paper Jam</i>.</p> <p>Make sure the Base Pad in the paper tray is not dirty. See <i>Related Information: Clean the Base Pad</i>.</p>
There is a paper jam.	<p>See <i>Related Information: Printer Jam or Paper Jam</i>.</p> <p>Make sure the paper guides are set to the correct paper size.</p> <p>Use the jam prevention settings. For printing See <i>Related Information: Prevent Smudged Printouts and Paper Jams (Windows)</i> or <i>Prevent Smudged Printouts and Paper Jams (Mac)</i>.</p>
Paper jam reoccurs.	<p>If there is a repeat paper jam, a small piece of paper may be stuck in the machine. Make sure paper is not still jammed in the machine. See <i>Related Information: Remove Paper Scraps</i>.</p>
The paper jams when you use 2-sided print.	<p>If paper jams occur frequently during 2-sided printing, the paper feed rollers may be stained with ink. Clean the paper feed rollers. See <i>Related Information: Clean the Paper Feed Rollers</i>.</p>



## Related Information

- [If You Are Having Difficulty with Your Machine](#)

### Related Topics:

- [Troubleshooting](#)
- [Error and Maintenance Messages](#)
- [Refill the Ink Tanks](#)
- [Unprintable Area](#)
- [Check the Print Quality](#)
- [Change the Paper Size and Paper Type](#)
- [Acceptable Paper and Other Print Media](#)

- 
- [Clean the Print Head from Your Brother Machine](#)
  - [Clean the Print Head from Your Computer \(Windows\)](#)
  - [Clean the Print Head from Your Computer \(Mac\)](#)
  - [Check the Print Alignment from Your Brother Machine](#)
  - [Check the Print Alignment from Your Computer \(Windows\)](#)
  - [Check the Print Alignment from Your Computer \(Mac\)](#)
  - [Load Paper](#)
  - [Clean the Machine's Printer Platen](#)
  - [Clean the Paper Feed Rollers](#)
  - [Clean the Paper Pick-up Rollers](#)
  - [Printer Jam or Paper Jam](#)
  - [Paper Weight and Thickness](#)
  - [Print Settings \(Windows\)](#)
  - [Print Options \(Mac\)](#)
  - [Print a Photo \(Mac\)](#)
  - [Prevent Smudged Printouts and Paper Jams \(Windows\)](#)
  - [Prevent Smudged Printouts and Paper Jams \(Mac\)](#)
  - [Clean the Base Pad](#)
  - [Change the Print Setting Options When Having Printing Problems](#)
  - [Reduce Printing Noise](#)
  - [Remove Paper Scraps](#)
  - [Correct the Paper Feed to Clear Vertical Lines](#)
-

## Other Problems

>> [Direct Photo Printing Difficulties](#)

>> [Software Difficulties](#)

### Direct Photo Printing Difficulties

Difficulties	Suggestions
Part of my photo is missing when printed.	Make sure Borderless printing and Cropping are turned off. See <i>Related Information: Print Borderless Photos from a USB Flash Drive.</i> See <i>Related Information: Print Photos with Auto Cropping.</i>

### Software Difficulties

Difficulties	Suggestions
Cannot print.	Uninstall and reinstall the Brother driver.
"Device Busy" appears on the computer screen.	Make sure the machine is not showing an error message on the machine's display.



### Related Information

- [If You Are Having Difficulty with Your Machine](#)

#### Related Topics:

- [Troubleshooting](#)
- [Print Borderless Photos from a USB Flash Drive](#)
- [Print Photos with Auto Cropping](#)

## Network Problems

- [Use the Network Connection Repair Tool \(Windows\)](#)
- [Where Can I Find My Brother Machine's Network Settings?](#)
- [I Cannot Complete the Wireless Network Setup Configuration](#)
- [My Brother Machine Cannot Print over the Network](#)
- [I Want to Check that My Network Devices are Working Correctly](#)
- [Troubleshooting](#)

## 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.

- Windows 7/Windows 8/Windows 10  
You must log on with Administrator rights.
- Make sure the Brother machine is turned on and is connected to the same network as your computer.

1. Do one of the following:

Option	Description
Windows Server 2008	Click  ( <b>Start</b> ) > <b>All Programs</b> > <b>Brother</b> > <b>Brother Utilities</b> . Click the drop-down list and select your model name (if not already selected). Click <b>Tools</b> in the left navigation bar, and then click <b>Network Connection Repair Tool</b> .
Windows 7	Click  ( <b>Start</b> ) > <b>All Programs</b> > <b>Brother</b> > <b>Brother Utilities</b> . Click the drop-down list and select your model name (if not already selected). Click <b>Tools</b> in the left navigation bar, and then click <b>Network Connection Repair Tool</b> .
Windows 8/ Windows 10	Launch  ( <b>Brother Utilities</b> ), and then click the drop-down list and select your model name (if not already selected). Click <b>Tools</b> in the left navigation bar, and then click <b>Network Connection Repair Tool</b> .
Windows Server 2012 / 2012 R2 / 2016	Launch  ( <b>Brother Utilities</b> ), and then click the drop-down list and select your model name (if not already selected). Click <b>Tools</b> in the left navigation bar, and then click <b>Network Connection Repair Tool</b> .

 If the **User Account Control** screen appears, click **Yes**.

2. Follow the on-screen instructions.
3. Check the diagnosis by printing the Network Configuration Report.

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

## Where Can I Find My Brother Machine's Network Settings?

- [Change Machine Settings from Your Computer](#)
- [Print the Network Configuration Report](#)

## I Cannot Complete the Wireless Network Setup Configuration

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.	<ul style="list-style-type: none"> <li>• Confirm the security settings using <b>Wireless Setup Helper</b>. For more information and to download the utility, go to your model's <b>Downloads</b> page on the Brother Solutions Center at <a href="http://support.brother.com">support.brother.com</a>.</li> <li>• Select and confirm that you are using the correct security settings.                             <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> </li> </ul>	Wireless
Your Brother machine's MAC address is not allowed.	Confirm that the Brother machine's MAC Address is allowed in the filter. You can find the MAC Address on your Brother machine's control panel.	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 name or Network Key manually.</li> <li>• Check the SSID name 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.	<ul style="list-style-type: none"> <li>• Confirm the SSID and password.                             <ul style="list-style-type: none"> <li>- 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.</li> </ul> </li> </ul>	Wi-Fi Direct
You are using Android™ 4.0.	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 G/O.	Wi-Fi Direct
Your Brother machine is placed too far from your mobile device.	Move your Brother machine within about 3.3 feet (1 metre) of the mobile device when you configure the Wi-Fi Direct network settings.	Wi-Fi Direct
There are some obstructions (walls or furniture, for example) between your machine and the mobile device.	Move your Brother machine to an obstruction-free area.	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.	Move other devices away from the Brother machine or the mobile device.	Wi-Fi Direct
You have checked and tried all of the above, but your Brother machine still cannot	<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> </ul>	Wi-Fi Direct

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Cause	Action	Interface
complete the Wi-Fi Direct configuration.	<ul style="list-style-type: none"><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>	

### 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

- [Network Problems](#)

#### Related Topics:

- [Configure Your Machine for a Wireless Network When the SSID is Not Broadcast](#)
  - [Use Wi-Fi Direct®](#)
-

## My Brother Machine Cannot Print over the Network

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> <li>Mac Check your network devices using the ping command. For more information on how to confirm your network settings, see <i>Related Information: Check Network Devices Using the Ping Command</i>.</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 7 Click  (Start) &gt; <b>Devices and Printers</b>.</li> <li>Windows 8 Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings &gt; Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>Windows 10 and Windows Server 2016 Click  &gt; <b>Windows System &gt; Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>Windows Server 2008 Click <b>Start &gt; Control Panel &gt; 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 &gt; Control Panel</b>. In the <b>Hardware</b> group, click <b>View devices and printers &gt; 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>Mac Click <b>System Preferences &gt; Printers &amp; Scanners</b>.</li> </ul> </li> </ul>	Wired/Wireless
Your Brother machine is not connected to the wireless network.	Print the WLAN Report to check the error code on the printed report.	Wireless

If you have checked and tried all of the above, but your Brother machine still cannot print, uninstall the printer driver and reinstall it.



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## Related Information

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- [Network Problems](#)

### **Related Topics:**

- [Print the WLAN Report](#)
  - [Use the Network Connection Repair Tool \(Windows\)](#)
  - [Wireless LAN Report Error Codes](#)
  - [Check Network Devices Using the Ping Command](#)
  - [I Want to Check that My Network Devices are Working Correctly](#)
-

## I Want to Check that My Network Devices are Working Correctly

Check	Action	Interface
Check that your Brother machine, access point/router, or network hub is turned on.	<p><b>Check the following:</b></p> <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 button is blinking.</li> <li>All protective packaging has been removed from the machine.</li> <li>The Top Cover and the Jam Clear Cover are 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 that you can "ping" the Brother machine from your computer.	<p>Ping the Brother machine from your computer using the IP address or the node name in the Windows command prompt or Mac Terminal application:</p> <p>ping &lt;ipaddress&gt; or &lt;nodename&gt;.</p> <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> <p>(Windows) Ask the network administrator and use the Network Connection Repair Tool to fix the IP address and the subnet mask.</p> <p>(Mac) Confirm that the IP address and the Subnet Mask are set correctly.</p>	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.	Wireless

If you have checked and tried all of the above but you are still having problems, see the instructions supplied with your wireless LAN access point/router to find the SSID and the Network Key information and set them correctly.

### ✓ Related Information

- Network Problems
  - Check Network Devices Using the Ping Command

#### Related Topics:

- Print the Network Configuration Report
- Print the WLAN Report
- Use the Network Connection Repair Tool (Windows)
- My Brother Machine Cannot Print over the Network
- Wireless LAN Report Error Codes

## Check Network Devices Using the Ping Command

Check the IP addresses of both your computer and your Brother machine, and then confirm whether the network is operating correctly.

- >> [Configure the IP Address on your computer \(Windows\)](#)
- >> [Configure the IP Address on your computer \(Mac\)](#)
- >> [Configure the IP Address on your Brother machine](#)

### Configure the IP Address on your computer (Windows)

1. Do one of the following:

- Windows 7

Click /(Start) > **All Programs** > **Accessories** > **Command Prompt**.

- Windows 8

Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Search** > **Command Prompt**.

- Windows 10

Click  > **Windows System** > **Command Prompt**.

- Type "ipconfig" and then press the Enter key on your keyboard.
- Confirm the values for the IPv4 address and subnet mask.
- Type "exit" and then press the Enter key on your keyboard.

### Configure the IP Address on your computer (Mac)

- Select **System Preferences** from the Apple menu.
- Click **Network** > **Advanced** > **TCP/IP**.
- Confirm the values for the IPv4 address and subnet mask.

### Configure the IP Address on your Brother machine

Print the Network Configuration Report, and confirm the values for the IP address and subnet mask.

```
<IP Settings >
IP Address      192.168.11.250      (set manually)
Subnet Mask    255.255.255.0
IP Gateway     192.168.100.200
Boot Method    STATIC
Boot Tries     3
IP Filter      Disabled
```

Check the IP addresses for both your computer and your Brother machine. Confirm that the network address portions are the same. For example, if the subnet mask is "255.255.255.0", it is normal for only the host address portions to be different.

	Network Address	Host Address	
IP Address	192.168.100.	250	Set the final number, which corresponds to "0" in the subnet mask, to 1–254.
Subnet Mask	255.255.255.	0	Usually, there are no problems when the subnet mask is "255.255.255.0". Use the same value for all of your computers.

