



# Online User's Guide

**HL-L3228CDW**

**HL-L3288CDW**

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

## Table of Contents

<b>Before You Use Your Machine</b> .....	<b>1</b>
Definitions of Notes .....	2
Trademarks .....	3
Open Source Licensing .....	4
Copyright and License .....	5
Important Notes.....	6
<b>Introduction to Your Machine</b> .....	<b>7</b>
Before Using Your Machine .....	8
Front View and Back View .....	9
Control Panel Overview .....	11
How to Navigate the Touchscreen LCD .....	16
How to Enter Text on Your Machine .....	17
Access Brother Utilities (Windows) .....	18
Uninstall the Software and Drivers (Windows) .....	20
Input/Output Port Locations on Your Machine .....	21
<b>Paper Handling</b> .....	<b>22</b>
Load Paper.....	23
Load and Print Using the Paper Tray .....	24
Load and Print Paper in the Manual Feed Slot .....	28
Paper Settings.....	35
Change the Paper Size and Paper Type.....	36
Change the Check Paper Setting.....	37
Unprintable Area .....	38
Recommended Print Media.....	39
Using Special Paper.....	40
<b>Print</b> .....	<b>41</b>
Print from Your Computer (Windows).....	42
Print a Document (Windows).....	43
Print Settings (Windows) .....	45
Secure Print (Windows).....	50
Change the Default Print Settings (Windows) .....	52
Print a Document Using the BR-Script3 Printer Driver (PostScript® 3™ Language Emulation) (Windows) .....	53
Monitor the Status of the Machine from Your Computer (Windows) .....	54
Print from Your Computer (Mac) .....	55
Cancel a Print Job.....	56
Test Print .....	57
<b>Network</b> .....	<b>58</b>
Supported Basic Network Features .....	59
Configure Network Settings .....	60
Configure Network Details Using the Control Panel.....	61
Wireless Network Settings .....	62
Use the Wireless Network .....	63
Use Wi-Fi Direct® .....	80

Enable/Disable Wireless LAN .....	85
Print the WLAN Report .....	86
Network Features .....	90
Enable/Disable Web Based Management Using the Control Panel .....	91
Configure the Proxy Server Settings Using Web Based Management .....	92
Print the Network Configuration Report .....	93
Synchronise Time with the SNTP Server Using Web Based Management .....	94
Gigabit Ethernet (Wired Network Only) .....	97
Reset the Network Settings to the Factory Settings .....	99
<b>Security .....</b>	<b>100</b>
Before Using Network Security Features .....	101
Disable Unnecessary Protocols .....	102
Configure Certificates for Device Security .....	103
Supported Security Certificate Features .....	104
How to Create and Install a Certificate .....	105
Create a Self-signed Certificate .....	106
Create a Certificate Signing Request (CSR) and Install a Certificate from a Certificate Authority (CA) .....	107
Import and Export the Certificate and Private Key .....	111
Import and Export a CA Certificate .....	114
Manage Multiple Certificates .....	117
Use SSL/TLS .....	118
Introduction to SSL/TLS .....	119
Manage Your Network Machine Securely Using SSL/TLS .....	122
Print Documents Securely Using SSL/TLS .....	126
Use SNMPv3 .....	128
Manage Your Network Machine Securely Using SNMPv3 .....	129
Use IPsec .....	130
Introduction to IPsec .....	131
Configure IPsec Using Web Based Management .....	132
Configure an IPsec Address Template Using Web Based Management .....	134
Configure an IPsec Template Using Web Based Management .....	136
Use IEEE 802.1x Authentication for a Wired or a Wireless Network .....	144
What Is IEEE 802.1x Authentication? .....	145
Configure IEEE 802.1x Authentication for a Wired or Wireless Network Using Web Based Management (Web Browser) .....	146
IEEE 802.1x Authentication Methods .....	148
Use Active Directory Authentication .....	149
Introduction to Active Directory Authentication .....	150
Configure Active Directory Authentication Using Web Based Management .....	151
Log On to Change the Machine Settings Using the Machine's Control Panel (Active Directory Authentication) .....	152
Use LDAP Authentication .....	153
Introduction to LDAP Authentication .....	154
Configure LDAP Authentication Using Web Based Management .....	155
Log On to Change the Machine Settings Using the Machine's Control Panel (LDAP Authentication) .....	156
Use Secure Function Lock 3.0 .....	157

Before Using Secure Function Lock 3.0 .....	158
Configure Secure Function Lock 3.0 Using Web Based Management .....	159
Configure Public Mode for Secure Function Lock 3.0 .....	160
Additional Secure Function Lock 3.0 Features .....	161
Send an Email Securely .....	162
Configure Email Sending Using Web Based Management .....	163
Send an Email with User Authentication .....	164
Send an Email Securely Using SSL/TLS .....	165
Store Print Log to Network .....	166
Store Print Log to Network Overview .....	167
Configure the Store Print Log to Network Settings Using Web Based Management .....	168
Use the Store Print Log to Network's Error Detection Setting .....	170
Lock the Machine Settings from the Control Panel .....	172
Setting Lock Overview .....	173
Use Global Network Detection Features .....	177
Enable Global IP Address Detection .....	178
Block Communications from the Global Network .....	179
<b>Mobile Connect .....</b>	<b>180</b>
AirPrint .....	181
AirPrint Overview .....	182
Before Using AirPrint (macOS) .....	183
Print Using AirPrint .....	184
Mopria™ Print Service .....	187
Brother Mobile Connect .....	188
WeChat Print .....	189
<b>Brother iPrint&amp;Scan .....</b>	<b>190</b>
Access Brother iPrint&Scan (Windows/Mac) .....	191
<b>Troubleshooting .....</b>	<b>192</b>
Error and Maintenance Messages .....	193
Paper Jams .....	201
Clear Paper Jams .....	202
Paper is Jammed in the Manual Feed Slot .....	203
Paper is Jammed in the Paper Tray .....	204
Paper is Jammed in the Back of the Machine .....	206
Paper is Jammed Inside the Machine .....	208
Paper is Jammed in the 2-sided Tray .....	210
Printing Problems .....	212
Improve the Print Quality .....	215
Network Problems .....	220
Error Messages .....	221
Use the Network Connection Repair Tool (Windows) .....	224
Check Your Machine's Network Settings .....	225
If You Are Having Difficulty with Your Machine's Network .....	226
AirPrint Problems .....	232
Other Problems .....	233
Check the Machine Information .....	235
Reset Functions .....	236








Machine Reset .....	237
Network Reset .....	238
Factory Reset .....	239
<b>Routine Maintenance .....</b>	<b>240</b>
Replace Supplies .....	241
Replace the Toner Cartridge .....	243
Replace the Drum Unit .....	247
Replace the Belt Unit.....	251
Replace the Waste Toner Box .....	255
Clean the Machine .....	259
Clean the LED Heads.....	261
Clean the Touchscreen LCD .....	262
Clean the Corona Wires .....	263
Clean the Drum Unit.....	265
Clean the Paper Pick-up Rollers .....	274
Correct Colour Printing.....	276
Set the Auto Correction Function .....	277
Reset the Machine's Colour Correction Settings.....	278
Check the Remaining Part Life .....	279
Pack and Ship Your Machine .....	280
Replace Periodic Maintenance Parts .....	282
<b>Machine Settings.....</b>	<b>283</b>
Change Machine Settings from the Control Panel .....	284
General Settings.....	285
Settings and Features Tables .....	294
Change Machine Settings Using Web Based Management .....	311
What is Web Based Management? .....	312
Access Web Based Management .....	313
Set or Change a Login Password for Web Based Management .....	315
<b>Appendix.....</b>	<b>316</b>
Specifications .....	317
Supplies .....	323
Important Information About Toner Cartridge Life .....	325
Notice .....	326
Brother Help and Customer Support.....	327

## Before You Use Your Machine

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

## Definitions of Notes

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

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



### Related Information

- [Before You Use Your Machine](#)

## Trademarks

Apple, App Store, AirPrint, Mac, macOS, iPadOS, iPad, iPhone, iPod touch, and Safari are trademarks of Apple Inc., registered in the U.S. and other countries.

Adobe®, Reader®, PostScript and PostScript 3 are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Wi-Fi®, Wi-Fi Alliance®, and Wi-Fi Direct® are registered trademarks of Wi-Fi Alliance®.

WPA™, WPA2™, WPA3™, Wi-Fi CERTIFIED, and Wi-Fi Protected Setup are trademarks of Wi-Fi Alliance®.

Android and Google Play are trademarks of Google LLC. Use of these trademarks is subject to Google Permissions.

Mopria™ and the Mopria™ Logo are registered and/or unregistered trademarks and service marks of Mopria Alliance, Inc. in the United States and other countries. Unauthorised use is strictly prohibited.

The Bluetooth® word mark is a registered trademark owned by Bluetooth SIG, Inc. and any use of such marks by Brother Industries, Ltd. is under license. Other trademarks and trade names are those of their respective owners.

Each company whose software title is mentioned in this manual has a Software Licence Agreement specific to its proprietary programs.

### Software Trademarks

FlashFX® is a registered trademark of Datalight, Inc.

FlashFX® Pro™ is a trademark of Datalight, Inc.

FlashFX® Tera™ is a trademark of Datalight, Inc.

Reliance™ is a trademark of Datalight, Inc.

Reliance Nitro™ is a trademark of Datalight, Inc.

Datalight® is a registered trademark of Datalight, Inc.

**Any trade names and product names of companies appearing on Brother products, related documents and any other materials are all trademarks or registered trademarks of those respective companies.**



### Related Information

- [Before You Use Your Machine](#)



## Open Source Licensing

This product includes open source software.

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



### Related Information

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

## Copyright and License

©2023 Brother Industries, Ltd. All rights reserved.

This product includes software developed by the following vendors:

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

Copyright 1989-2020 Datalight, Inc., All Rights Reserved.

FlashFX® Copyright 1998-2020 Datalight, Inc.



### Related Information

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

## Important Notes

- Check [support.brother.com/downloads](https://support.brother.com/downloads) for Brother driver and software updates.
- To keep your machine performance up to date, check [support.brother.com/downloads](https://support.brother.com/downloads) for the latest firmware upgrade. Otherwise, some of your machine's functions may not be available.
- Do not use this product outside the country of purchase as it may violate the wireless telecommunication and power regulations of that country.
- Before giving your machine to anyone else, replacing it, or disposing of it, we strongly recommend resetting it to its factory settings to remove all personal information.
- Windows 10 in this document represents Windows 10 Home, Windows 10 Pro, Windows 10 Education, and Windows 10 Enterprise.
- Windows 11 in this document represents Windows 11 Home, Windows 11 Pro, Windows 11 Education, and Windows 11 Enterprise.
- For macOS v13 Users:  
This machine supports macOS v13.  
For machine setup and software installation instructions, see the *Quick Setup Guide* included in the carton.  
All features in macOS v11 and macOS v12 are available in the macOS v13 environment and work in a similar way.
- In this User's Guide, the LCD messages of the HL-L3228CDW/HL-L3288CDW are used unless otherwise specified.
- In this User's Guide, the illustrations of the HL-L3228CDW/HL-L3288CDW are used unless otherwise specified.
- The screens or images in this User's Guide are for illustration purposes only and may differ from those of the actual products.
- Unless otherwise specified, the screens in this manual are from Windows 10. Screens on your computer may vary depending on your operating system.
- The contents of this document and the specifications of this product are subject to change without notice.



### Related Information

- [Before You Use Your Machine](#)

## Introduction to Your Machine

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

## Before Using Your Machine

Before attempting any printing operation, confirm the following:

- Make sure you have installed the correct software and drivers for your machine.
- For USB or network cable users: Make sure the interface cable is physically secure.

### Firewall (Windows)

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



### Related Information

- [Introduction to Your Machine](#)
-

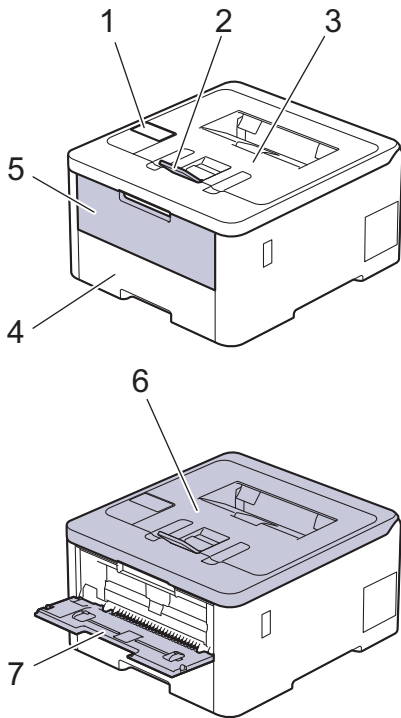
## Front View and Back View

>> [HL-L3228CDW](#)

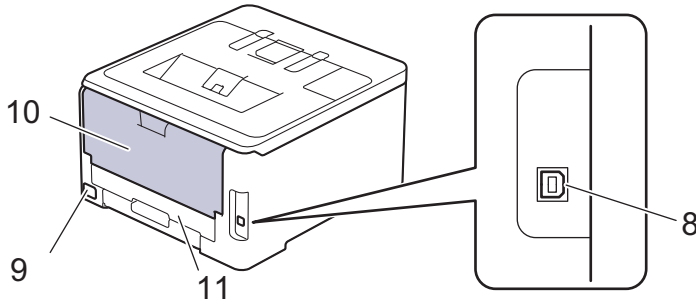
>> [HL-L3288CDW](#)

### HL-L3228CDW

#### Front View



#### Back View



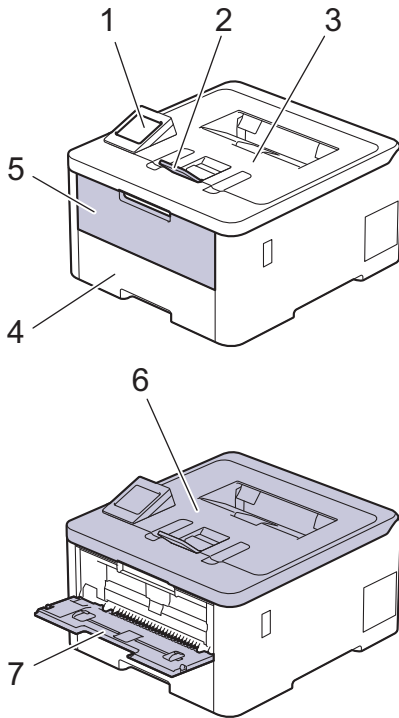
1. Control panel with a Liquid Crystal Display (LCD)
2. Face-down output tray support flap
3. Face-down output tray
4. Paper tray
5. Manual feed slot cover
6. Top cover
7. Manual feed slot
8. USB port
9. AC power connector
10. Back cover (Face-up output tray)
11. 2-sided tray



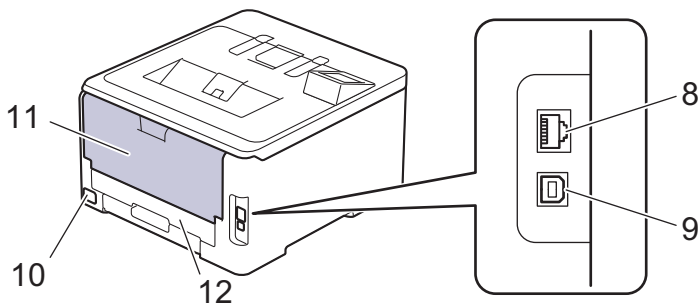
The machine is equipped with a non-detachable AC power cord depending on the model.