### Related Information

- [I Want to Check that My Network Devices are Working Correctly](#)

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**Related Topics:**

- [My Brother Machine Cannot Print over the Network](#)
-

## Google Cloud Print Problems

Difficulty	Suggestions
My Brother machine is not displayed in the printer list.	Make sure your machine is turned on.
	Confirm that Google Cloud Print™ is enabled.
	Confirm that your machine is registered with Google Cloud Print™. If it is not registered, try to register again.
I cannot print.	Make sure your machine is turned on.
	Confirm your network settings. See <i>Related Information</i> .
	Certain files may not be printable, or may not appear exactly as they are displayed.
I cannot register my Brother machine with Google Cloud Print™.	Make sure your machine is connected to a network with Internet access.
	Verify that the date and time are set correctly on your machine.
I do not see a confirmation message on my Brother machine when I try to register with Google Cloud Print™, even after repeating the registration steps.	Make sure your Brother machine is idle while you are registering with Google Cloud Print™.



### Related Information

- [If You Are Having Difficulty with Your Machine](#)

#### Related Topics:

- [Troubleshooting](#)
- [Network Settings for Using Google Cloud Print](#)

## AirPrint Problems

Difficulty	Suggestions
My Brother machine is not displayed in the printer list.	Make sure your Brother machine is turned on.
	Confirm the network settings.
	Move the mobile device closer to the wireless access point/router, or to your Brother machine.
I cannot print.	Make sure your Brother machine is turned on.
	Confirm the network settings.
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. Refer to the following Apple support article for more information about AirPrint: <a href="https://support.apple.com/kb/HT4356">support.apple.com/kb/HT4356</a> .



### Related Information

- [If You Are Having Difficulty with Your Machine](#)

#### Related Topics:

- [Troubleshooting](#)

## Check the Machine Information

Follow these instructions to check your Brother machine's serial number, firmware version, and firmware update.

1. Press  [Settings] > [All Settings] > [Machine Info.].
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 number of total pages the machine has printed.

3. Press .

### Related Information

- [Troubleshooting](#)

## Reset Your Brother Machine

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset].
2. Press the reset option you want to use.
3. Press [OK] for two seconds to reboot the machine.



### Related Information

- [Troubleshooting](#)
  - [Reset Functions Overview](#)

## Reset Functions Overview

The following reset functions are available:

1. [Machine Reset]

You can reset all the machine's settings that you have changed.

2. [Network]

Reset the print server back to its default factory settings (includes Password and IP Address information).

3. [All Settings]

Use the Settings Reset function to reset all machine's settings to the settings originally set at the factory.

Brother strongly recommends you perform this operation when you dispose of the machine.



Unplug the interface cable before you select [Network] or [All Settings].



### Related Information

- [Reset Your Brother Machine](#)

## **Routine Maintenance**

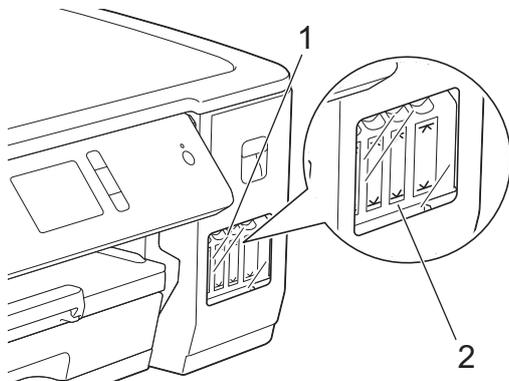
- [Refill the Ink Tanks](#)
- [Clean Your Brother Machine](#)
- [Check Your Brother Machine](#)
- [Correct the Paper Feed to Clear Vertical Lines](#)
- [Change the Print Setting Options When Having Printing Problems](#)
- [Pack and Ship Your Brother Machine](#)

## Refill the Ink Tanks

When the machine detects that it is running out of ink, the machine will display a message.

The LCD displays which ink tank is low or needs to be refilled. Be sure to follow the LCD prompts to refill the ink tanks in the correct order.

You can confirm the actual amount of remaining ink visually by looking through the window (1) of the ink tank. If the remaining ink level is at or below the lower line (2) under the minimum fill mark, refill the ink tank.



The ink below the lower line is necessary to prevent air from drying out and damaging the print head assembly. Refill the ink tank when the remaining ink level is at or below the lower line.

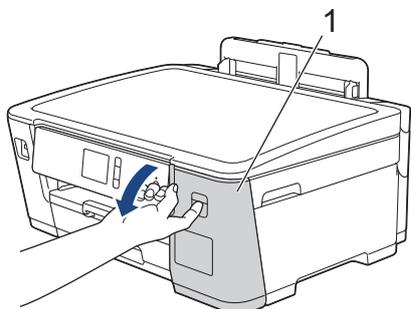
### **CAUTION**

If ink gets into your eyes, rinse them with water immediately. If left as it is, it may cause red eye or mild inflammation. In case of any abnormality, consult your doctor.

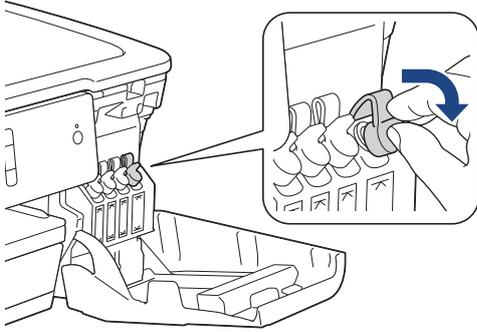
### **IMPORTANT**

- Brother strongly recommends that you continue to use only Brother Original replacement ink designed for your model. Use or attempted use of potentially incompatible ink in the Brother machine may cause damage to the machine and/or may result in unsatisfactory print quality. Our warranty coverage does not apply to any problem that is caused by the use of unauthorised third-party ink. To protect your investment and obtain premium performance from the Brother machine, we strongly recommend the use of Brother Original ink.

1. Open the ink tank cover (1).



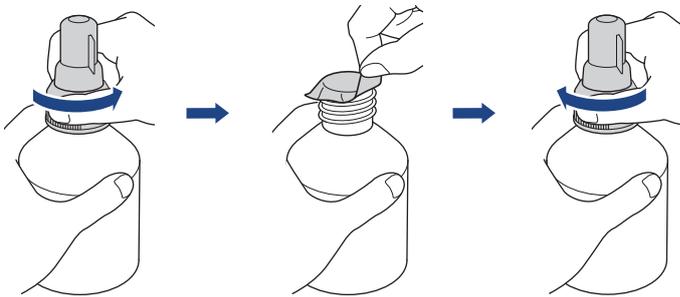
2. Pull the tab downwards to open the cap of the ink tank for the colour you want to refill.



## NOTE

Be careful to avoid touching any ink when handling the cap of the ink tank.

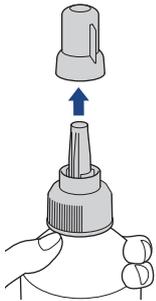
3. Remove the cap of the ink bottle, remove the film from the ink bottle, and then replace the cap.



## IMPORTANT

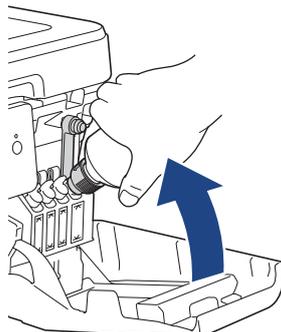
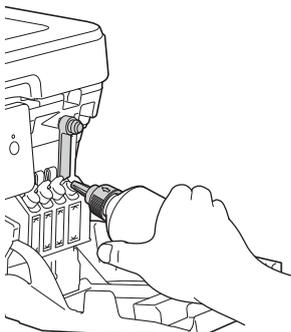
- Replace the ink bottle cap tightly. Otherwise, the ink may leak.
- DO NOT shake the ink bottles. If ink stains your skin or clothing, wash with soap or detergent at once.

4. Remove the nozzle cap, as shown.



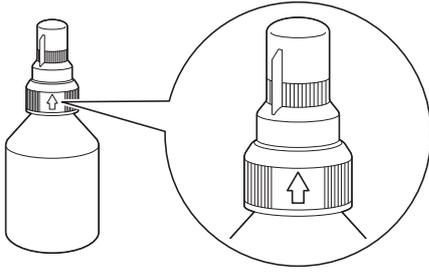
5. Make sure that the colour of the ink tank cap matches the ink colour you want to refill.

Keep the nozzle close to the ink tank opening and insert the bottle nozzle firmly into the ink tank so that the ink does not spill.



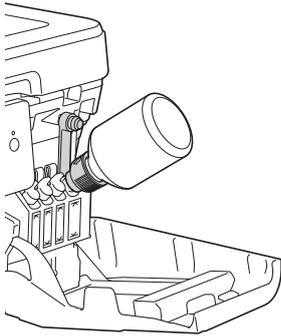


To fill the ink tank faster, insert the bottle nozzle firmly into the ink tank so that the arrow mark shown on the ink bottle in the illustration is up.



- The bottle is self-standing, and the ink fills automatically until the bottle is empty or until the ink reaches the maximum fill mark line.

To fill the ink tank faster, squeeze the bottle on both sides.



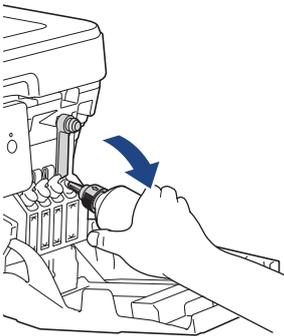
## IMPORTANT

Be careful not to fill the ink past the upper line above the maximum fill mark.

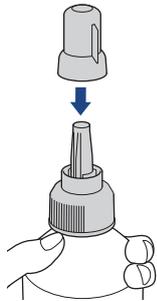
## NOTE

- Be careful not to spill any ink when you refill the ink tank.
- Refill with all of the ink in the bottle, if it does not exceed the upper line.

- Keep the nozzle close to the ink tank opening and turn the nozzle up and remove the bottle from the ink tank so that the ink does not spill.



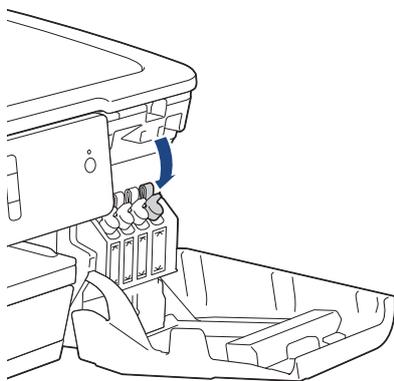
- Replace the nozzle cap.



## NOTE

- If any ink remains in the ink bottle, seal the cap tightly and store the ink bottle upright on a level surface in a cool, dark place.
- Avoid tilting the ink bottle or storing it on its side; it may leak.

9. Push down on the cap of the ink tank to close it tightly.



10. Repeat these steps for each ink tank you want to refill.

11. Close the ink tank cover.

When you open and close the ink tank cover, a message may appear on the LCD to verify whether the ink tanks were refilled.

- If you refilled the ink tanks, press [Yes], and press [Yes] to reset the ink dot counter for the refilled colours.
- If you did not refill the ink tank, be sure to press [No].

## IMPORTANT

- If you accidentally mix the colours by filling the wrong ink tank, contact Brother customer service or your local Brother dealer.
- Once you open an ink bottle, use it up within six months. Use unopened ink bottles by the expiration date written on the bottle package.



## Related Information

- [Routine Maintenance](#)

### Related Topics:

- [Error and Maintenance Messages](#)
- [Paper Handling and Printing Problems](#)
- [Pack and Ship Your Brother Machine](#)

## Clean Your Brother Machine

- [Clean the Print Head from Your Brother Machine](#)
- [Clean the Print Head from Your Computer \(Windows\)](#)
- [Clean the Print Head from Your Computer \(Mac\)](#)
- [Clean the Machine's LCD](#)
- [Clean the Outside of the Machine](#)
- [Clean the Machine's Printer Platen](#)
- [Clean the Paper Feed Rollers](#)
- [Clean the Base Pad](#)
- [Clean the Paper Pick-up Rollers](#)

## Clean the Print Head from Your Brother Machine

To maintain good print quality, the machine automatically cleans the print head when needed. If there is a print quality problem, start the cleaning process manually.

- Clean the print head if there is a horizontal line or a blank space in the text or graphics on printed pages. Depending on the problem colour, select to clean Black only, three colours at a time (Yellow/Cyan/Magenta), or all four colours at once.
- Cleaning the print head consumes ink.
- Cleaning too often uses ink unnecessarily.

### IMPORTANT

DO NOT touch the print head. Touching the print head may cause permanent damage and may void the print head's warranty.

1. Press  [Settings] > [Maintenance] > [Print Head Cleaning].
2. Press [Black only], [Colour only], or [All].
3. Press [Normal], [Strong], or [Strongest].
4. Press [Start].

The machine cleans the print head.



- If you clean the print head and the print has not improved, try cleaning the print head again. If the print has not improved, contact Brother customer service or your local Brother dealer.
- You can also clean the print head from your computer.



### Related Information

- [Clean Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Clean the Print Head from Your Computer \(Windows\)](#)
- [Clean the Print Head from Your Computer \(Mac\)](#)

## Clean the Print Head from Your Computer (Windows)

To maintain good print quality, the machine automatically cleans the print head when needed. If there is a print quality problem, start the cleaning process manually.

1. Do one of the following:

- For Windows Server 2008

Click  (**Start**) > **Control Panel** > **Hardware and Sound** > **Printers**.

- For Windows 7 and Windows Server 2008 R2

Click  (**Start**) > **Devices and Printers**.

- For Windows 8

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

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 Server 2012 R2

Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**.

- For Windows 10 and Windows Server 2016

Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.

2. Right-click the **Brother XXX-XXXX** icon (where XXXX is your model name), and then select **Printing preferences**. If printer driver options appear, select your printer driver.

The printer driver dialog box appears.

3. Click the **Maintenance** tab.

4. Select one of the following options:

Option	Description
<b>Check Print Quality...</b>	Use to print the test page and check the print quality.
<b>Print Head Cleaning...</b>	Use to start the cleaning process manually. Select if a line or blank spaces appear in text or graphics on the test page.

5. Do one of the following:

- If you selected the **Check Print Quality...** option, click **Start**.

The machine prints the test page.

- If you selected the **Print Head Cleaning...** option, select the **Black only**, **Colour only**, or **All** option for the cleaning type, and then click **Next**.

6. Select the **Normal**, **Strong**, or **Strongest** option for the cleaning strength, and then click **Next**.

7. Click **Start**.

The machine starts cleaning.



### Related Information

- [Clean Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)

- 
- Clean the Print Head from Your Brother Machine
-

## Clean the Print Head from Your Computer (Mac)

To maintain good print quality, the machine automatically cleans the print head when needed. If there is a print quality problem, start the cleaning process manually.

1. Select **System Preferences** from the Apple menu.
2. Select **Printers & Scanners**, and then select the machine.
3. Click the **Options & Supplies** button.
4. Click the **Utility** tab, and then click the **Open Printer Utility** button.  
The Status Monitor screen appears.
5. Click the **Control** menu, and then select **Maintenance**.
6. Select one of the following options:

Option	Description
<b>Check Print Quality...</b>	Use to print the test page and check the print quality.
<b>Print Head Cleaning...</b>	Use to start the cleaning process manually. Select if a line or blank spaces appear in text or graphics on the test page.

7. Do one of the following:
  - If you selected the **Check Print Quality...** option, click **Start**.  
The machine prints the test page.
  - If you selected the **Print Head Cleaning...** option, select **Black only**, **Color only**, or **All** option for the cleaning type, and then click **Next**.
8. Select the **Normal**, **Strong**, or **Strongest** option for the cleaning strength, and then click **Next**.
9. Click **Start**.  
The machine starts cleaning.



### Related Information

- [Clean Your Brother Machine](#)

#### Related Topics:

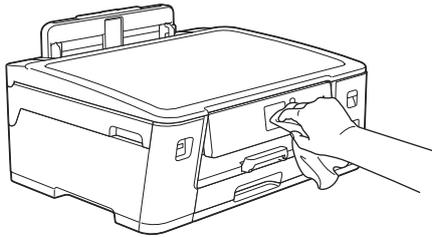
- [Paper Handling and Printing Problems](#)
- [Clean the Print Head from Your Brother Machine](#)

## Clean the Machine's LCD

### IMPORTANT

DO NOT use liquid cleaners (including ethanol).

1. Press and hold down  to turn off the machine. The LCD displays [Shutting Down] for a few seconds before the power goes off.
2. Clean the LCD with a dry, soft lint-free cloth.



### ✓ Related Information

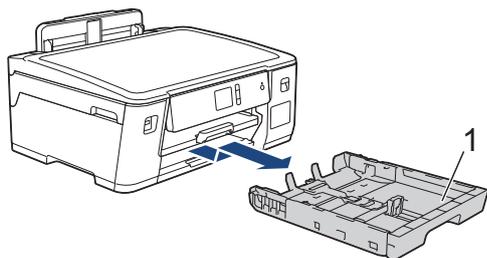
- [Clean Your Brother Machine](#)

## Clean the Outside of the Machine

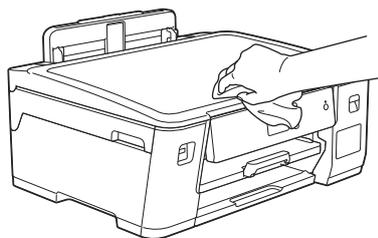
### IMPORTANT

- Cleaning with volatile liquids such as thinner or benzine will damage the outside surface of the machine.
- DO NOT use cleaning materials that contain ammonia.
- DO NOT use isopropyl alcohol to remove dirt from the control panel. It may crack the panel.

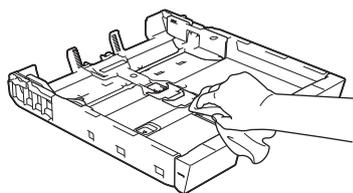
1. If the paper support flap is open, close it, and then close the paper support.
2. Pull the paper tray (1) completely out of the machine as shown by the arrow.



3. Wipe the outside of the machine with a dry, lint-free cloth to remove dust.



4. Remove anything that is stuck inside the paper tray. Wipe the inside and the outside of the paper tray with a dry, lint-free cloth to remove dust.



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

### ✓ Related Information

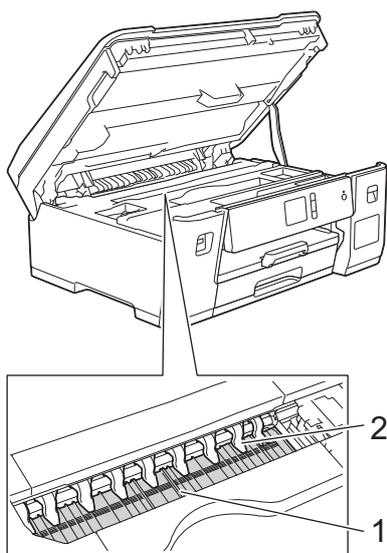
- [Clean Your Brother Machine](#)

## Clean the Machine's Printer Platen

### WARNING

 Be sure to unplug the machine from the electrical socket before cleaning the printer platen to avoid an electrical shock.

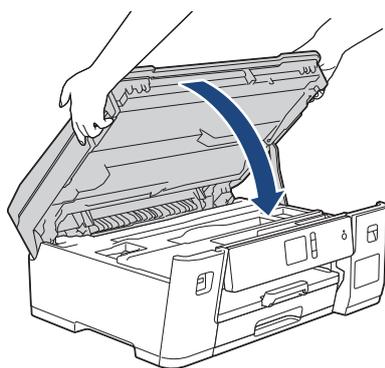
1. Using both hands, use the finger holds on each side of the machine to lift the top cover into the open position.
2. Clean the machine's printer platen (1) and the area around it, wiping off scattered ink with a dry, soft lint-free cloth.



### IMPORTANT

DO NOT bend or apply too much pressure on the nine tabs (2). They could be damaged.

3. Gently close the top cover using both hands.



4. Reconnect the power cord.

### Related Information

- [Clean Your Brother Machine](#)

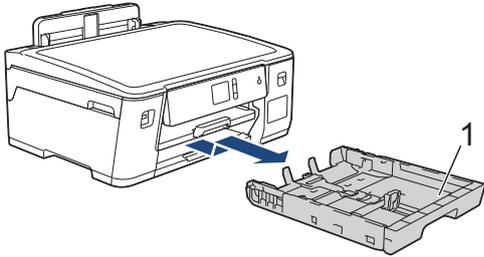
#### Related Topics:

- [Paper Handling and Printing Problems](#)

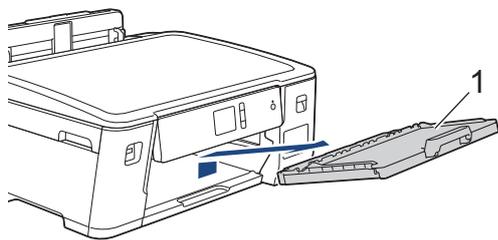
## Clean the Paper Feed Rollers

If the paper feed rollers are stained with ink or have a buildup of paper dust, it may cause paper feed problems.

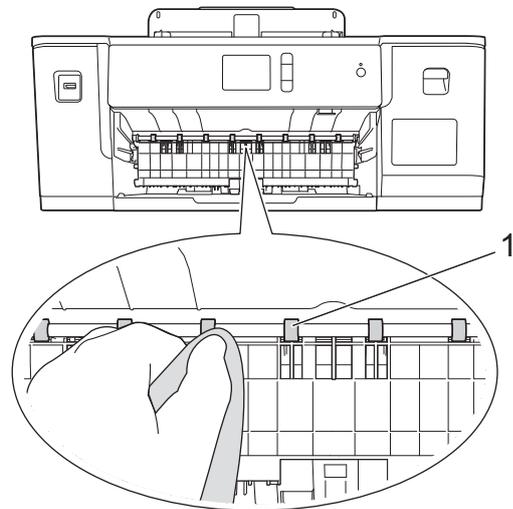
1. Unplug the machine from the electrical socket.
2. If the paper support flap is open, close it, and then close the paper support.
3. Pull the paper tray (1) completely out of the machine as shown by the arrow.



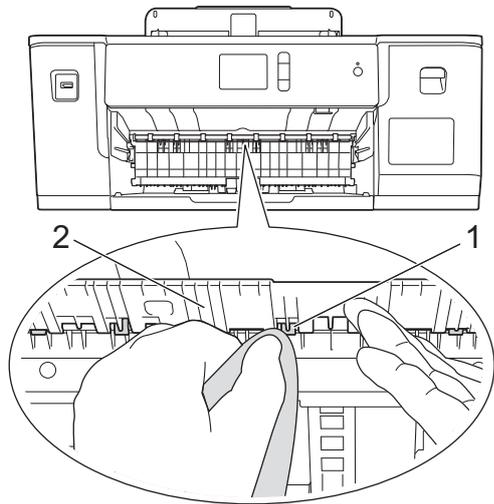
4. Lift the paper support (1), and then pull it at an angle completely out of the machine as shown by the arrow.



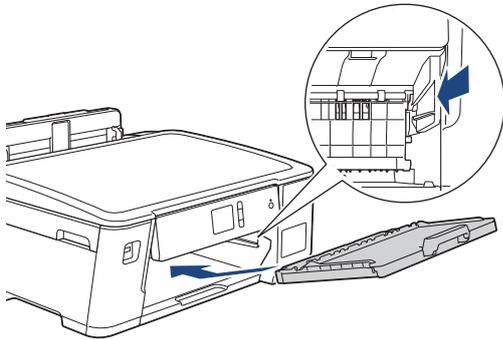
5. Clean the front side of the Paper Feed Rollers (1) with a soft lint-free cloth moistened with water, using a side-to-side motion. After cleaning, wipe the rollers with a dry, soft lint-free cloth to remove all moisture.