## HL-L3288CDW

### Front View



### Back View



1. Touch panel with touchscreen LCD
2. Face-down output tray support flap
3. Face-down output tray
4. Paper tray
5. Manual feed slot cover
6. Top cover
7. Manual feed slot
8. (For wired network models)  
10BASE-T / 100BASE-TX / 1000BASE-T port
9. USB port
10. AC power connector / cord
11. Back cover (Face-up output tray)
12. 2-sided tray

### ✓ Related Information

- [Introduction to Your Machine](#)

## Control Panel Overview

The control panel may vary depending on your model.

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW



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

Displays messages to help you set up and use the machine.

A four-level indicator shows the wireless signal strength if you are using a wireless connection.



#### 2. WiFi 设置

Launch the wireless installer on your computer and press the **WiFi 设置** button. Follow the on-screen instructions to configure a wireless connection between your machine and your network.

When the **WiFi 设置** light is on, your machine is connected to a wireless access point. When the **WiFi 设置** light blinks, the wireless connection was interrupted, or your machine is in the process of connecting to a wireless access point.

#### 3. Menu Buttons

##### 确定

Press to select the displayed option. After you change a setting, the machine returns to the previous menu level.

##### 返回

- Press to go back one level in the menu.
- Press to select the previous digit when entering letters or numbers.



### ▲ or ▼ (+ or -)

- Press to scroll through menus and options.
- Press to enter or change a letter or number. Hold down ▲ or ▼ to scroll faster. When you see the letter or number you want, press **确定**.

### 4. 加密打印

Press to print any jobs saved in the machine's memory. You need to enter your four-digit password.

### 5. 开始

- Press to clear certain error messages. To clear any other error messages, follow the LCD instructions.
- Press to print any data remaining in the machine's memory.
- Press to select the displayed option. After you select an option, the machine returns to Ready Mode.

### 6. 错误 LED

The **错误** LED blinks when the LCD displays an error or an important status message.

### 7. 数据 LED



The **数据** LED blinks depending on the machine's status.

When the **数据** LED is on, data is in the machine's memory. When the **数据** LED blinks, the machine is receiving or processing data.

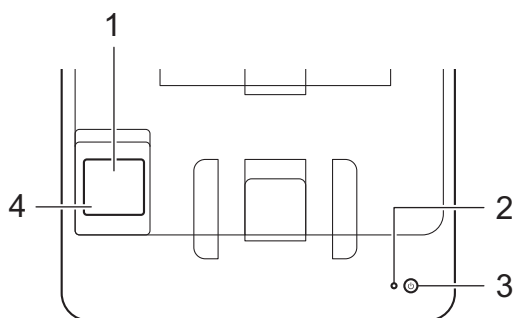
### 8. 取消

- Press to cancel the current setting.
- Press to cancel a programmed print job and clear it from the machine's memory. To cancel multiple print jobs, press and hold **取消** until the LCD displays [Cancel All Jobs].

### 9. Power On/Off

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

## HL-L3288CDW

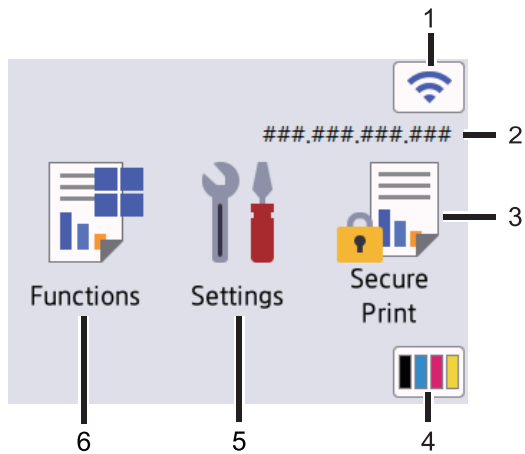


### 1. Touchscreen Liquid Crystal Display (LCD)

Access menus and options by pressing them on the touchscreen.

From the Home screen, you can access the WiFi setup, Toner level, Settings, Functions, and Secure Print screens.

The Home screen displays the machine's status when the machine is idle.




1.  **(Wireless Status)**

Press to configure wireless settings.

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



If you see  displayed as the wireless status, press it to select a wireless connection method or configure an existing wireless connection.

2. **IP Address**

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

3.  **[Secure Print]**

Press to access the Secure Print option.


4.  **(Toner)**


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

5.  **[Settings]**


Press to access the [Settings] menu.

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

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

6.  **[Functions]**

Press to access the Functions screen.

 **[Apps]**

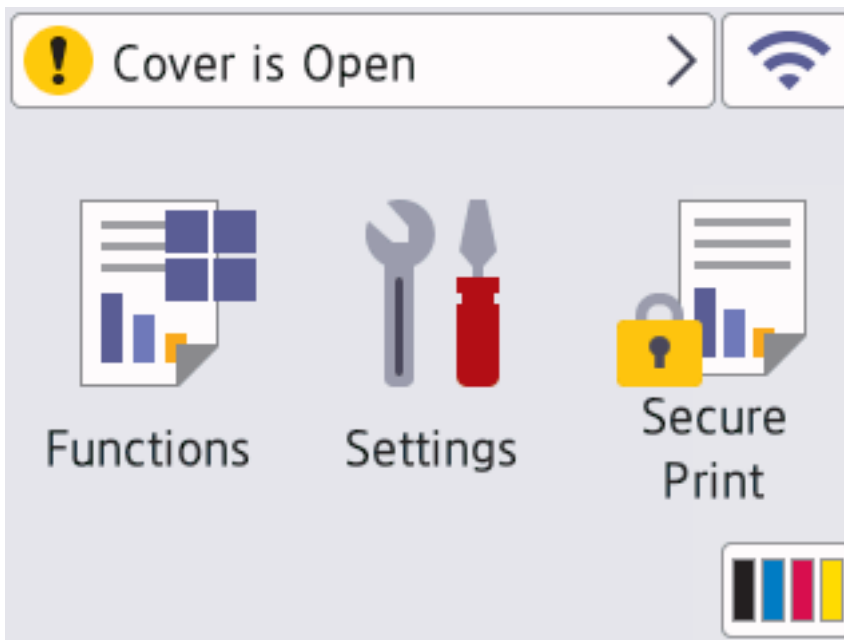
Press to connect your machine to an Internet service.




## Functions



Apps

### ! Warning icon





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

### 2. LED Power Indicator

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

### 3. Power On/Off

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

### 4. Touchpanel




(Back)

Press to go back to the previous menu.


---

 **(Home)**

Press to return to the Home screen.

 **(Cancel)**

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

 **Related Information**

- [Introduction to Your Machine](#)
-

## How to Navigate the Touchscreen LCD

**Related Models:** HL-L3288CDW

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

### IMPORTANT

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

### NOTE

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



This product uses fonts owned by ARPHIC TECHNOLOGY CO., LTD.



### Related Information

- [Introduction to Your Machine](#)

## How to Enter Text on Your Machine

>> HL-L3228CDW  
>> HL-L3288CDW

### HL-L3228CDW

When text is required, enter characters on the machine. The characters that are available may differ depending on the operation you perform.

- Hold down or repeatedly press ▲ or ▼ to select a character from this list:  
0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ(space)!"#\$%&'()\*+,-./:;<=>?  
@[^\_`{|}~
- Press **确定** when the character or symbol you want is displayed, and then enter the next character.
- Press **返回** to delete characters entered incorrectly.

### HL-L3288CDW

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



- Press **A 1 @** to cycle between letters, numbers, and special characters.
- Press **⇧aA** to cycle between lowercase and uppercase letters.
- To move the cursor to the left or right, press ◀ or ▶.

#### Inserting spaces

- To enter a space, press [Space].

#### Making corrections

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

### ✓ Related Information

- [Introduction to Your Machine](#)

## 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 11)


Click  > **All apps** > **Brother** > **Brother Utilities**.

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

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

- (Windows Server 2012 R2)

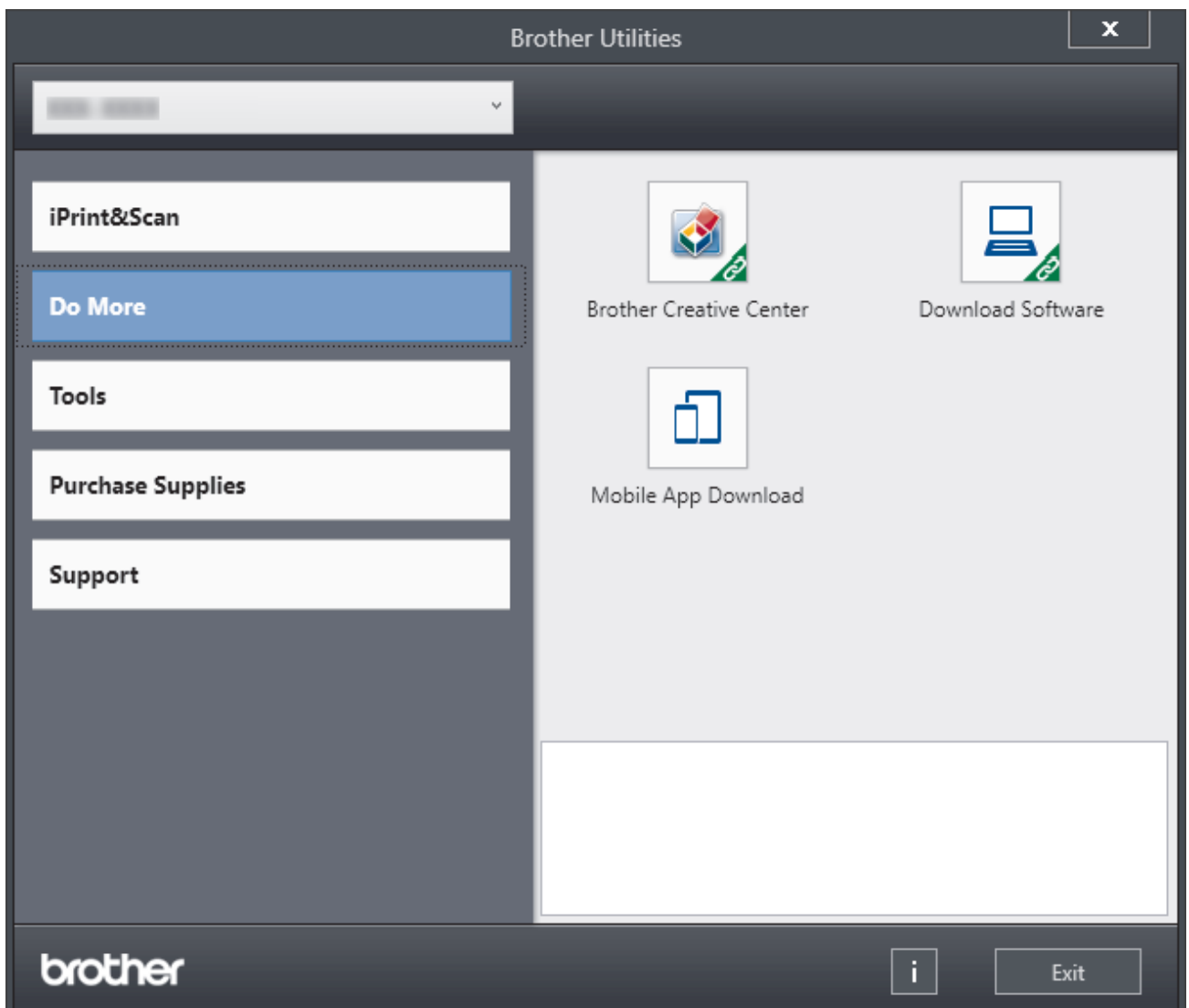
Move your mouse to the lower left corner of the **Start** screen and click  (if you are using a touch-based device, swipe up from the bottom of the **Start** screen to bring up the **Apps** screen).

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

- (Windows Server 2012)

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

2. Select your machine.



3. Choose the option you want.



## Related Information

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




## Uninstall the Software and Drivers (Windows)

1. Do one of the following:


- (Windows 11)


Click  > **All apps** > **Brother** > **Brother Utilities**.

- Windows 10, Windows Server 2016 and Windows Server 2019

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

- Windows Server 2012 R2

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

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

- Windows Server 2012

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

2. Select your model from the drop-down list (if it is not already selected).

3. Click **Tools** in the left navigation bar.

- If the **Software Update Notification** icon is visible, select it, and then click **Check now** > **Check for Software Updates** > **Update**. Follow the on-screen instructions.
- If the **Software Update Notification** icon is not visible, go to the next step.

4. Click **Uninstall** in the **Tools** section of **Brother Utilities**.

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

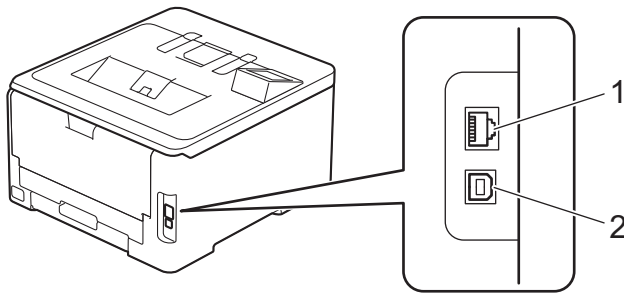


### Related Information

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

## Input/Output Port Locations on Your Machine

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



1. 10BASE-T / 100BASE-TX / 1000BASE-T port (For wired network models)
2. USB port

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

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



### Related Information

- [Introduction to Your Machine](#)

## Paper Handling

- [Load Paper](#)
- [Paper Settings](#)
- [Unprintable Area](#)
- [Recommended Print Media](#)
- [Using Special Paper](#)

## Load Paper

- [Load and Print Using the Paper Tray](#)
- [Load and Print Paper in the Manual Feed Slot](#)

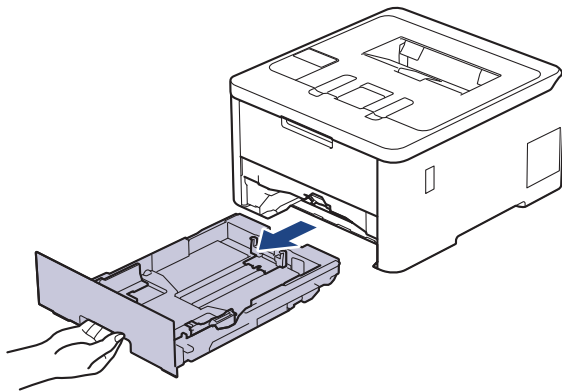
## Load and Print Using the Paper Tray

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

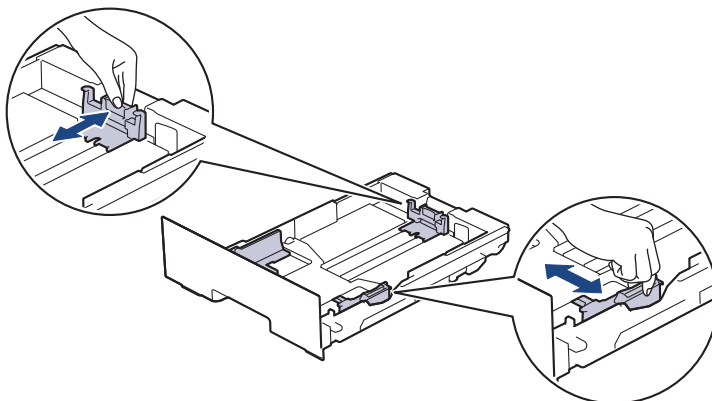
## Load Paper in the Paper Tray


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

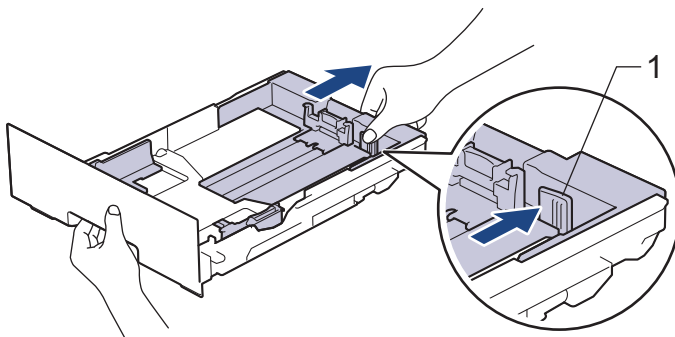
1. Pull the paper tray completely out of the machine.