6. Lift the Jam Clear Flap (2), and then clean the back side of the Paper Feed Rollers (1) with a soft lint-free cloth moistened with water. After cleaning, wipe the rollers with a dry, soft lint-free cloth to remove all moisture.



7. Put the paper support firmly back in the machine. Make sure you fit the paper support into the channels.



8. Slowly push the paper tray completely into the machine.
9. Reconnect the power cord.



Do not use the machine again until the rollers are dry. Using the machine before the rollers are dry may cause paper feed problems.



### Related Information

- [Clean Your Brother Machine](#)

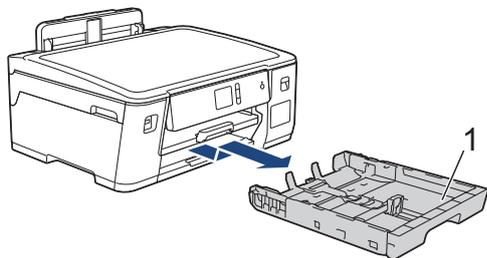
#### Related Topics:

- [Paper Handling and Printing Problems](#)

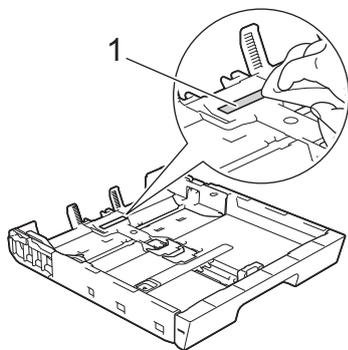
## Clean the Base Pad

Cleaning the Base Pad periodically may prevent the machine from feeding multiple sheets of paper when there are only a few sheets of paper left in the tray.

1. If the paper support flap is open, close it, and then close the paper support.
2. Pull the paper tray (1) completely out of the machine as shown by the arrow.



3. Clean the Base Pad (1) with a soft lint-free cloth moistened with water.  
After cleaning, wipe the pad with a dry, soft lint-free cloth to remove all moisture.



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

### ✓ Related Information

- [Clean Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)

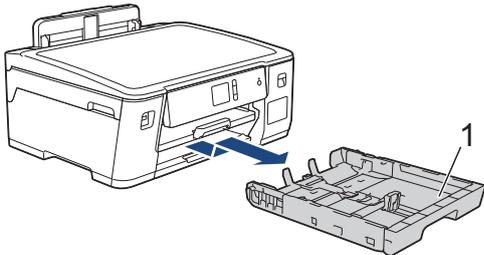
## Clean the Paper Pick-up Rollers

Cleaning the paper pick-up rollers periodically may prevent paper jams by ensuring that paper feeds correctly.

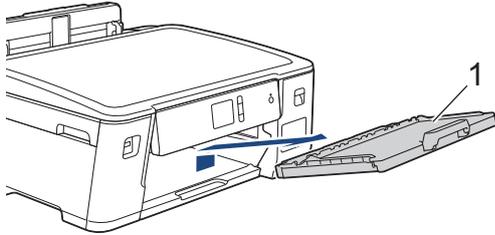


(For some countries) A Cleaning Kit for Paper Pick-up Rollers is supplied with your machine. Clean the paper pick-up rollers using the kit. For more information, see the instructions provided with the cleaning kit.

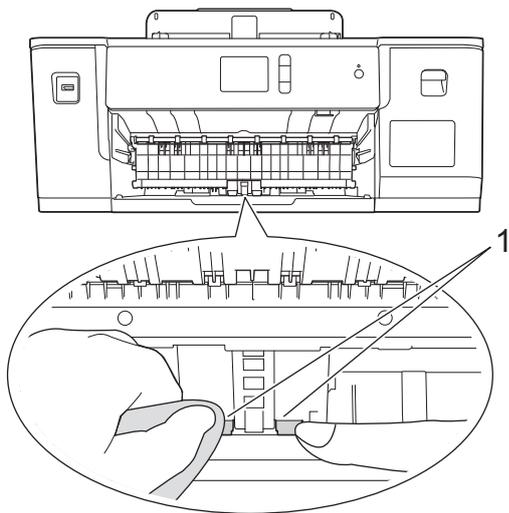
1. Unplug the machine from the electrical socket.
2. If the paper support flap is open, close it, and then close the paper support.
3. Pull the paper tray (1) completely out of the machine as shown by the arrow.



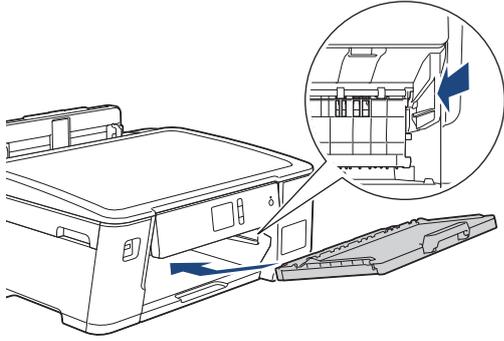
4. Lift the paper support (1), and then pull it at an angle completely out of the machine as shown by the arrow.



5. Clean the Paper Pick-up Rollers (1) with a soft lint-free cloth moistened with water. Slowly turn the rollers so that the whole surface is cleaned. After cleaning, wipe the rollers with a dry, soft lint-free cloth to remove all moisture.



6. Put the paper support firmly back in the machine. Make sure you fit the paper support into the channels.



7. Slowly push the paper tray completely into the machine.
8. Reconnect the power cord.



### Related Information

- [Clean Your Brother Machine](#)

#### Related Topics:

- [Error and Maintenance Messages](#)
  - [Paper Handling and Printing Problems](#)
-

## Check Your Brother Machine

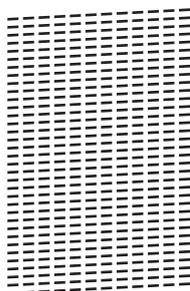
- [Check the Print Quality](#)
- [Check the Print Alignment from Your Brother Machine](#)
- [Check the Print Alignment from Your Computer \(Windows\)](#)
- [Check the Print Alignment from Your Computer \(Mac\)](#)
- [Monitor Machine Status from Your Computer \(Windows\)](#)
- [Monitor Machine Status from Your Computer \(Mac\)](#)

## Check the Print Quality

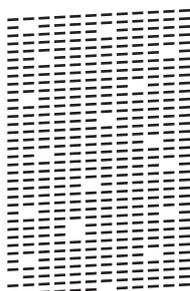
If faded or streaked colours and text appear or if text is missing on your printouts, the print head nozzles may be clogged. Print the Print Quality Check Sheet and look at the nozzle check pattern.

1. Press  [Settings] > [Maintenance] > [Improve Print Quality] > [Check Print Quality].
2. Press [Start].  
The machine prints the Print Quality Check Sheet.
3. Check the quality of the four colour blocks on the sheet.
4. The touchscreen asks about the print quality. Do one of the following:
  - If all lines are clear and visible, press [No], and then press  to finish the Print Quality check.
  - If lines are missing (see **Poor**, as follows), press [Yes].

### OK



### Poor



5. The touchscreen asks you to check the print quality of each colour. Press the number of the pattern (1–4) that most closely matches the printing result.
6. Do one of the following:
  - If print head cleaning is needed, press [Start] to start the cleaning procedure.
  - If print head cleaning is not needed, the Maintenance screen reappears on the touchscreen. Press .
7. After the cleaning procedure is finished, the touchscreen asks if you want to print the Print Quality Check Sheet again. Press [Yes], and then press [Start].  
The machine prints the Print Quality Check Sheet again. Check the quality of the four colour blocks on the sheet again.

If you clean the print head at least five times and the print has not improved, try cleaning the print head again up to three more times. If the print has not improved, contact Brother customer service or your local Brother dealer.

### IMPORTANT

DO NOT touch the print head. Touching the print head may cause permanent damage and may void the print head's warranty.



When a print head nozzle is clogged, the printed sample looks like this:



After the print head nozzle is cleaned, the lines are gone:



### Related Information

- [Check Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)
-

## Check the Print Alignment from Your Brother Machine

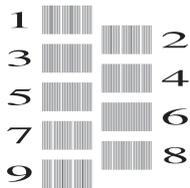
If your printed text becomes blurred or images become faded after transporting the machine, adjust the print alignment.

Before adjusting the print alignment, make a print quality check first by pressing  [Settings] > [Maintenance] > [Improve Print Quality] > [Check Print Quality].

1. Press  [Settings] > [Maintenance] > [Improve Print Quality] > [Alignment].
2. Press [Next].
3. Press [Yes] after a confirmation message if a print quality check has been completed appears on the LCD.
4. Select the paper size to print the Alignment Check Sheet on.
5. Press [Basic alignment] or [Advanced alignment].
6. Load specified size paper in the tray, and then press [Start].

The machine prints the Alignment Check Sheet.

(A)

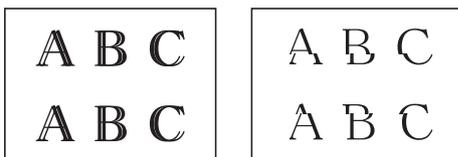


7. For the (A) pattern, press ▲ or ▼ to display the number of the test print with the fewest visible vertical stripes (1-9), and then press it (in the example above, row number 6 is the best choice). Press [OK].

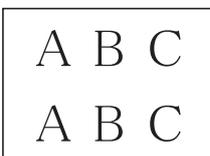
Repeat this step for the rest of the patterns.



When the print alignment is not adjusted correctly, text looks blurry or crooked, like this:



After the print alignment is adjusted correctly, text looks like this:



8. Press .

### Related Information

- [Check Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)

## Check the Print Alignment from Your Computer (Windows)

If your printed text becomes blurred or images become faded after transporting the machine, adjust the print alignment.

- Do one of the following:
  - For Windows Server 2008  
Click  (**Start**) > **Control Panel** > **Hardware and Sound** > **Printers**.
  - For Windows 7 and Windows Server 2008 R2  
Click  (**Start**) > **Devices and Printers**.
  - For Windows 8  
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  
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 Server 2012 R2  
Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**.
  - For Windows 10 and Windows Server 2016  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.
- Right-click the **Brother XXX-XXXX** icon (where XXXX is your model name), and then select **Printer properties**. If printer driver options appear, select your printer driver.  
The printer driver dialog box appears.
- Click the **General** tab, and then click the **Printing Preferences...** or **Preferences...** button.  
The printer driver dialog box appears.
- Click the **Advanced** tab.
- Click the **Other Print Options** button.
- Select the **Reduce Uneven Lines** option.
- Select one of the following options:

Option	Description
<b>A3, JIS B4, Ledger</b>	Adjust the print alignment for A3, JIS B4 (available only for some countries) and Ledger size paper.
<b>A4, Letter</b>	Adjust the print alignment for A4 and Letter size paper.
<b>Other Sizes</b>	Adjust the print alignment for other paper sizes.

- Click **OK** to return to the printer driver window.
- Click **OK**.

### Related Information

- [Check Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Change the Print Setting Options When Having Printing Problems](#)

## Check the Print Alignment from Your Computer (Mac)

If your printed text becomes blurred or images become faded after transporting the machine, adjust the print alignment.

1. From an application, such as Apple TextEdit, click the **File** menu, and then select **Print**.
2. Select **Brother XXX-XXXX** (where XXXX is your model name).
3. Click the application pop-up menu, and then select **Print Settings**.  
The **Print Settings** options appear.
4. Click the **Advanced** print settings list.
5. Click the **Reduce Uneven Lines** menu.
6. Select one of the following options:

Option	Description
<b>A3, JIS B4, Ledger</b>	Adjust the print alignment for A3, JIS B4 (available only for some countries) and Ledger size paper.
<b>A4, Letter</b>	Adjust the print alignment for A4 and Letter size paper.
<b>Other Sizes</b>	Adjust the print alignment for other paper sizes.

7. Change other printer settings, if needed.
8. Click **Print**.

### ✓ Related Information

- [Check Your Brother Machine](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Change the Print Setting Options When Having Printing Problems](#)

## Monitor Machine Status from Your Computer (Windows)

The Status Monitor utility is a configurable software tool for monitoring the status of one or more devices; it allows you to get immediate notification of errors.

- Do one of the following:

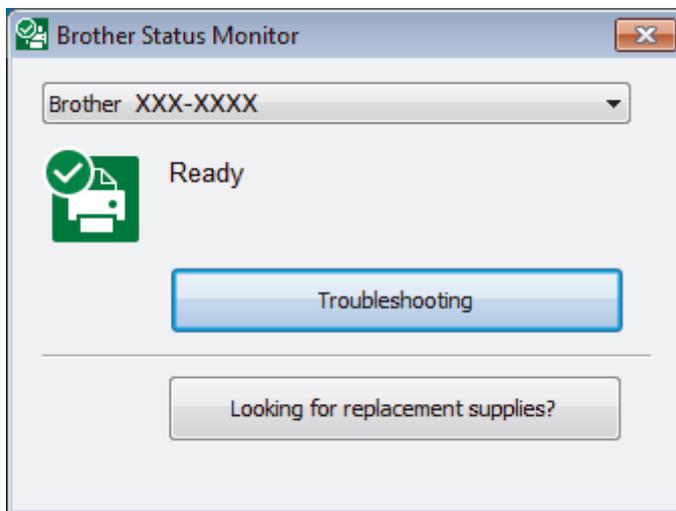
- Double-click the  icon in the task tray.
- Windows 7

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**.

- Windows 8 and Windows 10

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**.



### Troubleshooting

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

### Looking for replacement supplies?

Click the **Looking for replacement supplies?** button for more information on Brother original supplies.

## ✓ Related Information

- [Check Your Brother Machine](#)
  - [Status Monitor Indicators and What They Mean \(Windows\)](#)
  - [Turn Off the Show Status Monitor Feature \(Windows\)](#)
  - [Turn Off the Status Monitor \(Windows\)](#)

### Related Topics:

- [Cancel a Print Job \(Windows\)](#)

## Status Monitor Indicators and What They Mean (Windows)

When you start up your computer, the **Brother Status Monitor** icon appears on the task tray.

- A green icon indicates the normal stand-by condition.



- A yellow icon indicates a warning.



- A red icon indicates an error has occurred.



- A grey icon indicates the machine is offline.



### Related Information

- [Monitor Machine Status from Your Computer \(Windows\)](#)

## Turn Off the Show Status Monitor Feature (Windows)

The Show Status Monitor feature lets you know if there is a problem with a device that your computer is monitoring. The default setting is **Only when printing from this PC**. To turn it off, follow these steps:

1. Right-click the  (**Brother Status Monitor**) icon or window, select the **Status Monitor Settings** option, and then click **Options**.

The **Options** window appears.

2. Select the **Basic** tab, and then select **Off** for **Show Status Monitor**.
3. Click **OK**.



Even if the Show Status Monitor feature is turned off, you can check the machine's status at any time by displaying the Status Monitor.



### Related Information

- [Monitor Machine Status from Your Computer \(Windows\)](#)

## Turn Off the Status Monitor (Windows)

1. Right-click the  (**Brother Status Monitor**) icon or window, and then select **Exit**.
2. Click **OK**.

### Related Information

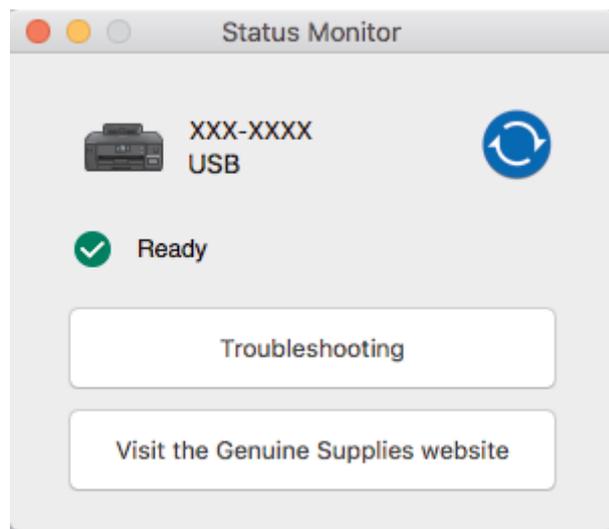
- [Monitor Machine Status from Your Computer \(Windows\)](#)
-

## Monitor Machine Status from Your Computer (Mac)

Brother's Status Monitor utility program is a configurable software tool for monitoring the status of a device and notifying you immediately in the event of an error. You can also use Brother's Status Monitor to access Web Based Management.

1. Select **System Preferences** from the Apple menu.
2. Select **Printers & Scanners**, and then select the machine.
3. Click the **Options & Supplies** button.
4. Click the **Utility** tab, and then click the **Open Printer Utility** button.

The Status Monitor screen appears.



### Troubleshooting

Click the **Troubleshooting** button to access the Brother Solutions Center, offering **FAQs & Troubleshooting** tips.

### Visit the Genuine Supplies website

Click the **Visit the Genuine Supplies website** button for more information about Brother original supplies.

### Updating the machine's status

To view the latest machine status while the **Status Monitor** window is open, click the  icon. To set the interval at which the software updates the machine status information, click the **Brother Status Monitor** menu, and then select **Preferences**.

### Web Based Management (Network Connection Only)

Access the Web Based Management system by clicking the machine icon on the **Status Monitor** screen. You can use a standard web browser to manage your machine using Hyper Text Transfer Protocol (HTTP).

## ✓ Related Information

- [Check Your Brother Machine](#)

### Related Topics:

- [Access Web Based Management](#)

## Correct the Paper Feed to Clear Vertical Lines

Adjust the paper feed to reduce vertical lines.

Before adjusting the paper feed, make a print quality check first by pressing  [Settings] > [Maintenance] > [Improve Print Quality] > [Check Print Quality].

1. Press  [Settings] > [Maintenance] > [Improve Print Quality] > [Correct Paper Feed].
2. Press [Next].
3. Press [Yes] after a confirmation message if a print quality check has been completed appears on the LCD.
4. Select the paper size to print the adjustment sheet on.
5. Load specified size paper in the tray, and then press [Start].  
The machine prints the adjustment sheet.
6. Follow the instructions on the LCD.  
You need to input information printed on the adjustment sheet manually.

### Related Information

- [Routine Maintenance](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)

## Change the Print Setting Options When Having Printing Problems

If your print result is poor quality, select these options depending on your purpose. When these settings are selected, the printing speed is slower.



These options are available only when performing operations from the machine. When printing from your computer, change the settings in the printer driver.

1. Press  [Settings] > [Maintenance] > [Print Setting Options].
2. Press one of the following options:

Option	Description
Reduce Smudging	Select this option according to your paper type and whether you are using 1-sided or 2-sided printing if you have problems with smudged printouts or paper jams.
Reduce Uneven Lines	Select this option according to your paper size if you have problems with uneven lines.
Slow Drying Paper	Select this option if you use a type of plain paper on which ink dries slowly.

3. Follow the LCD menus.
4. Press .



### Related Information

- [Routine Maintenance](#)

#### Related Topics:

- [Paper Handling and Printing Problems](#)
- [Prevent Smudged Printouts and Paper Jams \(Windows\)](#)
- [Prevent Smudged Printouts and Paper Jams \(Mac\)](#)
- [Check the Print Alignment from Your Computer \(Windows\)](#)
- [Check the Print Alignment from Your Computer \(Mac\)](#)
- [Print Settings \(Windows\)](#)
- [Print Options \(Mac\)](#)

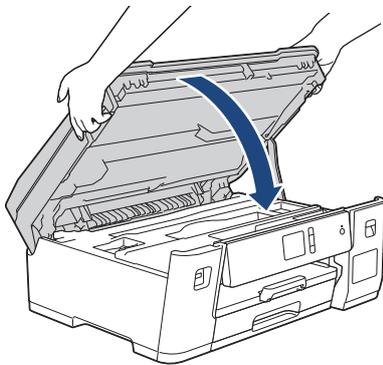
## Pack and Ship Your Brother Machine

- When you transport the machine, use the packing materials that came with your machine. Do not tip or turn the product upside down. If you do not pack the machine correctly, any damage that may occur in transit may not be covered by your warranty.
- The machine should be adequately insured with the carrier.

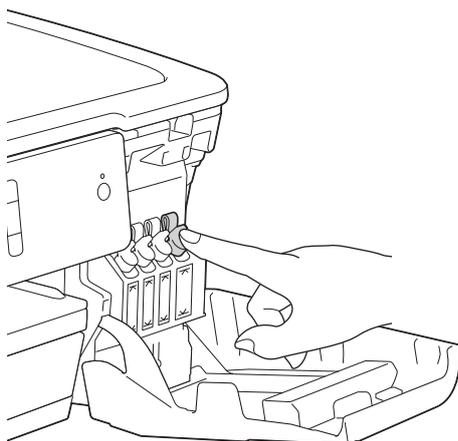
### IMPORTANT

It is important to allow the machine to “park” the print head after a print job. Listen carefully to the machine before unplugging it to make sure that all mechanical noises have stopped. Not allowing the machine to finish this parking process may lead to print problems and possible damage to the print head.

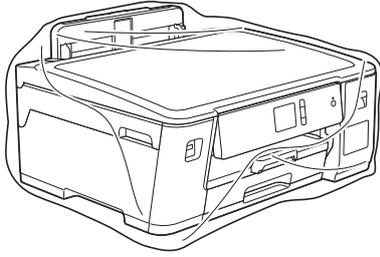
1. Unplug the machine from the electrical socket.
2. Using both hands, use the finger holds on each side of the machine to lift the top cover into the open position.
3. Unplug the interface cable from the machine, if it is connected.
4. Gently close the top cover using the finger holds on each side.



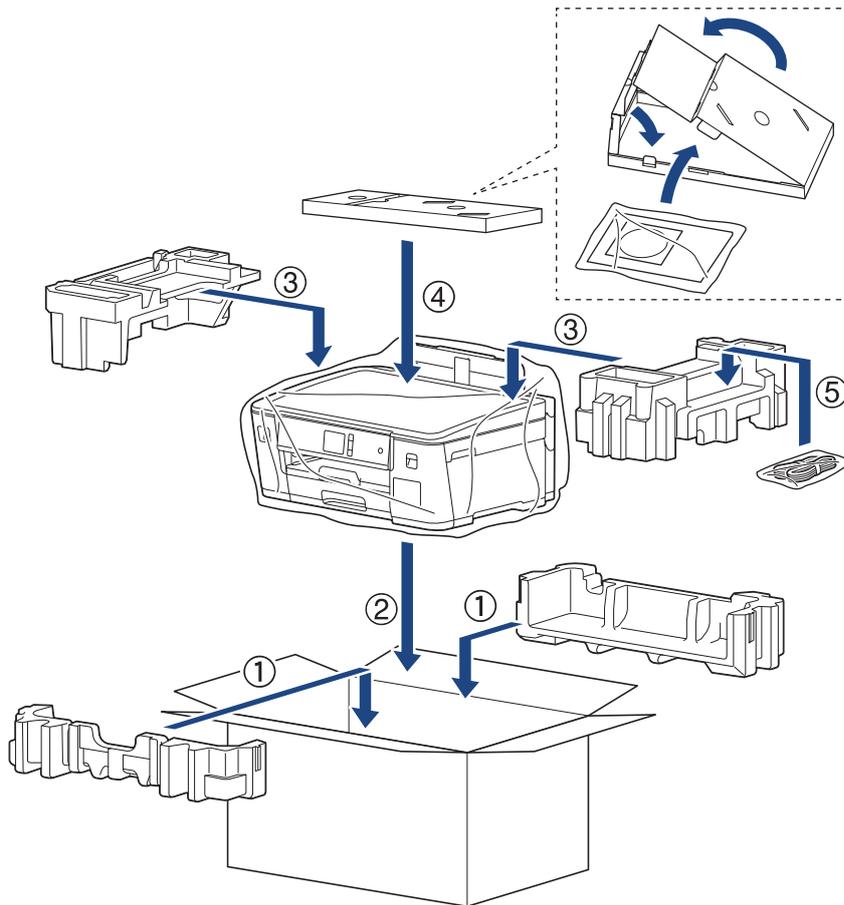
5. Open the ink tank cover.
6. Make sure the cap of the ink tank is installed correctly.  
Push down on the cap of the ink tank to install it tightly and then close the ink tank cover.