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



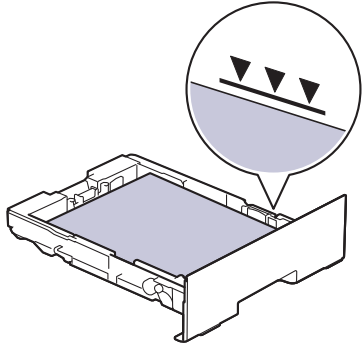
 For Legal or Folio size paper, press the release lever (1) in the back of the tray, and then pull out the back of the paper tray. (Legal and Folio size paper are not available in some regions.)



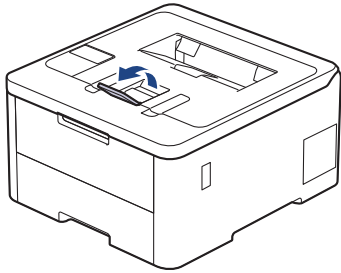
3. Fan the stack of paper well.
4. Load paper in the paper tray with the printing surface *face down*.

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

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



6. Slowly push the paper tray completely into the machine.  
7. Lift the support flap to prevent paper from sliding off the output tray.



### Related Information

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

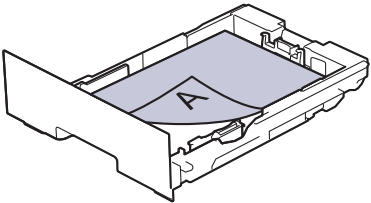
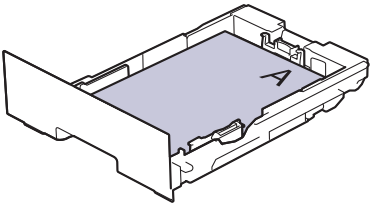
## Change Machine Settings to Print on Preprinted Paper Using the Paper Tray

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



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

### Orientation

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



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [Printer]. Press 确定.
  - b. Select [2-sided]. Press 确定.
  - c. Select [Single Image]. Press 确定.
2. Press ▲ or ▼ to select [2-sided Feed], and then press 开始.

### HL-L3288CDW

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

### ✓ Related Information

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



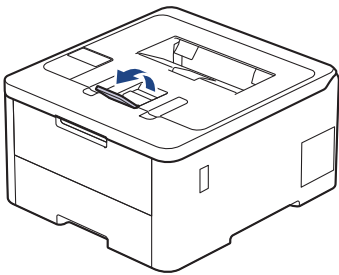
## Load and Print Paper in the Manual Feed Slot

- [Load and Print Paper in the Manual Feed Slot](#)
- [Load and Print on Labels Using the Manual Feed Slot](#)
- [Load and Print on Envelopes in the Manual Feed Slot](#)

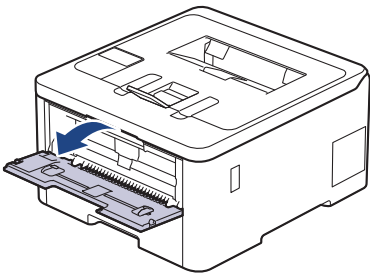
## Load and Print Paper in the Manual Feed Slot

When you load a different paper size in the tray, you must change the Paper Size setting in the machine or on your computer at the same time.

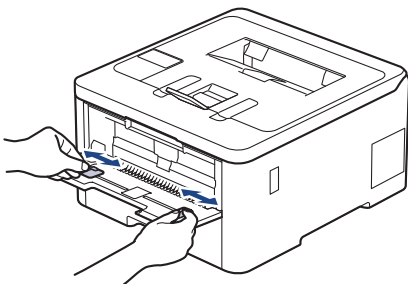
- Plain Paper
  - Thin Paper
  - Thick Paper
  - Recycled Paper
  - Bond Paper
  - Glossy Paper
1. Lift the support flap to prevent paper from sliding off the face down output tray.



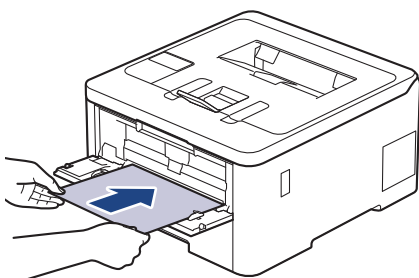
2. Open the manual feed slot cover.



3. Use both hands to slide the manual feed slot paper guides to fit the width of the paper you are using.



4. Using both hands, place one sheet of paper in the manual feed slot until the front edge touches the paper feed roller. When you feel the machine pull it in, let go.





- Load paper into the manual feed slot with the printing surface *facing up*.
  - Make sure the paper is straight and in the correct position in the manual feed slot. If it is not, the paper may not be fed correctly, resulting in a skewed printout or a paper jam.
- 

5. Send your print job to the machine.



Change your print preferences in the Print screen.

---

6. After the printed page comes out from the machine, load the next sheet of paper in the manual feed slot. Repeat for each page that you want to print.



### Related Information

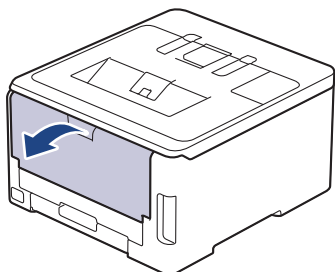
---


- [Load and Print Paper in the Manual Feed Slot](#)
-

## Load and Print on Labels Using the Manual Feed Slot

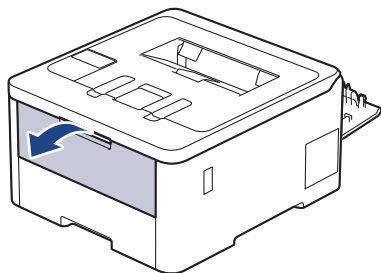
When you load a different paper size in the tray, you must change the Paper Size setting in the machine or on your computer at the same time.

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

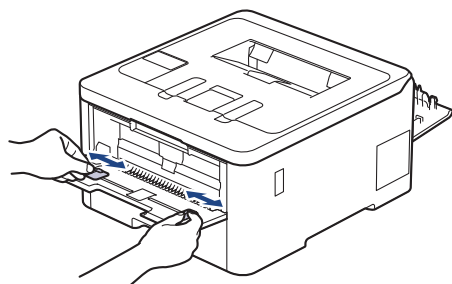


 The machine automatically turns on Manual Feed mode when you load paper in the manual feed slot.

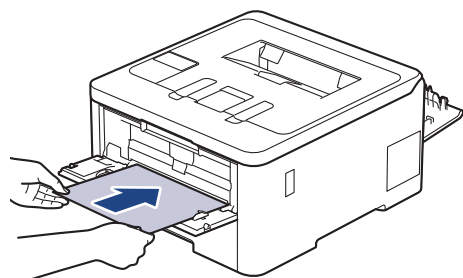
2. On the front of the machine, open the manual feed slot cover.



3. Use both hands to slide the manual feed slot paper guides to fit the width of the paper that you are using.



4. Using both hands, place one sheet of label in the manual feed slot until the front edge touches the paper feed roller. When you feel the machine pull it in, let go.





- Load label into the manual feed slot with the printing surface *facing up*.
  - Pull the label out completely if you must reload the label into the manual feed slot.
  - Do not put more than one sheet of label in the manual feed slot at one time, as it may cause a jam.
  - Make sure the label is straight and in the correct position in the manual feed slot. If it is not, the label may not be fed correctly, resulting in a skewed printout or a paper jam.
- 

5. Send your print job to the machine.



Change your print preferences in the Print screen.

---

6. After the printed page comes out from the back of the machine, load the next sheet of label in the manual feed slot. Repeat for each page that you want to print.
7. When finished, close the back cover (the face up output tray) until it locks in the closed position.



### Related Information

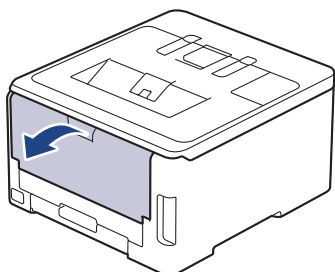
- [Load and Print Paper in the Manual Feed Slot](#)
-


## Load and Print on Envelopes in the Manual Feed Slot

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

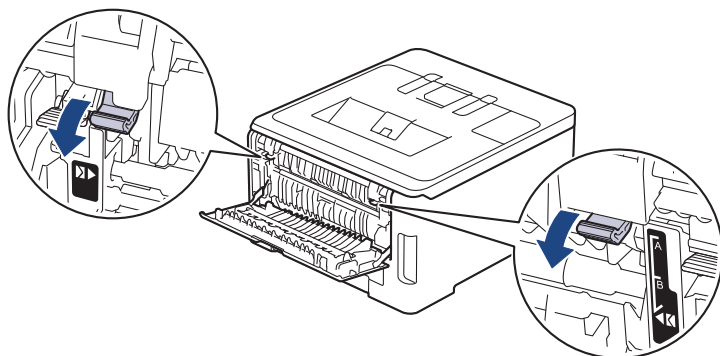
When you load a different paper size in the tray, you must change the Paper Size setting in the machine or on your computer at the same time.

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

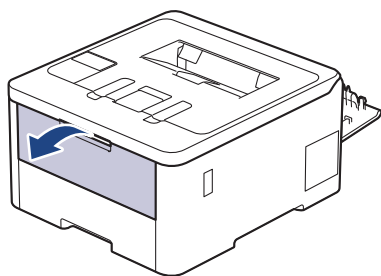


 The machine automatically turns on Manual Feed mode when you load paper in the manual feed slot.

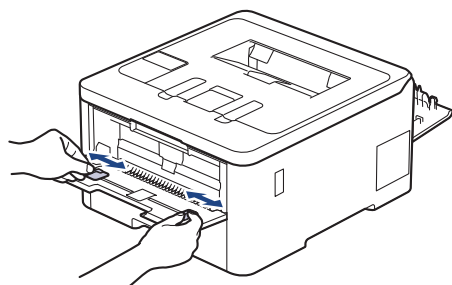
2. Pull down the two grey levers, one on the left side and one on the right side, as shown in the illustration.



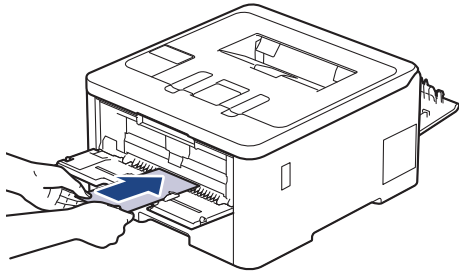
3. On the front of the machine, open the manual feed slot cover.



4. Use both hands to slide the manual feed slot paper guides to fit the width of the envelope that you are using.



- 
5. Using both hands, put one envelope in the manual feed slot until the front edge touches the paper feed roller. When you feel the machine pull it in, let go.



- Load the envelope into the manual feed slot with the printing surface *facing up*.
- Pull the envelope out completely when you reload the envelope into the manual feed slot.
- Do not put more than one envelope in the manual feed slot at one time, as it may cause a jam.
- Make sure the envelope is straight and in the correct position on the manual feed slot. If it is not, the envelope may not be fed correctly, resulting in a skewed printout or a paper jam.

- 
6. Send your print job to the machine.



Change your print preferences in the Print dialog box.

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

- 
7. After the printed envelope comes out of the machine, load the next envelope. Repeat for each envelope that you want to print.
8. When you have finished printing, return the two grey levers you adjusted in the earlier step back to their original positions.
9. Close the back cover (face-up output tray) until it locks in the closed position.



### Related Information

- [Load and Print Paper in the Manual Feed Slot](#)

## Paper Settings

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



## Change the Paper Size and Paper Type

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




>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [General Setup]. Press 确定.
  - b. Select [Tray Setting]. Press 确定.
  - c. Select [Paper Type]. Press 确定.
2. Press ▲ or ▼ to display the paper type you want, and then press 确定.
3. Press ▲ or ▼ to display the [Paper Size] option, and then press 确定.
4. Press ▲ or ▼ to display the paper size you want, and then press 开始.

### HL-L3288CDW

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

### ✓ Related Information

- [Paper Settings](#)

## Change the Check Paper Setting

When the Check Paper setting is set to On and you pull the paper tray out of the machine, a message appears on the LCD asking if you want to change the paper size and paper type.

The default setting is On.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [General Setup]. Press 确定.
  - b. Select [Tray Setting]. Press 确定.
  - c. Select [Check Paper]. Press 确定.
2. Press ▲ or ▼ to select the [On] or [Off] option, and then press 开始.

### HL-L3288CDW

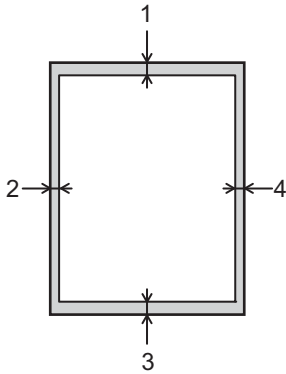
1. Press  [Settings] > [All Settings] > [General Setup] > [Tray Setting] > [Check Paper].
2. Press [On] or [Off].
3. Press .