7. Wrap the machine in the bag.



8. Pack the machine in the original carton with the original packing material as shown below.  
Do not pack the used ink bottles in the carton.



9. Close the carton and tape it shut.

### ✓ Related Information

- [Routine Maintenance](#)

#### Related Topics:

- [Refill the Ink Tanks](#)

## Machine Settings

Customise settings and features, create shortcuts, and work with options displayed on the machine's LCD to make your Brother 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

- [In the Event of Power Failure \(Memory Storage\)](#)
- [General Settings](#)
- [Print Reports](#)
- [Settings and Features Tables](#)

## In the Event of Power Failure (Memory Storage)

- Your menu settings are stored permanently and will not be lost.
- Temporary settings will be lost.
- The date and time will be retained for approximately 24 hours.



### Related Information

- [Change Machine Settings from the Control Panel](#)
-

## General Settings

- [Adjust the Machine Volume](#)
- [Change for Daylight Saving Time Automatically](#)
- [Change for Daylight Saving Time Manually](#)
- [Set Sleep Mode Countdown](#)
- [Set the Machine to Power Off Automatically](#)
- [Set the Date and Time](#)
- [Set the Time Zone](#)
- [Adjust the LCD Backlight Brightness](#)
- [Change How Long the LCD Backlight Stays On](#)
- [Reduce Printing Noise](#)
- [Change the Language Displayed on the LCD](#)
- [Change the Keyboard Setting](#)

## Adjust the Machine Volume

1. Press  [Settings] > [All Settings] > [General Setup] > [Beep].
2. Press ▲ or ▼ to display the [Off], [Low], [Med], or [High] option, and then press the option you want.
3. Press .



### Related Information

- [General Settings](#)
-

## Change for Daylight Saving Time Automatically

You can program the machine to change automatically for Daylight Saving Time.

It will reset itself forward one hour in the spring, and backward one hour in the autumn. Make sure you have set the correct date and time in the [Date & Time] setting.

This feature is available only in some countries.

1. Press  [Settings].
2. Press  [Date & Time] > [Auto Daylight].
3. Press [On] or [Off].
4. Press .

### Related Information

- [General Settings](#)

## Change for Daylight Saving Time Manually

You can program the machine to change for Daylight Saving Time.

When selecting [Forward Hour] it will forward the time by an hour and backward one hour when selecting [Backward Hour]. Make sure you have set the correct date and time in the [Date & Time] setting.

This feature is available only in some countries.

1. Press  [Settings].
2. Press  [Date & Time] > [Daylight Save].
3. Press [Forward Hour] or [Backward Hour].
4. Press .



### Related Information

- [General Settings](#)

## Set Sleep Mode Countdown

The Sleep Mode (or Power Save Mode) setting can reduce power consumption. When the machine is in Sleep Mode, it acts as though 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 timer will restart if any operation is carried out on the machine, such as receiving a print job.
  - The factory setting is five minutes.
  - When the machine goes into Sleep Mode, the LCD backlight turns off.
1. Press  [Settings] > [All Settings] > [General Setup] > [Sleep Mode].
  2. Press ▲ or ▼ to display the [1Min], [2Mins], [3Mins], [5Mins], [10Mins], [30Mins], or [60Mins] option, and then press the option you want.
  3. Press .



### Related Information

- [General Settings](#)

#### Related Topics:

- [Set the Machine to Power Off Automatically](#)

## Set the Machine to Power Off Automatically

The Auto Power Off feature can save power consumption. Set the amount of time that the machine will be in Sleep Mode before it automatically powers off. When this feature is set to [Off], you must power off the machine manually.

To turn on the machine after the Auto Power Off feature has turned it Off, press .



The machine will not power off automatically when:

- The machine is connected to a wired network.
- The machine is connected to a wireless network.
- [WLAN Enable] is set to [On] or [WLAN] is selected in the [Network I/F] setting.

1. Press  [Settings] > [All Settings] > [General Setup] > [Auto Power Off].
2. Press ▲ or ▼ to display the [Off], [1hour], [2hours], [4hours], or [8hours] option, and then press the option you want.
3. Press .



### Related Information

- [General Settings](#)

#### Related Topics:

- [Set Sleep Mode Countdown](#)

## Set the Date and Time

If the machine's power has been off, the machine's date and time may not be current. Re-enter them.

1. Press  [Settings].
2. Press  [Date & Time].
3. Press [Date].
4. Enter the last two digits of the year on the touchscreen, and then press [OK].
5. Enter two digits for the month on the touchscreen, and then press [OK].
6. Enter two digits for the day on the touchscreen, and then press [OK].
7. Press [Clock Type].
8. Press [12h Clock] or [24h Clock].
9. Press [Time].
10. To enter the time, do one of the following:
  - If you selected [12h Clock], enter the time (in 12-hour format) using the touchscreen, and then press [AM] or [PM].  
Press [OK].
  - If you selected [24h Clock], enter the time (in 24-hour format) using the touchscreen.  
Press [OK].  
(For example, enter 19:45 for 7:45 PM.)
11. Press .

### Related Information

- [General Settings](#)

#### Related Topics:

- [Register Your Machine with Google Cloud Print Using Web Based Management](#)

## Set the Time Zone

Set the time zone for your location on the machine.

This feature is available only in some countries.

1. Press  [Settings].
2. Press  [Date & Time] > [Time Zone].
3. Enter your time zone.
4. Press [OK].
5. 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 [Light], [Med], or [Dark] option.
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 ▲ or ▼ to display the [10Secs], [30Secs], [1Min], [2Mins], [3Mins], or [5Mins] option, and then press the option you want.
3. Press .



### Related Information

- [General Settings](#)

## 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].



- When the Quiet Mode setting is turned on,  appears on the Home screen.

1. Press  [Settings] > [Quiet Mode].
2. Press [On] or [Off].
3. Press .



### Related Information

- [General Settings](#)

#### Related Topics:

- [Touchscreen LCD Overview](#)
- [Paper Handling and Printing Problems](#)

## Change the Language Displayed 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](#)
-

## Change the Keyboard Setting

You can choose the type of keyboard for the LCD.

1. Press  [Settings] > [All Settings] > [General Setup] > [Keyboard Settings].
2. Press [QWERTY] or [ABC].
3. Press .



### Related Information

- [General Settings](#)

## Print Reports

- [Reports](#)
- [Print a Report](#)

## Reports

The following reports are available:

### User Settings

The User Settings report prints a list of your current settings.

### Network Configuration (network models)

The Network Configuration report prints a list of your current network settings.

### WLAN Report (wireless models)

The WLAN Report prints the wireless LAN connectivity diagnosis.



### Related Information

- [Print Reports](#)

## Print a Report

1. Press  [Settings] > [All Settings] > [Print Reports].
2. Press ▲ or ▼ to display the report options, and then press the option you want.
3. Press [Yes].
4. Press .



### Related Information

- [Print Reports](#)
-

## Settings and Features Tables

- [Settings Tables \(2.7"\(67.5 mm\) Touchscreen models\)](#)
- [Features Tables \(2.7"\(67.5 mm\) Touchscreen models\)](#)

## Settings Tables (2.7"(67.5 mm) Touchscreen models)

These tables will help you understand your machine's menu selections and options.

- >> [Settings]
- >> [General Setup]
- >> [Network]
- >> [Print Reports]
- >> [Machine Info.]
- >> [Initial Setup]

### [Settings]



### [Settings]

Level 1	Level 2	Level 3	Descriptions
 (Date & Time)	<b>Date</b>	-	Set the date and time on your machine.
	<b>Time</b>	-	
	<b>Clock Type</b>	-	Select the time format (12-hour or 24-hour).
	<b>Auto Daylight</b> (Available only for some countries.)	-	Set the machine to change automatically for Daylight Saving Time.
	<b>Daylight Save</b> (Available only for some countries.)	-	Change for Daylight Saving Time manually.
	<b>Time Zone</b> (Available only for some countries.)	-	Set your time zone.
<b>Maintenance</b>	<b>Improve Print Quality</b>	-	Check and correct the print quality, alignment and paper feeding according to the LCD instructions.
	<b>Print Head Cleaning</b>	-	Clean the print head according to the LCD instructions.
	<b>Remove Paper Scraps</b>	-	Remove a piece of paper in the machine according to the LCD instructions.
	<b>Clean Paper Pick-up Roller</b> (Available only for some countries.)	-	Clean the rollers according to the LCD instructions.
	<b>Ink Low Notice</b>	-	Set the machine to display the ink low messages.
	<b>Ink Bottle Model</b>	-	Check the ink bottle numbers.
	<b>Print Setting Options</b>	<b>Reduce Smudging</b>	
<b>Reduce Uneven Lines</b>			Reduce uneven lines on the paper during printing.
<b>Slow Drying Paper</b>			Use this setting when printing with a type of plain paper on which the ink dries very slowly.
<b>Wi-Fi</b>	<b>TCP/IP</b>	-	Set TCP/IP protocol.
	<b>Setup Wizard</b>	-	Configure your wireless network settings manually.
	<b>WLAN Assistant</b>	-	Configure your wireless network settings using the Brother installation disc.

Level 1	Level 2	Level 3	Descriptions
Wi-Fi	WPS	-	Configure your wireless network settings using the one-button push method.
	WPS w/ PIN Code	-	Configure your wireless network settings using WPS with a PIN.
	WLAN Status	-	View the current wireless network status.
	MAC Address	-	View the machine's MAC address.
Quiet Mode	-	-	Decrease printing noise.
Tray Setting	Tray #1	Paper Type	Set the type of paper in paper tray #1.
		Paper Size	Set the size of paper in paper tray #1.
	MP Tray	Paper Type	Set the type of paper in the MP tray.
		Paper Size	Set the size of paper in the MP tray.
Beep	-	-	Adjust the beeper volume.
All Settings	-	-	Configure the detailed settings.

### [General Setup]



[Settings] > [All Settings] > [General Setup]

Level 1	Level 2	Level 3	Descriptions	
Maintenance	Improve Print Quality	-	Check and correct the print quality, alignment and paper feeding according to the LCD instructions.	
	Print Head Cleaning	-	Clean the print head according to the LCD instructions.	
	Remove Paper Scraps	-	Remove a piece of paper in the machine according to the LCD instructions.	
	Clean Paper Pick-up Roller (Available only for some countries.)	-	Clean the rollers according to the LCD instructions.	
	Ink Low Notice	-	Set the machine to display the ink low messages.	
	Ink Bottle Model	-	Check the ink bottle numbers.	
	Print Setting Options	Reduce Smudging	Reduce Smudging	Reduce smudging on the paper or paper jams during printing.
		Reduce Uneven Lines	Reduce Uneven Lines	Reduce uneven lines on the paper during printing.
Slow Drying Paper		Slow Drying Paper	Use this setting when printing with a type of plain paper on which the ink dries very slowly.	
Tray Setting	Tray #1	Paper Type	Set the type of paper in paper tray #1.	
		Paper Size	Set the size of paper in paper tray #1.	
	MP Tray	Paper Type	Set the type of paper in the MP tray.	
		Paper Size	Set the size of paper in the MP tray.	
	Tray Setting: Print	Tray Priority	Change the tray priority for printing from your computer.	
	Tray Setting: JPEG Print (Media)	Tray Use	Select the tray to be used for printing photos from a USB flash drive.	
		Tray Priority	Change the tray priority for printing photos from a USB flash drive.	