### ✓ Related Information

- [Paper Settings](#)

## Unprintable Area

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



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

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



### Related Information

- [Paper Handling](#)

## Recommended Print Media

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

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



### Related Information

- [Paper Handling](#)

## Using Special Paper

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

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

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

### IMPORTANT

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

DO NOT use paper:

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

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



### Related Information

- [Paper Handling](#)

## Print

- [Print from Your Computer \(Windows\)](#)
- [Print from Your Computer \(Mac\)](#)
- [Cancel a Print Job](#)
- [Test Print](#)

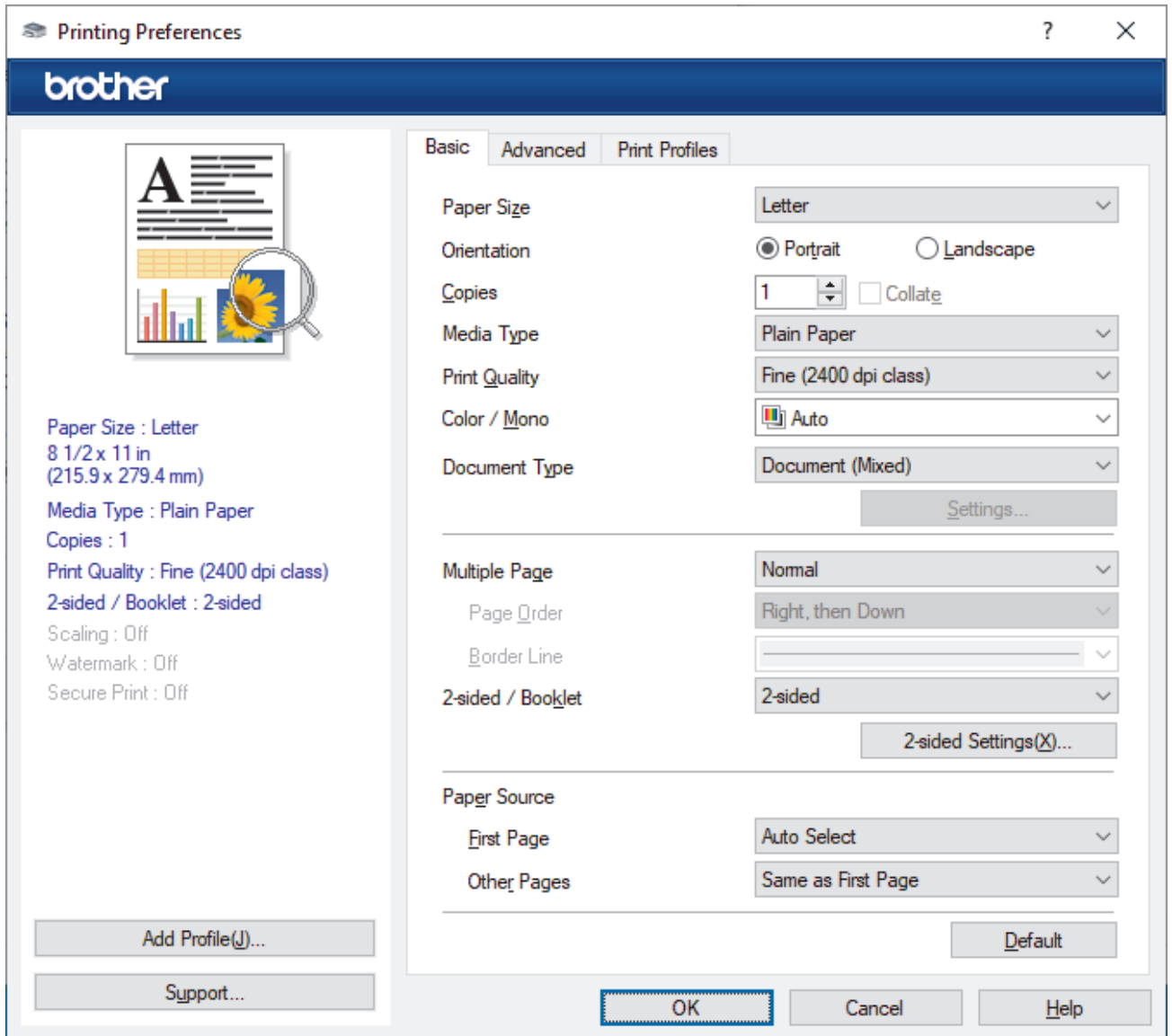
## Print from Your Computer (Windows)

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

## Print a Document (Windows)

1. Select the print command in your application.
2. Select your model's name, and then click the printer's properties or preferences button.

The printer driver window appears.



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



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

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





## Related Information

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

### **Related Topics:**

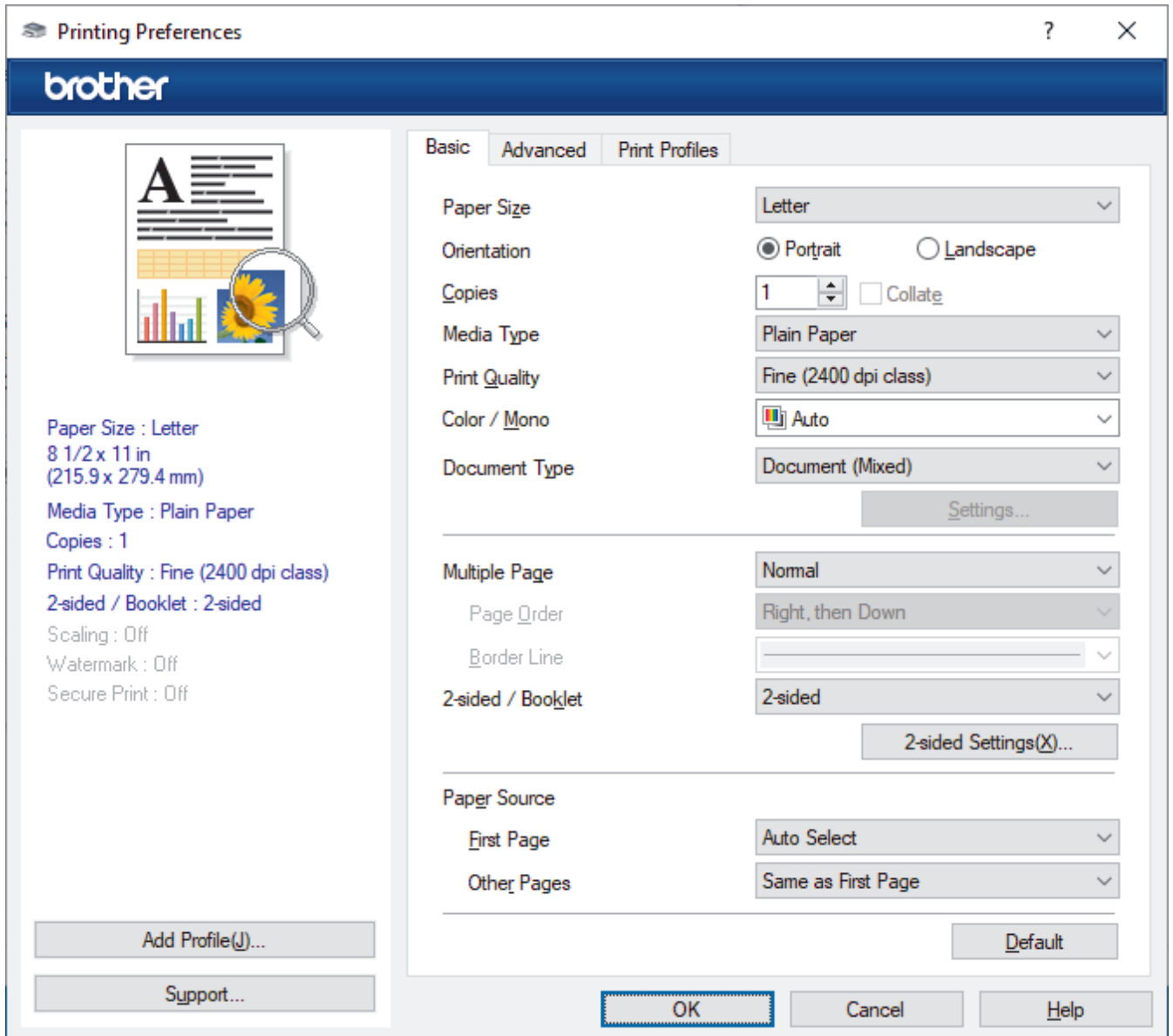
- [Print Settings \(Windows\)](#)
-

## Print Settings (Windows)

>> **Basic Tab**

>> **Advanced Tab**

### Basic Tab



#### 1. Paper Size

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

#### 2. Orientation

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

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

#### 3. Copies

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

#### Collate

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

---

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

#### 4. Media Type

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

#### 5. Print Quality

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

#### 6. Color / Mono

Select the Colour/Mono settings to use.

### NOTE

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

---

#### 7. Document Type

Select the type of document you want to print.

##### Settings button

Specify advanced settings, such as colour mode.

##### Color Mode

Select the colour mode to suit your preference.

##### Import

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

##### Export

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

##### Improve Gray Color

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

##### Enhance Black Printing

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

##### Improve Pattern Printing

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

#### 8. Multiple Page

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

##### Page Order

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

##### Border Line

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

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

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

### 2-sided Settings button

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

## 10. Paper Source

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

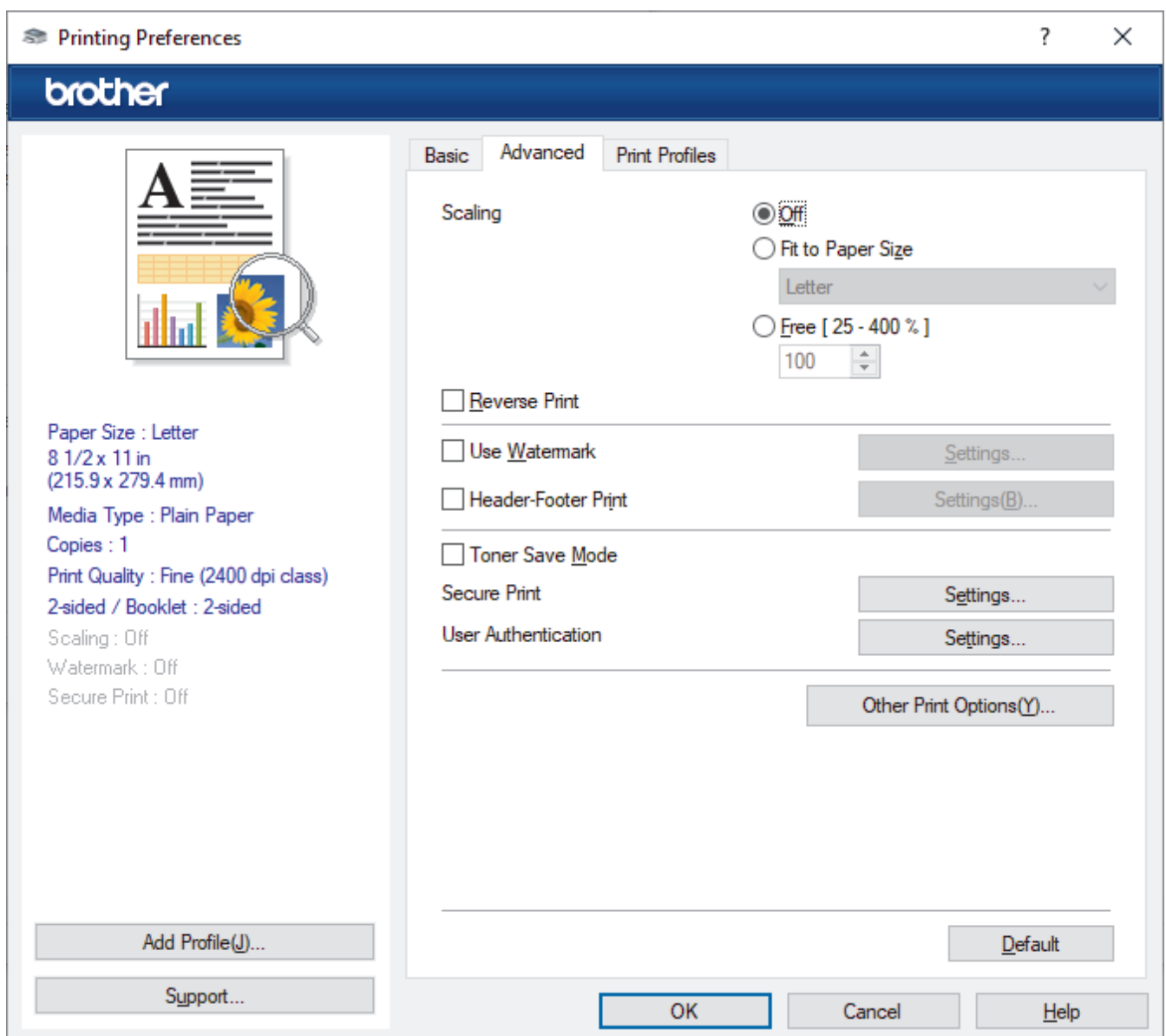
### First Page

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

### Other Pages

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

## Advanced Tab



### 1. Scaling

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

---

### Fit to Paper Size

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

### Free [ 25 - 400 % ]

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

### 2. Reverse Print

Select this option to rotate the printed image 180 degrees.

### 3. Use Watermark

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

### 4. Header-Footer Print

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

### 5. Toner Save Mode

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

### 6. Secure Print

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

### 7. Administrator

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

### 8. User Authentication

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

### 9. Other Print Options button

#### Sleep Time

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

#### Macro/Stream (available for certain models)

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

#### Improve Print Output

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

#### Edge Emphasis

Select this option to make the text appear sharper.

#### Skip Blank Page

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

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

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

## NOTE

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

---

## TrueType Mode

### Mode

Select how the fonts are processed for printing.

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

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

### Eco settings

Select this option to reduce printing noise.



## Related Information

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

### Related Topics:

- [Print a Document \(Windows\)](#)
-

## Secure Print (Windows)

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

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

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Select the print command in your application.
2. Select your model's name, and then click the printer's properties or preferences button.  
The printer driver window appears.
3. Click the **Advanced** tab.
4. Click the **Settings** button in the **Secure Print** field.
5. Select the **Secure Print** checkbox.
6. Type your four-digit password in the **Password** field.
7. Type the user name and job name in the **User Name** and **Job Name** fields, if needed.
8. Click **OK** to close the **Secure Print Settings** window.
9. Click **OK**.
10. Complete your print operation.
11. On the machine's control panel, press **加密打印**.
12. Press **▲** or **▼** to display your user name, and then press **确定**.
13. Enter your four-digit password.  
To enter each digit, press **▲** or **▼** to select a number, and then press **确定**.
14. Press **▲** or **▼** to display the job, and then press **确定**.
15. Press **▲** or **▼** to select the [Print] option, and then press **确定**.
16. Press **▲** or **▼** to enter the number of copies you want.
17. Press **确定**.  
The machine prints the data.

The secured data will be cleared from the machine's memory after printing.

### HL-L3288CDW

1. Select the print command in your application.
2. Select your model's name, and then click the printer's properties or preferences button.  
The printer driver window appears.
3. Click the **Advanced** tab.
4. Click the **Settings** button in the **Secure Print** field.
5. Select the **Secure Print** checkbox.
6. Type your four-digit password in the **Password** field.
7. Type the user name and job name in the **User Name** and **Job Name** fields, if needed.
8. Click **OK** to close the **Secure Print Settings** window.
9. Click **OK**.
10. Complete your print operation.
11. On the machine's control panel, press [Secure Print].

- 
12. Press ▲ or ▼ to display the user names, and then press to select your user name.
  13. Enter your four-digit password, and then press [OK].
  14. Press ▲ or ▼ to display the print job, and then press it.
  15. Enter the number of copies you want.
  16. Press [Start].

The secured data will be cleared from the machine's memory after printing.



### **Related Information**

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



## Change the Default Print Settings (Windows)

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

1. Do one of the following:
  - For Windows 11  
Click  > **All apps** > **Windows Tools** > **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**.
  - For Windows 10, Windows Server 2016, Windows Server 2019, and Windows Server 2022  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound (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 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**.
2. Right-click your model's icon, and then select **Printer properties**. (If printer driver options appear, select your printer driver.)

The printer properties dialog box appears.
3. Click the **General** tab, and then click the **Printing Preferences...** or **Preferences...** button.

The printer driver dialog box appears.



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

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 \(Windows\)](#)

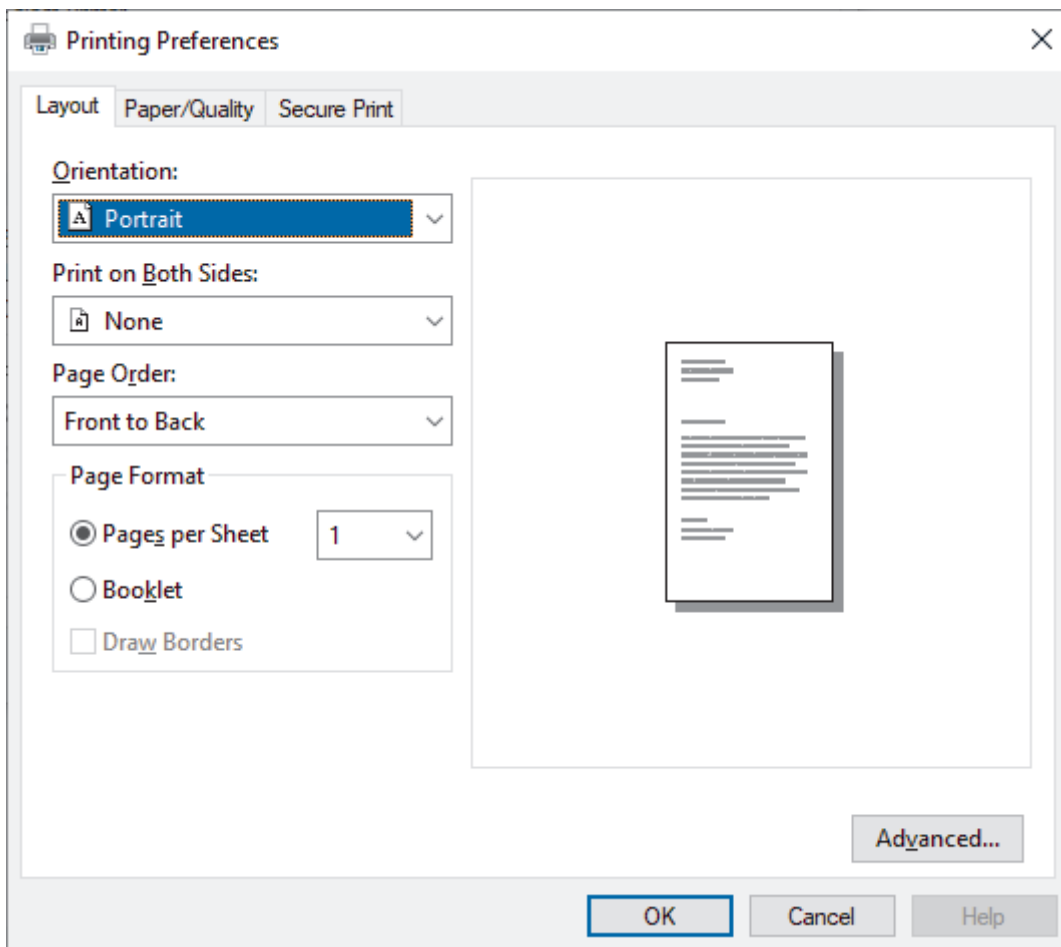
## Print a Document Using the BR-Script3 Printer Driver (PostScript® 3™ Language Emulation) (Windows)

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

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

1. Select the print command in your application.
2. Select your model with **BR-Script3** in the name, and then click the printer's properties or preferences button.

The printer driver window appears.



3. Click the **Layout**, **Paper/Quality**, or **Secure Print** tab to change basic print settings. (available for certain models)

Click the **Layout** or **Paper/Quality** tab, and then click the **Advanced...** button to change advanced print settings. Click **OK**.

4. Click **OK**.
5. Complete your print operation.



### ✓ Related Information

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

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

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

Do one of the following:

- Double-click the  icon in the task tray.
- Launch  (**Brother Utilities**), and then click the drop-down list and select your model's name (if not already selected). Click **Tools** in the left navigation bar, and then click **Status Monitor**.

### Troubleshooting

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

### Visit the Genuine Supplies website

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



### Related Information

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

#### Related Topics:

- [Printing Problems](#)

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

- [Print Using AirPrint](#)

## Cancel a Print Job

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

Press **取消**.




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

### HL-L3288CDW

Press .



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

### Related Information

- [Print](#)

## Test Print

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

>> [HL-L3228CDW](#)



>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to display the [Printer] option, and then press 确定.
2. Press ▲ or ▼ to display the [Print Options] option, and then press 确定.
3. Press ▲ or ▼ to display the [Test Print] option, and then press 确定.
4. Press 开始.

The machine prints the test page.

### HL-L3288CDW

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

### ✓ Related Information

- [Print](#)

## Network

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

## Supported Basic Network Features

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

Operating Systems	Windows	Windows Server	macOS
Printing	Yes	Yes	Yes
Web Based Management <sup>1</sup>	Yes	Yes	Yes
Status Monitor	Yes		
Driver Deployment Wizard	Yes	Yes	

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



- When connecting your machine to an outside network such as the Internet, make sure your network environment is protected by a separate firewall or other means in order to prevent information leaks due to inadequate settings or unauthorised access by malicious third parties.
- When your machine is connected to the global network, a warning appears. When you see this warning, we strongly recommend confirming your network settings, and then re-connecting to a secure network.
- Enabling your machine's global network communication filtering feature blocks access from the global network. The global network communication filtering feature may prevent the machine from receiving certain print jobs from a computer or mobile device that uses a global IP address.



### Related Information

- [Network](#)

#### Related Topics:

- [Set or Change a Login Password for Web Based Management](#)



## Configure Network Settings

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

## Configure Network Details Using the Control Panel

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



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


>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the network option you want, and then press 确定. Repeat this step until you access the menu you want to configure, and then follow the LCD instructions.

### HL-L3288CDW

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

### Related Information

- [Configure Network Settings](#)

#### Related Topics:

- [Settings Tables \(HL-L3228CDW\)](#)
- [Settings Tables \(HL-L3288CDW\)](#)
- [Supported Basic Network Features](#)

## Wireless Network Settings

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

## Use the Wireless Network

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

## Before Configuring Your Machine for a Wireless Network

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

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

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

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



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



### Related Information

- [Use the Wireless Network](#)

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

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

You have completed the wireless network setup.



### Related Information

- [Use the Wireless Network](#)
-

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

>> HL-L3228CDW  
>> HL-L3288CDW

### HL-L3228CDW

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

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

Network Name (SSID)

Network Key

For example:

Network Name (SSID)
HELLO

Network Key
12345



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

#### How can I find this information?

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

2. Press ▲ or ▼ to select the [Network] option, and then press 确定.
3. Press ▲ or ▼ to select the [WLAN (Wi-Fi)] option, and then press 确定.
4. Press ▲ or ▼ to select the [Find Network] option, and then press 确定.
5. When [WLAN Enable?] appears, select On.  
This will start the wireless setup wizard.
6. The machine will search for your network and display a list of available SSIDs. When a list of SSIDs appears, press ▲ or ▼ to select the SSID you want.
7. Press 确定.
8. Do one of the following:
  - If you are using an authentication and encryption method that requires a Network Key, enter the Network Key you wrote down in the first step.

When you have entered all the characters, press **确定**.

To apply the settings, select [Yes].

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

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

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

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

## HL-L3288CDW

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

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

### Network Name (SSID)

--

### Network Key (Password)

--

For example:

### Network Name (SSID)

HELLO

### Network Key (Password)


12345



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

#### How can I find this information?

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

2. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [Find Wi-Fi Network].

3. When [Enable WLAN?] appears, press [Yes].

This will start the wireless setup wizard. To cancel, press [No].

4. The machine will search for your network and display a list of available SSIDs.

If a list of SSIDs is displayed, press ▲ or ▼ to display the SSID to which you want to connect, and then press the SSID.

5. Press [OK].

6. Do one of the following:



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

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

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

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

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

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



## Related Information

- [Use the Wireless Network](#)

### Related Topics:

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

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

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

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)


### HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [WLAN (Wi-Fi)] option, and then press 确定.
3. Press ▲ or ▼ to select the [WPS/Push Button] option, and then press 确定.
4. When [WLAN Enable?] appears, select On.  
This will start the wireless setup wizard.
5. When the LCD displays [Press Key on rtr], press the WPS button on your wireless access point/router. Then follow the LCD instructions on your machine. Your machine will automatically detect your wireless access point/router and try to connect to your wireless network.

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

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

### HL-L3288CDW

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

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

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

### Related Information

- [Use the Wireless Network](#)

#### Related Topics:

- [Wireless LAN Report Error Codes](#)

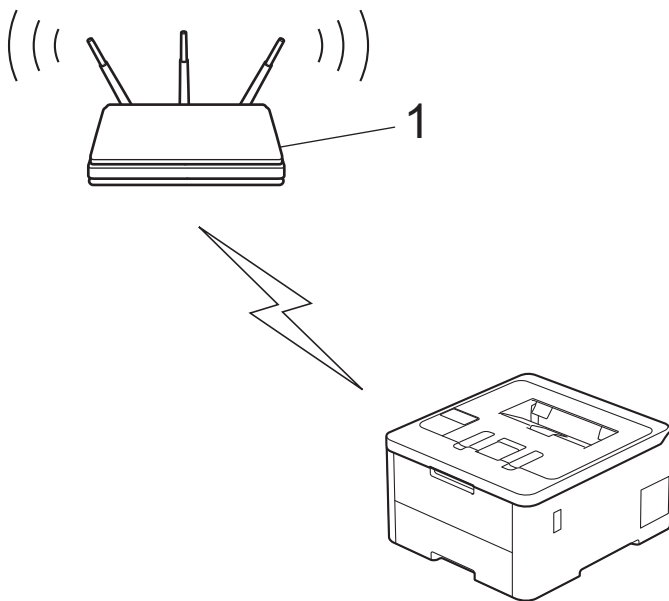
## Configure Your Machine for a Wireless Network Using the PIN Method of Wi-Fi Protected Setup™ (WPS)

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.

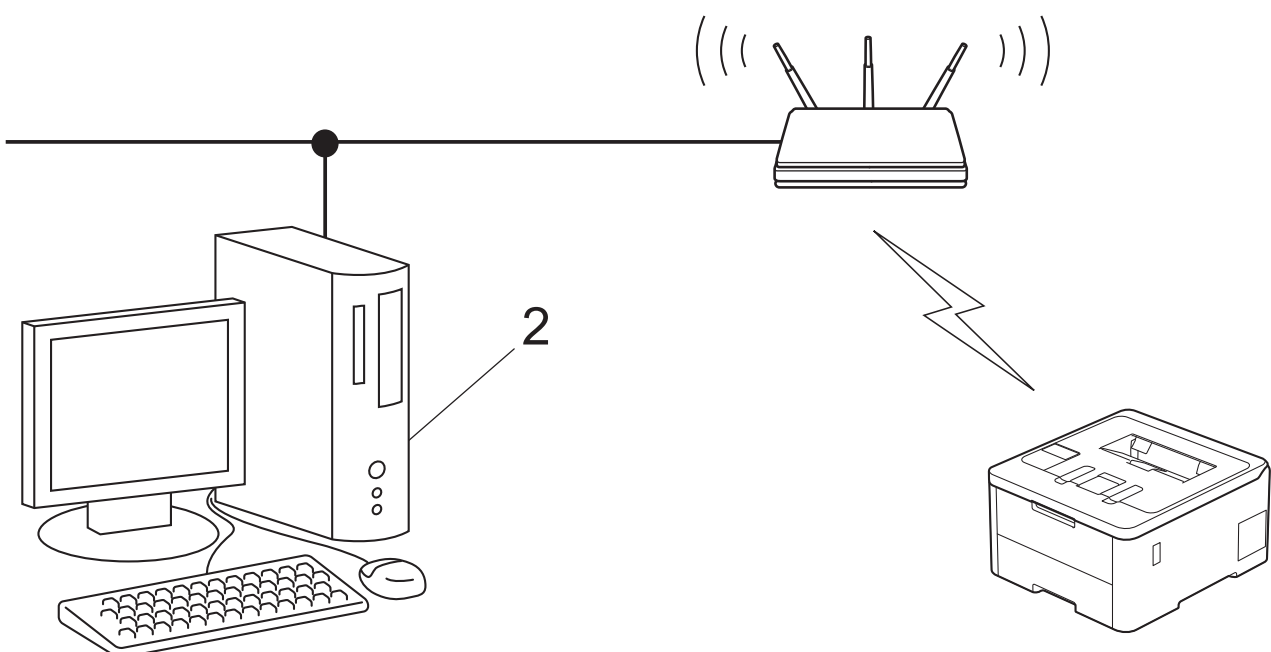
### Type A

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:



>> HL-L3228CDW  
>> HL-L3288CDW



## HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [WLAN (Wi-Fi)] option, and then press 确定.
3. Press ▲ or ▼ to select the [WPS/PIN Code] option, and then press 确定.
4. When [WLAN Enable?] appears, select On.  
This will start the wireless setup wizard.
5. The LCD displays an eight-digit PIN and the machine starts searching for a wireless LAN access point/router.
6. 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).
7. Go to the WPS settings page and type the PIN, and then follow the on-screen instructions.



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

**If you are using a Windows 10 or Windows 11 computer as a Registrar, complete the following steps:**

8. Do one of the following:
  - Windows 11  
Click  > **All apps** > **Windows Tools** > **Control Panel**. In the **Hardware and Sound** group, click **Add a device**.
  - Windows 10  
Click  > **Windows System** > **Control Panel**. In the **Hardware and Sound** group, click **Add a device**.




- To use a Windows 10 or Windows 11 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 10 or Windows 11 as a Registrar, you can install the printer driver after the wireless configuration by following the on-screen instructions. To install the driver and software necessary to use your machine, go to your model's **Downloads** page at [support.brother.com/downloads](http://support.brother.com/downloads).

9. Select your machine and click **Next**.
10. Type the PIN displayed on the machine's LCD, and then click **Next**.
11. Click **Close**.

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

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

## HL-L3288CDW

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



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


**If you are using a Windows 10 or Windows 11 computer as a Registrar, complete the following steps:**

6. Do one of the following:

- Windows 11

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

- Windows 10

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



- To use a Windows 10 or Windows 11 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 10 or Windows 11 as a Registrar, you can install the printer driver after the wireless configuration by following the on-screen instructions. To install the driver and software necessary to use your machine, go to your model's **Downloads** page at [support.brother.com/downloads](http://support.brother.com/downloads).