Level 1	Level 2	Level 3	Descriptions
Tray Setting	Check Paper	-	Check the paper type and paper size when you pull the tray out of the machine.
Quiet Mode	-	-	Decrease printing noise.
Beep	-	-	Adjust the beeper volume.
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.
Keyboard Settings	-	-	Select the type of keyboard for the LCD.
Sleep Mode	-	-	Select how long the machine must be idle before it goes into Sleep Mode.
Auto Power Off	-	-	Select how long the machine must wait before it automatically turns itself off after entering Sleep Mode.  When set to Off, the machine will not power off automatically.

## [Network]



[Settings] > [All Settings] > [Network]

Level 1	Level 2	Level 3	Level 4	Descriptions
Wired LAN	TCP/IP	BOOT Method	-	Select the Boot 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	-	Specify the IP address of the primary or secondary WINS server.
		DNS Server	-	Specify the IP address of the primary or secondary DNS server.
		APIPA	-	Set the machine to allocate the IP address from the link-local address range automatically.
	IPv6	-	Turn the IPv6 protocol on or off. For more detailed information, go to your model's <b>FAQs &amp; Troubleshooting</b> page on the Brother support website at <a href="http://support.brother.com">support.brother.com</a> .	
	Ethernet	-	-	Select the Ethernet link mode.
	Wired Status	-	-	View the current wired status.
	MAC Address	-	-	View the machine's MAC address.
WLAN	TCP/IP	BOOT Method	-	Select the Boot method that best suits your needs.
		IP Address	-	Enter the IP address.
		Subnet Mask	-	Enter the Subnet mask.

Level 1	Level 2	Level 3	Level 4	Descriptions
WLAN	TCP/IP	Gateway	-	Enter the Gateway address.
		Node Name	-	Enter the Node name.
		WINS Configuration	-	Select the WINS configuration mode.
		WINS Server	-	Specify the IP address of the primary or secondary WINS server.
		DNS Server	-	Specify the IP address of the primary or secondary DNS server.
		APIPA	-	Set the machine to allocate the IP address from the link-local address range automatically.
		IPv6	-	Turn the IPv6 protocol on or off. For more detailed information, go to your model's <b>FAQs &amp; Troubleshooting</b> page on the Brother support website at <a href="http://support.brother.com">support.brother.com</a> .
	Setup Wizard	-	-	Configure your wireless network settings manually.
	WLAN Assistant	-	-	Configure your wireless network settings using the Brother installation disc.
	WPS	-	-	Configure your wireless network settings using the one-button push method.
	WPS w/ PIN Code	-	-	Configure your wireless network settings using WPS with a PIN.
	WLAN Status	Status	-	View the current wireless network status.
		Signal	-	View the current wireless network signal strength.
		SSID	-	View the current SSID.
		Comm. Mode	-	View the current Communication mode.
	MAC Address	-	-	View the machine's MAC address.
Wi-Fi Direct	Push Button	-	-	Configure your Wi-Fi Direct network settings using the one-button push method.
	PIN Code	-	-	Configure your Wi-Fi Direct network settings using WPS with a PIN code.
	Manual	-	-	Configure your Wi-Fi Direct network settings manually.
	Group Owner	-	-	Set your machine as the Group Owner.
	Device Information	Device Name	-	View your machine's device name.
		SSID	-	View the Group Owner's SSID. When the machine is not connected, the LCD displays Not Connected.
		IP Address	-	View your machine's current IP Address.
	Status Information	Status	-	View the current Wi-Fi Direct network status.
		Signal	-	View the current Wi-Fi Direct network signal strength. When your machine acts as Group Owner, the LCD always indicates a strong signal.
I/F Enable	-	-	Turn the Wi-Fi Direct connection on or off.	

Level 1	Level 2	Level 3	Level 4	Descriptions
Message from Brother	Message from Brother	-	-	Display messages and notifications from Brother.
	Status	-	-	
Web Connect Settings	Proxy Settings	Proxy Connection	-	Change the Web connection settings.
		Address	-	
		Port	-	
		User Name	-	
		Password	-	
Network I/F	-	-	-	Select the network connection type.
IPsec	-	-	-	IPsec is an optional security feature of the IP protocol that provides authentication and encryption services. We recommend contacting your network administrator before changing this setting.
Network Reset	-	-	-	Restore all network settings back to the factory settings.

### [Print Reports]



[Settings] > [All Settings] > [Print Reports]

Level 1	Descriptions
User Settings	Print a list of your settings.
Network Configuration	Print a list of your Network settings.
WLAN Report	Print the wireless LAN connection results.

### [Machine Info.]



[Settings] > [All Settings] > [Machine Info.]

Level 1	Level 2	Descriptions
Serial No.	-	Check your machine's serial number.
Firmware Version	Main 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	-	Display the printed pages.

### [Initial Setup]



[Settings] > [All Settings] > [Initial Setup]

Level 1	Level 2	Descriptions
Date & Time	Date	Set the date and time on your machine.
	Time	
	Clock Type	Select the time format (12-hour or 24-hour).
	Auto Daylight	Set the machine to change automatically for Daylight Saving Time.

Level 1	Level 2	Descriptions
<b>Date &amp; Time</b>	(Available only for some countries.)	
	<b>Daylight Save</b> (Available only for some countries.)	Change for Daylight Saving Time manually.
	<b>Time Zone</b> (Available only for some countries.)	Set your time zone.
<b>Reset</b>	<b>Machine Reset</b>	Restore all the machine's settings that you have changed, such as Date and Time.
	<b>Network</b>	Restore all network settings back to the factory settings.
	<b>All Settings</b>	Restore all the machine's settings back to the factory settings.
<b>Local Language</b> (Available only for some countries.)	-	Change your LCD language.



## Related Information

- [Settings and Features Tables](#)

## Features Tables (2.7"(67.5 mm) Touchscreen models)

These tables will help you understand your machine's feature selections and temporary options.

>>  [Functions]

>>  [Maintenance]

>>  Wi-Fi Setup

>> When you have put a USB Flash drive in the USB slot

### [Functions]

Level 1	Level 2	Level 3	Level 4	Level 5	Descriptions
Web	-	-	-	-	Connect the Brother machine to an Internet service.
USB	JPEG Print	Select Files	OK	Print Settings	Adjust your photos with the options.
			Print All	-	Print all photos in your USB flash drive.
		Index Print	Print Index Sheet	Print Settings	Print a thumbnail page.
			Print Photos	Print Settings	Print photos by choosing the index numbers.
Download Software	-	-	-	-	Displays information about downloading and installing software for mobile devices and computers.

### [Maintenance]

Level 1	Level 2	Descriptions
Improve Print Quality	-	Check and correct the print quality, alignment and paper feeding according to the LCD instructions.
Print Head Cleaning	-	Clean the print head according to the LCD instructions.
Remove Paper Scraps	-	Remove a piece of paper in the machine according to the LCD instructions.
Clean Paper Pick-up Roller (Available only for some countries.)	-	Clean the rollers according to the LCD instructions.
Ink Low Notice	-	Set the machine to display the ink low messages.
Ink Bottle Model	-	Check the ink bottle numbers.
Print Setting Options	Reduce Smudging	Reduce smudging on the paper or paper jams during printing.
	Reduce Uneven Lines	Reduce uneven lines on the paper during printing.
	Slow Drying Paper	Use this setting when printing with a type of plain paper on which the ink dries very slowly.

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## WiFi Wi-Fi Setup

Level 1	Descriptions
Setup Wizard	Configure your wireless network settings manually.
WLAN Assistant	Configure your wireless network settings using the Brother installation disc.
WPS	Configure your wireless network settings using the one-button push method.

### When you have put a USB Flash drive in the USB slot

Level 1	Descriptions
JPEG Print	Select photo menu.



### Related Information

- [Settings and Features Tables](#)
-

## Change Machine Settings from Your Computer

- [Change Machine Settings Using Web Based Management](#)
- [Where Can I Find My Brother Machine's Network Settings?](#)
- [Network Management Software and Utilities](#)

## 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). Type your machine's IP address into your web browser to access and change your print server settings.



- We recommend Microsoft Internet Explorer 11/Microsoft Edge for Windows and Safari 10/11 for Mac. Make sure that JavaScript and Cookies are always enabled in whichever browser you use.
- You must use the TCP/IP protocol on your network and have a valid IP address programmed into the print server and your computer.

The screenshot shows the Brother web-based management interface. At the top, there is a header with the IP address 'XXX-XXXX', a 'Logout' button, and the Brother logo. Below the header is a navigation menu with tabs for 'General', 'Print', 'Administrator', and 'Network'. The 'Status' section is selected, showing a sidebar with various settings like 'Auto Refresh Interval', 'Maintenance Information', 'Find Device', etc. The main content area displays the 'Status' information: 'Device Status' is 'Ready', 'Automatic Refresh' is set to 'Off', 'Web Language' is 'Auto', and 'Device Location' has fields for 'Contact' and 'Location'.

- 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 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 detailed information, see *Related Information*.
- The default login password to manage machine settings is **initpass**. We recommend you change it 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. If the machine prompts you for a password, type it, and then click .

You can now change the print server settings.

If you change the protocol settings, you must restart the machine after clicking **Submit** to activate the configuration.

Every time you access Web Based Management, type the password in the **Login** field, and then click . After configuring the settings, log out by clicking .



### Related Information

- [Change Machine Settings Using Web Based Management](#)

#### Related Topics:

- [Print the Network Configuration Report](#)
- [Monitor Machine Status from Your Computer \(Mac\)](#)
- [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

We recommend changing the default login password to prevent unauthorised access to 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



- 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.

- For Mac, access Web Based Management by clicking the machine's icon on the **Status Monitor** screen.

3. Do one of the following:

- If you have previously set your own password, type it, and then click .
- If you have not previously set your own password, type **initpass**, and then click .

4. Click the **Administrator** tab.
5. Type the password you want to use in the **Enter New Password** field (8 to 32 characters).
6. Retype the password in the **Confirm New Password** field.
7. Click **Submit**.