7. Select your machine and click **Next**.

8. Type the PIN displayed on the machine's LCD, and then click **Next**.

9. Click **Close**.

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

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



## Related Information

- [Use the Wireless Network](#)

### Related Topics:

- [Wireless LAN Report Error Codes](#)

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

>> HL-L3228CDW  
>> HL-L3288CDW

### HL-L3228CDW

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

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

Network Name (SSID)		

Authentication Method	Encryption Mode	Network Key
Open System	NONE	-
	WEP	
Shared Key	WEP	
WPA/WPA2-PSK	AES	
	TKIP	
WPA3-SAE	AES	

For example:

Network Name (SSID)		
HELLO		

Authentication Method	Encryption Mode	Network Key
WPA2-PSK	AES	12345678



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

2. Press ▲ or ▼ to select the [Network] option, and then press 确定.
3. Press ▲ or ▼ to select the [WLAN (Wi-Fi)] option, and then press 确定.
4. Press ▲ or ▼ to select the [Find Network] option, and then press 确定.
5. When [WLAN Enable?] appears, select On.  
This will start the wireless setup wizard.
6. The machine will search for your network and display a list of available SSIDs. Press ▲ or ▼ to select the [<New SSID>] option, and then press 确定.
7. Enter the SSID name, and then press 确定.
8. Press ▲ or ▼ to select the Authentication Method you want, and then press 确定.
9. Do one of the following:
  - If you selected the [Open System] option, press ▲ or ▼ to select the Encryption Type [None] or [WEP], and then press 确定.  
If you selected the [WEP] option for Encryption Type, enter the WEP key, and then press 确定.
  - If you selected the [Shared Key] option, enter the WEP key, and then press 确定.

- If you selected the [WPA-Personal] option, press ▲ or ▼ to select the Encryption Type [TKIP+AES] or [AES], and then press 确定.  
Enter the WPA™ key, and then press 确定.
- If you selected the [WPA3-SAE] option, select the Encryption Type [AES], and then press 确定.  
Enter the WPA™ key, and then press 确定.



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

10. To apply the settings, select [Yes].

11. The machine will attempt to connect to the wireless device you have selected.

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

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

## HL-L3288CDW

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

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


Network Name (SSID)		
Authentication Method	Encryption Mode	Network Key
Open System	NONE	-
	WEP	
Shared Key	WEP	
WPA/WPA2-PSK	AES	
	TKIP	
WPA3-SAE	AES	

For example:

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



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

2. Press  [Settings] > [All Settings] > [Network] > [WLAN(Wi-Fi)] > [Find Wi-Fi Network].
3. When [Enable WLAN?] appears, press [Yes].  
This will start the wireless setup wizard. To cancel, press [No].
4. The machine will search for your network and display a list of available SSIDs. Press ▲ or ▼ to display the [<New SSID>] option.
5. Press [<New SSID>], and then press [OK].
6. Enter the SSID name, and then press [OK].

---

7. Select the Authentication Method.

8. Do one of the following:

- If you selected the [Open System] option, press [None] or [WEP].  
If you selected the [WEP] option for Encryption type, enter the WEP key, and then press [OK].
- If you selected the [Shared Key] option, enter the WEP key, and then press [OK].
- If you selected the [WPA/WPA2-PSK/WPA3-SAE] option, press [TKIP+AES] or [AES].  
Enter the WPA™ key, and then press [OK].
- If you selected the [WPA3-SAE] option, press [AES].  
Enter the WPA™ key, and then press [OK].



---

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

---

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

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

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



### Related Information

- [Use the Wireless Network](#)

#### Related Topics:

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



## Configure Your Machine for an Enterprise Wireless Network

- >> [HL-L3228CDW](#)
- >> [HL-L3288CDW](#)

### HL-L3228CDW

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

1. Check and record the current wireless network settings.

Network Name (SSID)

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

For example:

Network Name (SSID)
HELLO

Authentication Method	Encryption Mode	User ID	Password
EAP-FAST/MS-CHAPv2	AES	Brother	12345678



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

2. Press ▲ or ▼ to select the [Network] option, and then press 确定.
3. Press ▲ or ▼ to select the [WLAN (Wi-Fi)] option, and then press 确定.
4. Press ▲ or ▼ to select the [Find Network] option, and then press 确定.
5. When [WLAN Enable?] appears, select On.  
This will start the wireless setup wizard.
6. The machine will search for your network and display a list of available SSIDs. Press ▲ or ▼ to select the [<New SSID>] option, and then press 确定.
7. Enter the SSID name, and then press 确定.
8. Press ▲ or ▼ to select the Authentication Method you want, and then press 确定.
9. Do one of the following:
  - If you selected the [EAP-FAST], [PEAP] or [EAP-TTLS] option, press ▲ or ▼ to select the Inner Authentication Method [NONE], [CHAP], [MS-CHAP], [MS-CHAPv2], [PAP] or [GTC], and then press 确定.



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

Press ▲ or ▼ to select the Encryption Type [TKIP+AES] or [AES], and then press 确定.

Press ▲ or ▼ to select the Verification Method [No Verification], [CA] or [CA+Server ID], and then press 确定.

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



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

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

10. To apply the settings, press ▲. To cancel, press ▼.

11. The machine will attempt to connect to the wireless device you have selected.

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

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

## HL-L3288CDW

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

1. Check and record the current wireless network settings.


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

For example:

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



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

2. Press  [Settings] > [All Settings] > [Network] > [WLAN (Wi-Fi)] > [Find Wi-Fi Network].

---

3. When [Enable WLAN?] appears, press [Yes].

This will start the wireless setup wizard. To cancel, press [No].

4. The machine will search for your network and display a list of available SSIDs. Press ▲ or ▼ to display the [<New SSID>] option.

5. Press [<New SSID>], and then press [OK].

6. Enter the SSID name, and then press [OK].

7. Select the Authentication Method.

8. Do one of the following:

- If you selected the [EAP-FAST], [PEAP] or [EAP-TTLS] option, press ▲ or ▼ to select the Inner Authentication Method [NONE], [CHAP], [MS-CHAP], [MS-CHAPv2], [GTC] or [PAP].



---

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

---

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

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

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



---

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

---

- If you selected the [EAP-TLS] option, select the Encryption Type [TKIP+AES] or [AES].

When the machine displays a list of available Client Certificates, select the certificate you want.

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

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

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

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

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



## Related Information

- [Use the Wireless Network](#)

### Related Topics:

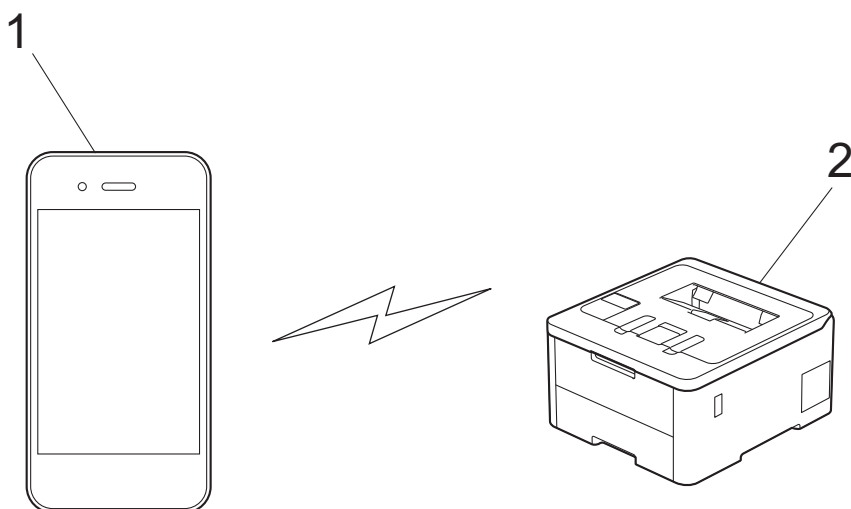
- [Wireless LAN Report Error Codes](#)
-

## Use Wi-Fi Direct®

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

## Wi-Fi Direct Overview

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



1. Mobile device
2. Your machine



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



### Related Information

- [Use Wi-Fi Direct®](#)

#### Related Topics:

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

## Configure Your Wi-Fi Direct Network Manually

>> [HL-L3228CDW](#)  
>> [HL-L3288CDW](#)

### HL-L3228CDW

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


1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [Wi-Fi Direct] option, and then press 确定.
3. Press ▲ or ▼ to select the [Manual] option, and then press 确定.
4. When [Wi-Fi Direct On?] appears, select On.
5. 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.
6. If your mobile device connects successfully, the machine's LCD displays [Connected]. You have completed the Wi-Fi Direct network setup.

### HL-L3288CDW

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



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

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

### Related Information

- [Use Wi-Fi Direct®](#)

#### Related Topics:

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

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

>> HL-L3228CDW

>> HL-L3288CDW

### HL-L3228CDW

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

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [Wi-Fi Direct] option, and then press 确定.
3. Press ▲ or ▼ to select the [Push Button] option, and then press 确定.
4. When [Wi-Fi Direct On?] appears, select On.




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

- a. Press ▲ or ▼ to select the [Network] option, and then press 确定.
  - b. Press ▲ or ▼ to select the [Wi-Fi Direct] option, and then press 确定.
  - c. Press ▲ or ▼ to select the [Group Owner] option, and then press 确定.
  - d. Press ▲ or ▼ to select the [On] option, and then press 确定.
  - e. Press ▲ or ▼ to select the [Push Button] option, and then press 确定.
5. 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 and press OK.] appears on the machine's LCD. Press 确定 on your machine.  
This will start the Wi-Fi Direct setup.
  6. Do one of the following:
    - If your mobile device displays a list of machines with Wi-Fi Direct enabled, select your Brother machine.
    - If your Brother machine displays a list of mobile devices with Wi-Fi Direct enabled, select your mobile device. Press ▲ or ▼ to select the mobile device you want to connect to and press 确定. To search for available devices again, select [<Rescan>], and then press 确定.
  7. If your mobile device connects successfully, the machine's LCD displays [Connected]. You have completed the Wi-Fi Direct network setup.

### HL-L3288CDW




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

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



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

- a. Press  [Settings] > [All Settings] > [Network] > [Wi-Fi Direct] > [Group Owner], and then press [On].
  - b. Press ▲ or ▼ to select the [Push Button].
2. When the [Activate Wi-Fi Direct on other device. Then Press [OK].] message appears, turn your mobile device's Wi-Fi Direct function on (for more information, see your mobile device's user's guide). Press [OK] on your machine.
  3. Do one of the following:



- 
- If your mobile device displays a list of machines with Wi-Fi Direct enabled, select your Brother machine.
  - If your Brother machine displays a list of mobile devices with Wi-Fi Direct enabled, select your mobile device. To search for available devices again, press [Rescan].
4. When your mobile device connects successfully, the machine's LCD displays [Connected].
  5. Press [Close].



## Related Information

- [Use Wi-Fi Direct®](#)

### Related Topics:

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

## Enable/Disable Wireless LAN



>> HL-L3228CDW

>> HL-L3288CDW

### HL-L3228CDW

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

### HL-L3288CDW

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



### Related Information

- [Wireless Network Settings](#)

## Print the WLAN Report

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

>> [HL-L3228CDW](#)



>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Print Reports] option, and then press 确定.
2. Press ▲ or ▼ to select the [WLAN Report] option, and then press 确定.
3. Press 开始.

The machine will print the WLAN Report.

### HL-L3288CDW

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

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

### Related Information

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

#### Related Topics:

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

## Wireless LAN Report Error Codes

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

Error Code	Problem and Recommended Solutions
TS-01	<p>The WLAN (Wi-Fi) is not enabled.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"><li>• Enable the WLAN setting on your machine.</li><li>• If a network cable is connected to your machine, disconnect it.</li></ul>
TS-02	<p>The wireless router/access point cannot be detected.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"><li>• Make sure the wireless router/access point is on.</li><li>• Temporarily place your machine closer to the wireless router/access point when you are configuring the wireless settings.</li><li>• If your wireless router/access point is using MAC address filtering, confirm that the MAC address of the machine is allowed in the filter. You can find the MAC address by printing the Network Configuration Report.</li><li>• If you manually entered the Network Name (SSID) and security information (authentication method/encryption method), the information may be incorrect. Check the Network Name and security information again and re-enter the correct information.</li><li>• Restart your wireless router/access point. If you cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</li></ul>
TS-03	<p>The wireless enterprise network and security settings you entered may be incorrect.</p> <p>Check the following points and try to set up your wireless connection again:</p> <p>Verify the following information:</p> <ul style="list-style-type: none"><li>- Network Name (SSID) you selected to configure your machine.</li><li>- Security information you selected to configure your machine (such as the authentication method, encryption method, or User ID).</li></ul> <p>If you still cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</p>
TS-04	<p>Your machine does not support the authentication and encryption methods used by the selected wireless router/access point.</p> <p>For infrastructure mode (Most common)</p> <p>Change the authentication and encryption methods of the wireless router/access point. Your machine supports the following authentication and encryption methods:</p> <ul style="list-style-type: none"><li>• WPA-Personal: TKIP / AES</li><li>• WPA2-Personal: TKIP / AES</li><li>• WPA3-Personal: AES</li><li>• OPEN: WEP / NONE (without encryption)</li><li>• Shared key: WEP</li></ul> <p>If your issue is not solved, the Network Name (SSID) or security settings you entered may be incorrect. Check that all wireless network settings are correct for your network.</p>

Error Code	Problem and Recommended Solutions
TS-05	<p>The Network Name (SSID) and Network Key (Password) are incorrect.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"> <li>• Confirm the Network Name (SSID) and Network Key (Password).</li> <li>• If your Network Key contains upper-case and lower-case letters, make sure you type them correctly.</li> <li>• If you cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</li> <li>• If your wireless router/access point uses WEP encryption with multiple WEP keys, write down and use only the first WEP key.</li> </ul>
TS-06	<p>The wireless security information (authentication method/encryption method/Network Key (Password)) is incorrect.</p> <p>Check the following points and try to set up your wireless connection again:</p> <ul style="list-style-type: none"> <li>• Confirm the Network Key. If your Network Key contains upper-case and lower-case letters, make sure you type them correctly.</li> <li>• Confirm whether the authentication method entered and the authentication method or encryption method supported by the wireless router/access point are the same.</li> <li>• If the network key, authentication method, and encryption method have been confirmed, restart your wireless router/access point and the machine.</li> <li>• If your wireless router/access point's Stealth Mode is on, you may need to disable it to connect to the wireless network.</li> </ul> <p>If you cannot find the Network Name (SSID) and security information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</p>
TS-07	<p>The machine cannot detect a wireless router/access point that has WPS (Wi-Fi Protected Setup) enabled.</p> <p>Check the following points and try again:</p> <ul style="list-style-type: none"> <li>• To check if your wireless router/access point supports WPS, look for the WPS symbol displayed on the router/access point. For more information, see the documentation provided with your wireless router/access point.</li> <li>• To set up your wireless connection using WPS, you must configure both your machine and the wireless router/access point. For more information, see the user's guide.</li> <li>• If you do not know how to set up your wireless router/access point using WPS, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.</li> </ul>
TS-08	<p>Two or more wireless routers or access points that have WPS enabled are detected.</p> <p>Check the following points and try again:</p> <ul style="list-style-type: none"> <li>• Make sure that only one wireless router/access point within range has WPS enabled, and then try to connect again.</li> <li>• Try to connect again after a few minutes to avoid interference from other access points/routers.</li> </ul>



---

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

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

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

---



## Related Information

- [Print the WLAN Report](#)

### Related Topics:

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

## Network Features

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

## Enable/Disable Web Based Management Using the Control Panel

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)


### HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [Web Based Mgmt] option, and then press 确定.
3. Press ▲ or ▼ to select the option you want, and then press 确定.



If you enable this function, make sure you specify the connection method to use Web Based Management.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Network] > [Web Based Mgmt].
2. Press to select the option you want.



If you enable this function, make sure you specify the connection method to use Web Based Management.



### Related Information

- [Network Features](#)

#### Related Topics:

- [Access Web Based Management](#)



## 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 using the latest version of the following web browsers:
  - Microsoft Edge, Firefox, and Google Chrome™ for Windows
  - Safari, Firefox, and Google Chrome™ for Mac
  - Google Chrome™ for Android™
  - Safari and Google Chrome™ for iOS
- Ensure that JavaScript and Cookies are always enabled, regardless of which 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 your machine's IP address).

For example:

https://192.168.1.2

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



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

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



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

5. Make sure the **Proxy** checkbox is selected, and then click **Submit**.
6. In the **Proxy** field, click **Advanced Settings**.
7. Enter the proxy server information.
8. Click **Submit**.



### Related Information

- [Network Features](#)

#### Related Topics:

- [Access Web Based Management](#)

## Print the Network Configuration Report

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



- The Node Name appears on the Network Configuration Report. The default Node Name is "BRN123456abcdef" for a wired network or "BRW123456abcdef" for a wireless network (where "123456abcdef" 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

>> [HL-L3228CDW](#)



>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Print Reports] option, and then press 确定.
2. Press ▲ or ▼ to select the [Network Config] option, and then press 确定.
3. Press 开始.

The machine prints the Network Configuration Report.

### HL-L3288CDW

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



### Related Information

- [Network Features](#)

#### Related Topics:

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

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

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

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

## Configure Date and Time Using Web Based Management

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

This feature is not available in some countries.

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

For example:

https://192.168.1.2


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



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

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



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

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



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

6. Click **Submit**.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## Configure the SNTP Protocol Using Web Based Management

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

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

For example:

https://192.168.1.2


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



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

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



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

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

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

10. Click **Submit**.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## Gigabit Ethernet (Wired Network Only)

**Related Models:** HL-L3288CDW

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



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



### Related Information

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

## Configure the Gigabit Ethernet Settings Using Web Based Management

**Related Models:** HL-L3288CDW


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



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

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



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

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

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



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)
- [Print the Network Configuration Report](#)

## Reset the Network Settings to the Factory Settings

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



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

>> [HL-L3228CDW](#)


>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [Network Reset] option, and then press 确定.
3. Follow the machine's instruction to reset the network settings.

The machine will restart.

### HL-L3288CDW

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

The machine will restart.

### ✓ Related Information

- [Network Features](#)

#### Related Topics:

- [Reset Functions](#)



## Security

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

## Before Using Network Security Features

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



---

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

---



### Related Information

- [Security](#)
    - [Disable Unnecessary Protocols](#)
-

## Disable Unnecessary Protocols

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

For example:

https://192.168.1.2


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



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

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



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

5. Clear any unnecessary protocol check boxes to disable them.
6. Click **Submit**.
7. Restart your Brother machine to activate the configuration.



### Related Information

- [Before Using Network Security Features](#)

#### Related Topics:

- [Access Web Based Management](#)

## Configure Certificates for Device Security

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

- [Supported Security Certificate Features](#)
- [How to Create and Install a Certificate](#)
- [Create a Self-signed Certificate](#)
- [Create a Certificate Signing Request \(CSR\) and Install a Certificate from a Certificate Authority \(CA\)](#)
- [Import and Export the Certificate and Private Key](#)
- [Import and Export a CA Certificate](#)
- [Manage Multiple Certificates](#)

## Supported Security Certificate Features

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

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

Your machine supports the following:

- Pre-installed certificate

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



---

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.

---

- Self-signed certificate

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

- Certificate from a Certificate Authority (CA)

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

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

- Certificate Authority (CA) Certificate

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



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



### Related Information

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

## How to Create and Install a Certificate

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

### Option 1

#### Self-Signed Certificate

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

### Option 2

#### Certificate from a CA

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



#### Related Information

- [Configure Certificates for Device Security](#)

## Create a Self-signed Certificate

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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


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



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

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



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

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



### Related Information

- [Configure Certificates for Device Security](#)

#### Related Topics:

- [Access Web Based Management](#)

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

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

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



## Create a Certificate Signing Request (CSR)

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

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

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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


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



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

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



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

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



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

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

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

10. Click **Save**.



- Follow your CA's policy regarding the method to send a CSR to your CA.
  - If you are using the Enterprise root CA of Windows Server 2012/2012 R2/2016/2019/2022, we recommend using the Web Server for the certificate template to securely create the Client Certificate. If you are creating a Client Certificate for an IEEE 802.1x environment with EAP-TLS authentication, we recommend using User for the certificate template.
- 



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)
-

## Install a Certificate on Your Machine

When you receive a certificate from a Certificate Authority (CA), follow the steps below to install it on the print server:

Only a certificate issued with your machine's Certificate Signing Request (CSR) can be installed on your machine. When you want to create another CSR, make sure that the certificate is installed before creating the new CSR. Create another CSR only after installing the certificate on the machine, otherwise the CSR created before installing the new CSR 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 your 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://brn123456abcdef

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

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



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

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



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

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

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

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



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## 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 your 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://brn123456abcdef

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

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



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

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



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

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

The certificate and private key are imported to your machine.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## 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 your 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://brn123456abcdef

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

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



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

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



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

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

The certificate and private key are exported to your computer.

You can also import the certificate to your computer.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## 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 your 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://brn123456abcdef

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

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



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

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



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

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



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)



## 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 your 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://brn123456abcdef

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

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



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

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



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

5. Select the certificate you want to export and click **Export**.
6. Click **Submit**.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## Manage Multiple Certificates

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

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

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



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



### Related Information

- [Configure Certificates for Device Security](#)

## Use SSL/TLS

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

## Introduction to SSL/TLS

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

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



### Related Information

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

## Brief History of SSL/TLS

SSL/TLS was originally created to secure web traffic information, particularly data sent between web browsers and servers. SSL is now used with additional applications, such as Telnet, printer, and FTP software, in order to become a universal solution for online security. Its original design intentions are still being used today by many online retailers and banks to secure sensitive data, such as credit card numbers, customer records, etc.

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



### Related Information

- [Introduction to SSL/TLS](#)
-

## Benefits of Using SSL/TLS

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



### Related Information

- [Introduction to SSL/TLS](#)

## Manage Your Network Machine Securely Using SSL/TLS

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

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

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

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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

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



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

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



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

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



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)



## Access Web Based Management Using SSL/TLS

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



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

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



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

4. You can now access the machine using HTTPS.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## Install the Self-signed Certificate for Windows Users as Administrators

- The following steps are for Microsoft Edge. If you use another web browser, refer to your web browser's documentation or online help for instructions on how to install certificates.
- Make sure you have created your self-signed certificate using Web Based Management.

1. Right-click the **Microsoft Edge** icon, and then click **Run as administrator**.

If the **User Account Control** screen appears, click **Yes**.

2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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


3. If your connection is not private, click the **Advanced** button, and then continue to the web page.
4. If required, type the password in the **Login** field, and then click **Login**.



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

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



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

6. Click **Export**.
7. To encrypt the output file, type a password in the **Enter password** field. If the **Enter password** field is blank, your output file will not be encrypted.
8. Type the password again in the **Retype password** field, and then click **Submit**.
9. Click the downloaded file to open.
10. When the **Certificate Import Wizard** appears, click **Next**.
11. Click **Next**.
12. If required, type a password, and then click **Next**.
13. Select **Place all certificates in the following store**, and then click **Browse....**
14. Select the **Trusted Root Certification Authorities**, and then click **OK**.
15. Click **Next**.
16. Click **Finish**.
17. Click **Yes**, if the fingerprint (thumbprint) is correct.
18. Click **OK**.



### Related Information

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

### Related Topics:

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

## **Print Documents Securely Using SSL/TLS**

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

## Print Documents Using IPPS

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

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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


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



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

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



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

5. Make sure the **IPP** checkbox is selected.



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

Restart your machine to activate the configuration.

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

6. Click **HTTP Server Settings**.
7. Select the **HTTPS** checkbox in the **IPP** area, and then click **Submit**.
8. Restart your machine to activate the configuration.

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



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)

## Use SNMPv3

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

## Manage Your Network Machine Securely Using SNMPv3

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


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





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

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



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

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

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

7. Click **Submit**.



If your machine displays the protocol setting options, select the options you want.

8. Restart your machine to activate the configuration.



### Related Information

- [Use SNMPv3](#)

#### Related Topics:

- [Access Web Based Management](#)

## Use IPsec

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

## Introduction to IPsec

IPsec (Internet Protocol Security) is a security protocol that uses an optional Internet Protocol function to prevent data manipulation and ensure the confidentiality of data transmitted as IP packets. IPsec encrypts data carried over a 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, a network-connected computer sends data to and receives data from a specified device using IPsec. When 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).



---

For IPsec transmissions, the following conditions are necessary:

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

- IPsec settings

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



---

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

---



### Related Information

- [Use IPsec](#)
-



## Configure IPsec Using Web Based Management

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

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

For example:

https://192.168.1.2


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



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

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



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

5. Configure the settings.

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

6. Click **Submit**.

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

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



### Related Information

- [Use IPsec](#)

#### Related Topics:

- [Configure Certificates for Device Security](#)

- 
- Access Web Based Management
-

## 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 your machine's IP address).

For example:

https://192.168.1.2

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



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

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



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

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

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

---

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

8. Click **Submit**.



---

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

---



### Related Information

- [Use IPsec](#)

#### Related Topics:

- [Access Web Based Management](#)
-

## 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 your machine's IP address).

For example:

https://192.168.1.2

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



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

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



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

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




### Related Information



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

### Related Topics:

- [Access Web Based Management](#)

## IKEv1 Settings for an IPsec Template


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

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



## Related Information

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


## IKEv2 Settings for an IPsec Template

Option	Description
<b>Template Name</b>	Type a name for the template (up to 16 characters).
<b>Use Prefixed Template</b>	Select <b>Custom</b> , <b>IKEv2 High Security</b> , or <b>IKEv2 Medium Security</b> . The setting items are different depending on the selected template.
<b>Internet Key Exchange (IKE)</b>	<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>IKEv2</b>.</p>
<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>.</li> </ul> <hr/> <p> ESP is a protocol for carrying out encrypted communication using IPsec. ESP encrypts the payload (communicated contents) and adds additional information. The IP packet comprises the header and the encrypted payload, which follows the header. In addition to the encrypted data, the IP packet also includes information regarding the encryption method and encryption key, the authentication data, and so on.</p> <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>MD5</b>, <b>SHA1</b>, <b>SHA256</b>, <b>SHA384</b>, or <b>SHA512</b>.</li> <li>• <b>SA Lifetime</b> Specify the IKE SA lifetime. Type the time (seconds) and number of kilobytes (KByte).</li> <li>• <b>Encapsulation Mode</b> Select <b>Transport</b> or <b>Tunnel</b>.</li> <li>• <b>Remote Router IP-Address</b> Type the IP address (IPv4 or IPv6) of the remote router. Enter this information only when the <b>Tunnel</b> mode is selected.</li> </ul>



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

---



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





### Related Information

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

## Manual Settings for an IPsec Template

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

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



## Related Information

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

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

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

## What Is IEEE 802.1x Authentication?

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



### Related Information

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

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

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



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

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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

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



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

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



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

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

6. Configure the IEEE 802.1x authentication settings.



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

---

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

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

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

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

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

### Related Information

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

#### Related Topics:

- [Configure Certificates for Device Security](#)
  - [Access Web Based Management](#)
- 

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



## IEEE 802.1x Authentication Methods

### EAP-FAST

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

Your 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.

Your 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.

Your Brother machine supports the following inner authentications:

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

### EAP-TLS

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



### Related Information

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

## Use Active Directory Authentication

**Related Models:** HL-L3288CDW

- [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

**Related Models:** HL-L3288CDW

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

Active Directory Authentication offers the following feature:

Stores incoming print data

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



### Related Information

- [Use Active Directory Authentication](#)

## Configure Active Directory Authentication Using Web Based Management

**Related Models:** HL-L3288CDW

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 your machine's IP address).

For example:

https://192.168.1.2


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



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

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



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

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

Option	Description
<b>Remember User ID</b>	Select this option to save your User ID.
<b>Active Directory Server Address</b>	Type the IP address or the server name (for example: ad.example.com) of the Active Directory Server.
<b>Active Directory Domain Name</b>	Type the Active Directory domain name.
<b>Protocol &amp; Authentication Method</b>	Select the protocol and authentication method.
<b>SSL/TLS</b>	Select the <b>SSL/TLS</b> option.
<b>LDAP Server Port</b>	Type the port number to connect the Active Directory server via LDAP (available only for <b>LDAP + kerberos</b> or <b>LDAP + NTLMv2</b> authentication method).

9. Click **Submit**.



### Related Information

- [Use Active Directory Authentication](#)

### Related Topics:

- [Access Web Based Management](#)

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

**Related Models:** HL-L3288CDW

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

1. On the machine's control panel, enter your User ID.
2. Press [OK].
3. When authentication is successful, the machine's control panel unlocks, and the LCD displays the Home screen.



### Related Information

- [Use Active Directory Authentication](#)

## Use LDAP Authentication

**Related Models:** HL-L3288CDW

- [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

**Related Models:** HL-L3288CDW

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

LDAP Authentication offers the following feature:

Stores incoming print data

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



### Related Information

- [Use LDAP Authentication](#)

## Configure LDAP Authentication Using Web Based Management

Related Models: HL-L3288CDW


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



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

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



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

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

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

9. Click **Submit**.



### Related Information

- [Use LDAP Authentication](#)

### Related Topics:

- [Access Web Based Management](#)



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

**Related Models:** HL-L3288CDW

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

1. On the machine's control panel, enter your User ID and Password.
2. Press [OK].
3. When authentication is successful, the machine's control panel unlocks, and the LCD displays the Home screen.



### Related Information

- [Use LDAP Authentication](#)

## Use Secure Function Lock 3.0

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

- [Before Using Secure Function Lock 3.0](#)
- [Configure Secure Function Lock 3.0 Using Web Based Management](#)
- [Configure Public Mode for Secure Function Lock 3.0](#)
- [Additional Secure Function Lock 3.0 Features](#)

## Before Using Secure Function Lock 3.0

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

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

- **Print**

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

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


- **Color Print**

- **Page Limits (\*)**

- **Page Counters**



Touchscreen LCD models:

When Secure Function Lock is enabled, the machine automatically enters Public Mode and some of the machine's functions become restricted to authorised users only. To access the restricted machine functions, press , select your user name, and enter your password.

---



### Related Information

- [Use Secure Function Lock 3.0](#)
-

## Configure Secure Function Lock 3.0 Using Web Based Management

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

For example:

https://192.168.1.2

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



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

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



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

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



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

15. Select **User List / Restricted Functions** from the drop-down list for each user.
16. Click **Submit**.



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



### Related Information

- [Use Secure Function Lock 3.0](#)

#### Related Topics:

- [Access 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 Brother iPrint&Scan and Brother Mobile Connect.