### Related Information

- [Change Machine Settings Using Web Based Management](#)

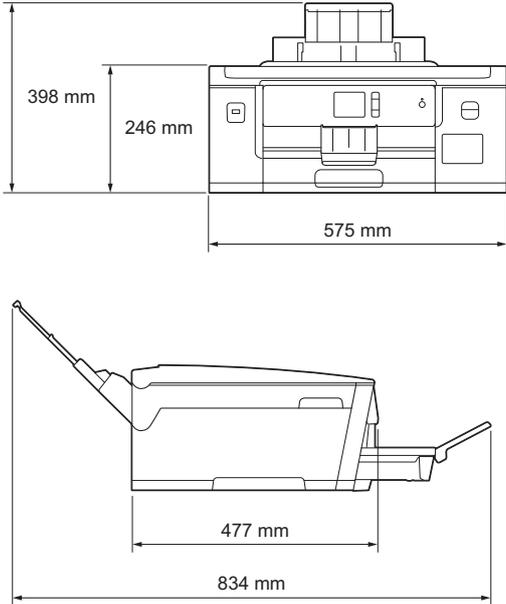
## Appendix

- [Specifications](#)
- [Enter Text on Your Brother Machine](#)
- [Brother Numbers](#)

## Specifications

- >> General Specifications
- >> Print Media Specifications
- >> USB Flash Drive Specifications
- >> Printer Specifications
- >> Interface Specifications
- >> Network Specifications
- >> Computer Requirements Specifications

### General Specifications

<b>Printer Type</b>	Inkjet	
<b>Print Head</b>	<b>Mono</b>	Piezo with 420 nozzles x 1
	<b>Colour</b>	Piezo with 420 nozzles x 3
<b>Memory Capacity</b>	<ul style="list-style-type: none"> <li>• 128 MB</li> </ul>	
<b>LCD (liquid crystal display) <sup>1</sup></b>	<ul style="list-style-type: none"> <li>• 2.7 in. (67.5 mm) TFT Colour Touchscreen LCD</li> </ul>	
<b>Power Source</b>	AC 100 to 120 V 50/60 Hz (Taiwan) AC 220 to 240 V 50/60 Hz (Australia and other countries)	
<b>Power Consumption <sup>2</sup></b>	<ul style="list-style-type: none"> <li>• HL-T4000DW (Australia and other countries)                             <ul style="list-style-type: none"> <li><b>Printing <sup>3</sup></b>: Approx. 20 W</li> <li><b>Ready <sup>4</sup></b>: Approx. 5.0 W</li> <li><b>Sleep <sup>4</sup></b>: Approx. 1.2 W</li> <li><b>Power Off <sup>4 5</sup></b>: Approx. 0.04 W</li> </ul> </li> <li>• HL-T4000DW (Taiwan)                             <ul style="list-style-type: none"> <li><b>Printing <sup>3</sup></b>: Approx. 19 W</li> <li><b>Ready <sup>4</sup></b>: Approx. 4.5 W</li> <li><b>Sleep <sup>4</sup></b>: Approx. 1.2 W</li> <li><b>Power Off <sup>4 5</sup></b>: Approx. 0.04 W</li> </ul> </li> </ul>	
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• HL-T4000DW</li> </ul> 	
<b>Weights</b>	<ul style="list-style-type: none"> <li>• HL-T4000DW (Australia and other countries)                             <ul style="list-style-type: none"> <li>16.1 kg</li> </ul> </li> </ul>	

			<ul style="list-style-type: none"> <li>HL-T4000DW (Taiwan) 16.0 kg</li> </ul>
<b>Noise Level</b>	<b>Sound Pressure</b>	<b>Operating</b>	50 dB (A) (Approx.) <sup>6</sup>
<b>Temperature</b>	<b>Operating</b>		10 to 35 °C
	<b>Best Print Quality</b>		20 to 33 °C
<b>Humidity</b>	<b>Operating</b>		20 to 80% (without condensation)
	<b>Best Print Quality</b>		20 to 80% (without condensation)

1 Measured diagonally

2 Measured when the machine is connected to the USB interface. Power consumption varies slightly depending on the usage environment or part wear.

3 When single-sided printing, resolution: standard / document: ISO/IEC 24712 printed pattern.

4 Measured according to IEC 62301 Edition 2.0.

5 Even when the machine is turned off, it will automatically turn itself on periodically for print head maintenance, and then turn itself off.

6 Noise depends on printing conditions.

## Print Media Specifications

<b>Paper Input</b>	<b>Paper Tray #1</b>	<b>Paper Type</b> <sup>1</sup>	Plain Paper, Inkjet Paper (coated paper), Glossy Paper, Recycled Paper
		<b>Paper Size</b> <sup>2</sup>	(Landscape) A4, Letter, Executive, B5 (JIS) (Portrait) A3, Ledger, B4 (JIS), Legal, Mexico Legal, India Legal, Folio, A5, B6 (JIS), A6, Envelopes (C5, Com-10, DL, Monarch), Photo (10 x 15 cm), Photo L (9 x 13 cm), Photo 2L (13 x 18 cm), Index card (13 x 20 cm)
		<b>Maximum Paper Capacity</b>	Up to 250 sheets of 80 gsm plain paper
	<b>Multi-purpose tray (MP tray)</b> <sup>3</sup>	<b>Paper Type</b> <sup>1</sup>	Plain Paper, Inkjet Paper (coated paper), Glossy Paper, Recycled Paper
		<b>Paper Size</b> <sup>2</sup>	(Landscape) A4, Letter, Executive, B5 (JIS) (Portrait) A3, Ledger, B4 (JIS), Legal, Mexico Legal, India Legal, Folio, A5, B6 (JIS), A6, Envelopes (C5, Com-10, DL, Monarch), Photo (10 x 15 cm), Photo L (9 x 13 cm), Photo 2L (13 x 18 cm), Index card (13 x 20 cm)
		<b>Maximum Paper Capacity</b>	Up to 100 sheets of 80 gsm Plain Paper
<b>Paper Output</b> <sup>1</sup>		<ul style="list-style-type: none"> <li>Up to A4/Letter size paper Up to 100 sheets of 80 gsm Plain Paper (face up print delivery to the output paper tray)</li> <li>Over A4/Letter size paper Up to 50 sheets of 80 gsm Plain Paper (face up print delivery to the output paper tray)</li> </ul>	

1 For glossy paper, remove printed pages from the output paper tray immediately after they exit the machine to avoid smudging.

2 B6 (JIS), B5 (JIS) and B4 (JIS) size paper are supported only in some countries.

3 We recommend using the MP tray for glossy paper.

## USB Flash Drive Specifications

<b>Compatible Media</b>	USB Flash drive <sup>1</sup>
-------------------------	------------------------------

<b>JPEG Print</b>	<b>Resolution</b>	Up to 1200 x 4800 dpi
	<b>Paper Type</b>	Plain Paper, Inkjet Paper (coated paper), Glossy Paper, Recycled Paper
	<b>Paper Size</b>	A4, Letter, A3, Ledger, Photo (10 x 15 cm), Photo 2L (13 x 18 cm)
	<b>File Format</b>	JPEG (Progressive JPEG format is not supported)

<sup>1</sup> USB Flash drive is not included. Full-Speed USB 2.0. USB Mass Storage standard up to 256 GB. Supported formats: FAT12/FAT16/FAT32/exFAT

## Printer Specifications

<b>Resolution</b>	Up to 1200 × 4800 dpi	
<b>Printing Width</b> <sup>1</sup>	291 mm [297 mm (borderless)] <sup>2</sup>	
<b>Borderless</b>	A4, Letter, A3, Ledger, A6, Photo (10 x 15 cm), Photo L (9 x 13 cm), Photo 2L (13 x 18 cm), Index card (13 x 20 cm)	
<b>Automatic 2-sided</b>	<b>Paper Type</b>	Plain Paper, Recycled Paper
	<b>Paper Size</b> <sup>3</sup>	A3, Ledger, B4 (JIS), Legal, Mexico Legal, India Legal, Folio, A4, A5, Letter, Executive, B5 (JIS), B6 (JIS)
<b>Print Speed</b>	For detailed specifications, visit <a href="http://www.brother.com">www.brother.com</a> .	

<sup>1</sup> When printing on A3 size paper.

<sup>2</sup> When the Borderless feature is set to On.

<sup>3</sup> B6 (JIS), B5 (JIS) and B4 (JIS) size paper are supported only in some countries.

## Interface Specifications

<b>USB</b> <sup>1 2</sup>	Use a USB 2.0 interface cable that is no longer than 5 m.
<b>LAN</b>	Use an Ethernet UTP cable category 5 or greater.
<b>Wireless LAN</b>	IEEE 802.11b/g/n (Infrastructure) IEEE 802.11g/n (Wi-Fi Direct)

<sup>1</sup> 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.

<sup>2</sup> Third party USB ports are not supported.

## Network Specifications



You can connect your machine to a network for Network Printing.

Brother **BRAdmin Light** (Windows only) is available as a download from Brother Solutions Center. Go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com) and download the software.

(Windows) If you require more advanced machine management, use the latest version of Brother **BRAdmin Professional**. Go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com) and download the software.

<b>Network Security (Wired)</b>		<ul style="list-style-type: none"> <li>SMTP-AUTH, SSL/TLS (IPPS, HTTPS, SMTP), SNMP v3, 802.1x (EAP-MD5, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, Ipsec</li> </ul>
<b>Network Security (Wireless)</b>		<ul style="list-style-type: none"> <li>SMTP-AUTH, SSL/TLS (IPPS, HTTPS, SMTP), SNMP v3, 802.1x (LEAP, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, Ipsec</li> </ul>
<b>Wireless Network Security</b>		WEP 64/128 bit, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) <sup>1</sup>
<b>Wireless Setup Support Utility</b>	<b>WPS</b>	Yes

<sup>1</sup> Wi-Fi Direct supports WPA2-PSK (AES) only.

## Computer Requirements Specifications

### Supported Operating Systems And Software Functions

Computer Platform & Operating System Version		PC Interface			Processor	Hard Disk Space to Install
		USB <sup>1</sup>	10/100 Base-TX (Ethernet)	Wireless 802.11b/g/n		
Windows Operating System	Windows 7 SP1 Windows 8 Windows 8.1	Printing			32 bit (x86) or 64 bit (x64) processor	80 MB
	Windows 10 Home Windows 10 Pro Windows 10 Education Windows 10 Enterprise					
	Windows Server 2008	Printing			64 bit (x64) processor	
	Windows Server 2008 R2					
	Windows Server 2012					
	Windows Server 2012 R2 Windows Server 2016					
Mac Operating System	macOS v10.11.6 macOS v10.12.x macOS v10.13.x	Printing			Intel® Processor	80 MB

<sup>1</sup> Third party USB ports are not supported.

For the latest driver updates, go to your model's **Downloads** page on the Brother Solutions Center at [support.brother.com](http://support.brother.com) and download **Full Driver & Software Package**.

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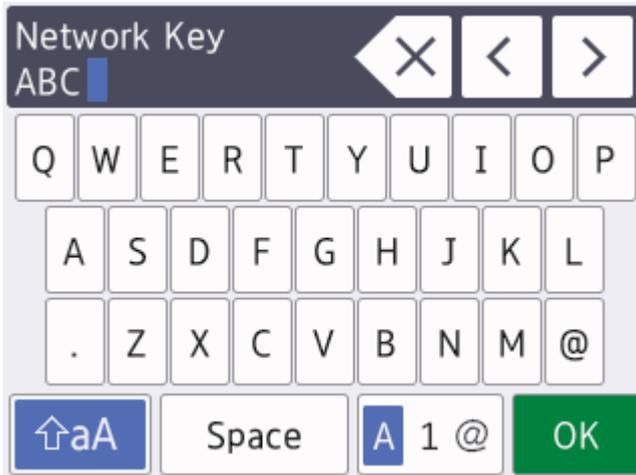
#### Related Information

- [Appendix](#)

## Enter Text on Your Brother Machine

- The characters that are available may differ depending on your country.
- The keyboard layout may differ depending on the function you are setting.

When you need to enter text on your Brother machine, a keyboard will appear on the touchscreen.



- 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]. Or, you can press ▶ to move the cursor.

### Making corrections

- If you entered an incorrect character and want to change it, press ◀ or ▶ to highlight the incorrect character. Press , and then 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

- [Appendix](#)

## Brother Numbers

### IMPORTANT

For technical help, you must call Brother Customer Service or your local Brother Dealer.

- >> [FAQs \(Frequently Asked Questions\)](#)
- >> [Customer Service](#)

### FAQs (Frequently Asked Questions)

The Brother Solutions Center is our one-stop resource for all your Machine needs. Download the latest software and utilities and read **FAQs & Troubleshooting** tips to learn how to get the most from your Brother product.

Check here for Brother driver updates, too.

[support.brother.com](http://support.brother.com)

### Customer Service

Visit [www.brother.com](http://www.brother.com) for contact information on your local Brother office.

### Service centre locations

For service centres in your area, contact your local Brother Office. Contact information for local Brother Offices can be found at [www.brother.com](http://www.brother.com) and selecting your country.

#### Internet Addresses

Brother Global Web Site: [www.brother.com](http://www.brother.com)

For Frequently Asked Questions (FAQs), Product Support and Technical Questions, and Driver Updates and Utilities:

[support.brother.com](http://support.brother.com)



### Related Information

- [Appendix](#)

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ASA  
Version B