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

For example:

https://192.168.1.2


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



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

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



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

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



### Related Information

- [Use Secure Function Lock 3.0](#)

#### Related Topics:

- [Access Web Based Management](#)

## 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.



### Related Information

- [Use Secure Function Lock 3.0](#)
-

## **Send an Email Securely**

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

## Configure Email Sending Using Web Based Management

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


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



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

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



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

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



### Related Information

- [Send an Email Securely](#)

#### Related Topics:

- [Access Web Based Management](#)



## Send an Email with User Authentication

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

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



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

### Email Server Settings

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



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



### Related Information

- [Send an Email Securely](#)

## Send an Email Securely Using SSL/TLS

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



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

### Verify Server Certificate

Under **SSL/TLS**, if you choose **SSL** or **TLS**, the **Verify Server Certificate** checkbox 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** checkbox.

### 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>	587
	<b>Server Authentication Method</b>	<b>SMTP-AUTH</b>
	<b>SSL/TLS</b>	<b>TLS</b>



### Related Information

- [Send an Email Securely](#)

#### Related Topics:

- [Configure Certificates for Device Security](#)

## Store Print Log to Network

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

## Store Print Log to Network Overview

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

The following print functions are recorded in the print log:

Print jobs from your computer



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



### Related Information

- [Store Print Log to Network](#)

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

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

For example:

https://192.168.1.2

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





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

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



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

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

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

---

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

---

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



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

8. Click **Submit** to display the **Test Print Log to Network** page.

To test your settings, click **Yes** and then go to the next step.

To skip the test, click **No**. Your settings will be submitted automatically.

9. The machine will test your settings.

10. If your settings are accepted, **Test OK** appears on the screen.

If **Test Error** appears, check all settings, and then click **Submit** to display the Test page again.



### Related Information

- [Store Print Log to Network](#)

#### Related Topics:

- [Access Web Based Management](#)
-

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

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

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

For example:

https://192.168.1.2


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



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

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



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

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

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

When the Store Print Log function has recovered, the print log is recorded as follows:

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

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

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



### Related Information

- [Store Print Log to Network](#)

---

**Related Topics:**

- [Access Web Based Management](#)
-



## Lock the Machine Settings from the Control Panel

Before turning the machine's Setting Lock on, write down and save your password. If you forget the password, you must reset all passwords stored in the machine by contacting your administrator or Brother customer service.

- [Setting Lock Overview](#)

## Setting Lock Overview

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

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

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

## Set the Setting Lock Password



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to display the [General Setup] option, and then press 确定.
2. Press ▲ or ▼ to display the [Setting Lock] option, and then press 确定.
3. Enter a four-digit number for the password.  
To enter each digit, press ▲ or ▼ to select a number, and then press 确定.
4. When the LCD displays [Verify:], re-enter the password.

### HL-L3288CDW

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



### Related Information

- [Setting Lock Overview](#)

## Change the Setting Lock Password



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to display the [General Setup] option, and then press 确定.
2. Press ▲ or ▼ to display the [Setting Lock] option, and then press 确定.
3. Press ▲ or ▼ to select the [Set Password] option, and then press 确定.
4. Enter the current four-digit password.  
To enter each digit, press ▲ or ▼ to select a number, and then press 确定.
5. Enter a new four-digit password.  
To enter each digit, press ▲ or ▼ to select a number, and then press 确定.
6. When the LCD displays [Verify:], re-enter the new password.

### HL-L3288CDW

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

### Related Information

- [Setting Lock Overview](#)

## Turn Setting Lock On


>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to display the [General Setup] option, and then press 确定.
2. Press ▲ or ▼ to display the [Setting Lock] option, and then press 确定.
3. Press 确定 when the LCD displays [On].
4. Enter the current four-digit password.  
To enter each digit, press ▲ or ▼ to select a number, and then press 确定.

### HL-L3288CDW

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



### Related Information

- [Setting Lock Overview](#)

## Use Global Network Detection Features

When you use your machine on a private network, use the Global Network Detection feature to avoid a risk from unexpected attacks from the global network.

- [Enable Global IP Address Detection](#)
- [Block Communications from the Global Network](#)

## Enable Global IP Address Detection

Use this feature to check your machine's IP address. When your machine is assigned to a global IP address, an alert is displayed on the machine.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [Global Detect] option, and then press 确定.
3. Press ▲ or ▼ to select the [Allow Detect] option, and then press 确定.
4. Press ▲ or ▼ to select [On], and then press 确定.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Network] > [Global Detect] > [Allow Detect] > [On].
2. Press .



### Related Information

- [Use Global Network Detection Features](#)

## Block Communications from the Global Network



When you enable this feature, it limits receiving jobs from devices with global IP addresses



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Network] option, and then press 确定.
2. Press ▲ or ▼ to select the [Global Detect] option, and then press 确定.
3. Press ▲ or ▼ to select the [Reject Access] option, and then press 确定.
4. Press ▲ or ▼ to select [On], and then press 确定.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Network] > [Global Detect] > [Reject Access] > [On].
2. Press .



### Related Information

- [Use Global Network Detection Features](#)



## Mobile Connect

- [AirPrint](#)
- [Mopria™ Print Service](#)
- [Brother Mobile Connect](#)
- [WeChat 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](#)

#### Related Topics:

- [AirPrint Problems](#)

## Before Using AirPrint (macOS)

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

1. Select **System Preferences** from the Apple menu.
2. Click **Printers & Scanners**.
3. Click the + icon below the Printers pane on the left.  
The **Add Printer** screen appears.
4. Do one of the following:
  - macOS v12  
Select your machine, and then select your model's name from the **Use** pop-up menu.
  - macOS v11  
Select your machine, and then select **AirPrint** from the **Use** pop-up menu.
5. Click **Add**.



### Related Information



- [AirPrint](#)

## Print Using AirPrint

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

## Print from iPad, iPhone, or iPod touch

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

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



### Related Information

- [Print Using AirPrint](#)

## Print Using AirPrint (macOS)

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

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



### Related Information

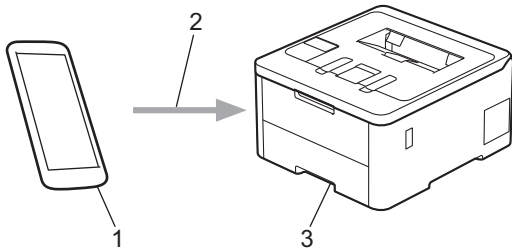
- [Print Using AirPrint](#)

#### Related Topics:

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

## Mopria™ Print Service

Mopria™ Print Service is a print feature on Android™ mobile devices developed by the Mopria Alliance™. With this service, you can connect to the same network as your machine and print without additional setup.



1. Android™ Mobile Device
2. Wi-Fi® Connection
3. Your Machine

The Mopria™ Print Service must be downloaded from a search engine and installed on your Android™ device. Before using this Mopria™ feature, make sure you enable it on your mobile device.

### Related Information

- [Mobile Connect](#)



## Brother Mobile Connect

Use Brother Mobile Connect to print from your mobile device.

- For Android™ devices:

Brother Mobile Connect allows you to use your Brother machine's features directly from your Android™ device.

Go to your model's **Downloads** page at [support.brother.com](http://support.brother.com) to download Brother Mobile Connect.

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

Brother Mobile Connect allows you to use your Brother machine's features directly from your iOS or iPadOS device.

Download and install Brother Mobile Connect from the App Store.



### Related Information

- [Mobile Connect](#)

#### Related Topics:

- [Access Brother iPrint&Scan \(Windows/Mac\)](#)
-

## WeChat Print

Your machine can print through an app for WeChat, which is called "兄弟畅享印". "兄弟畅享印" lets you wirelessly print photos and documents without installing a driver.

- Connect your machine before using WeChat print function for the first time. Go to [www.brother.cn/minisite/bcnactivity/FAQ.html](http://www.brother.cn/minisite/bcnactivity/FAQ.html) for operation instructions.
- You need to install and set up Brother Mobile Connect on your mobile device. For more information, see *Related Information*.
- 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.

1. Start Brother Mobile Connect on your mobile device.
2. Tap **WeChat Print** on the Home screen.
3. Follow the on-screen instructions.
4. When the **Online Functions Settings** screen appears, tap the **Enable** button, and then follow the on-screen instructions.



(HL-L3288CDW)

You can also configure WeChat print settings from your machine. Press [Functions] > [Apps] > [Online Functions], and then follow the on-screen instructions.

If the End-User License Agreement (EULA) screen appears, follow the on-screen instructions.



### Related Information

- [Mobile Connect](#)

#### Related Topics:

- [Brother Mobile Connect](#)
- [Configure the Proxy Server Settings Using Web Based Management](#)

## Brother iPrint&Scan

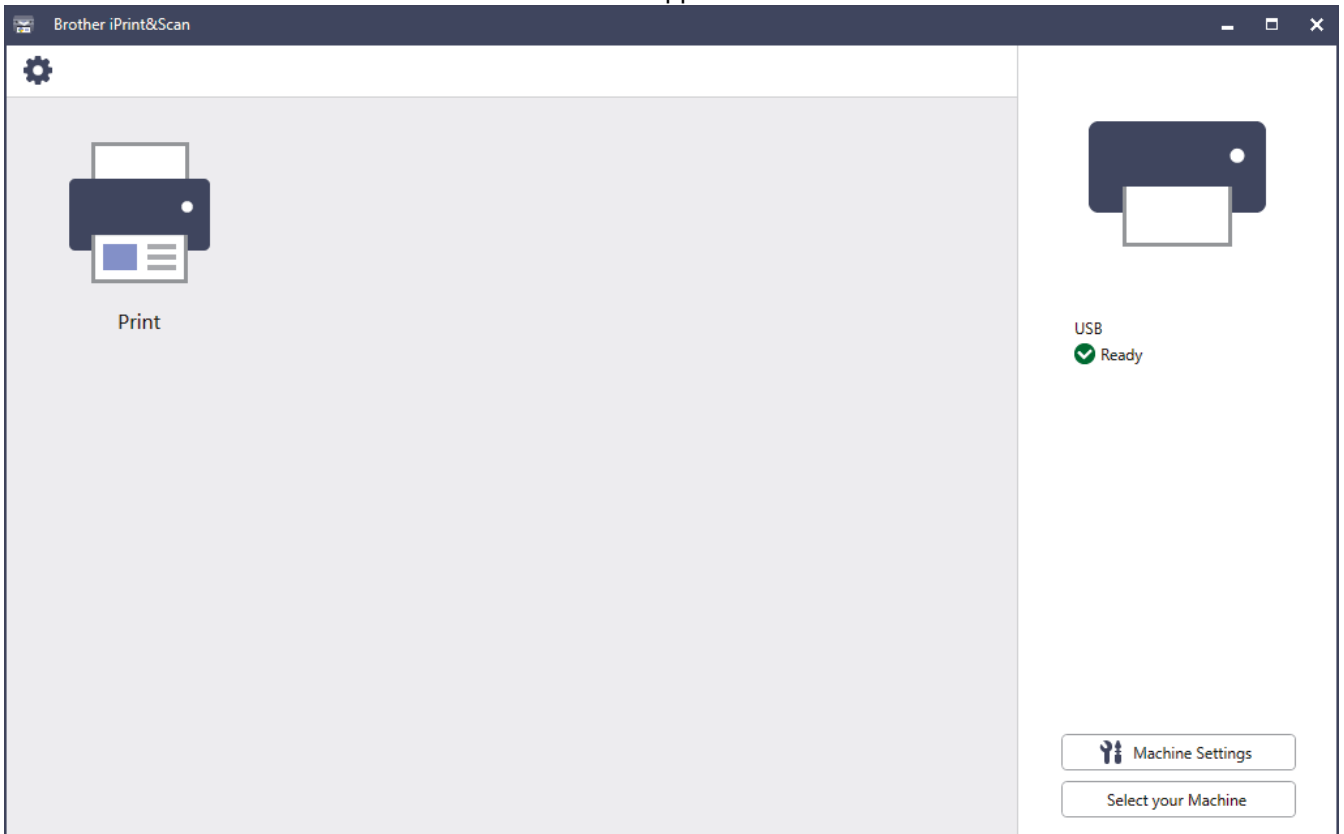
- [Access Brother iPrint&Scan \(Windows/Mac\)](#)

## Access Brother iPrint&Scan (Windows/Mac)

Use Brother iPrint&Scan for Windows and Mac to print from your computer.

The following screen shows an example of Brother iPrint&Scan for Windows. The actual screen may differ depending on the version of the application.

- For Windows  
Go to your model's **Downloads** page at [support.brother.com/downloads](http://support.brother.com/downloads) to download the latest application.
- For Mac  
Download and install Brother iPrint&Scan from the App Store.



If prompted, install the driver and software necessary to use your machine. Download the installer from your model's **Downloads** page at [support.brother.com/downloads](http://support.brother.com/downloads).

### ✓ Related Information

- [Brother iPrint&Scan](#)

#### Related Topics:

- [Brother Mobile Connect](#)

## Troubleshooting

Use this section to resolve typical problems you may encounter when using your machine. You can correct most problems yourself.

### IMPORTANT

For technical help, you must call Brother customer service or your local Brother dealer.



If you need additional help, visit [support.brother.com](http://support.brother.com).

First, check the following:

- The machine's power cord is connected correctly and the machine's power is on. See the *Quick Setup Guide*.
- All of the protective materials have been removed. See the *Quick Setup Guide*.
- Paper is loaded correctly in the paper tray.
- The interface cables are securely connected to the machine and the computer, or the wireless connection is set up on both the machine and your computer.
- Error and maintenance messages

If you did not solve the problem with the checks, identify the problem and then see *Related Information*.



### Related Information

- [Error and Maintenance Messages](#)
- [Paper Jams](#)
- [Printing Problems](#)
- [Improve the Print Quality](#)
- [Network Problems](#)
- [AirPrint Problems](#)
- [Other Problems](#)
- [Check the Machine Information](#)
- [Reset Functions](#)

## Error and Maintenance Messages

As with any sophisticated office product, errors may occur and supply items may have to be replaced. If this happens, your machine identifies the error or required routine maintenance and shows the appropriate message. The most common error and maintenance messages are shown in the table.



Follow the instructions in the **Action** column to solve the error and remove the message.

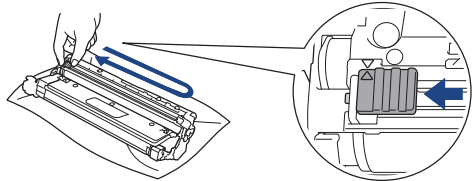
You can correct most errors and perform routine maintenance by yourself. If you need more tips: Visit [support.brother.com/faqs](http://support.brother.com/faqs).


>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)


### HL-L3228CDW

Error Message	Cause	Action
2-sided Disabled	The back cover of the machine is not closed completely.	Close the back cover of the machine until it locks in the closed position.
	The 2-sided tray is not installed completely.	Install the 2-sided tray firmly in the machine.
Access Denied	The function you want to use is restricted by Secure Function Lock 3.0.	Ask your administrator to check your Secure Function Lock Settings.
Belt End Soon	The belt unit is near the end of its life.	Order a new belt unit before the LCD displays Replace Belt.
Calibrate	Calibration failed.	<ul style="list-style-type: none"> <li>Press and hold down  to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour calibration again using the control panel.</li> <li>Install a new belt unit.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Cannot Detect	Your machine cannot detect the toner cartridge.	<p>Remove the toner cartridge and drum unit assembly for the colour that is indicated on the LCD. Take out the toner cartridge, and put it back into the drum unit again. Re-install the toner cartridge and drum unit assembly back in the machine.</p> <p><i>See Related Information: Replace the Toner Cartridge.</i></p>
Cannot Print ###	The machine has a mechanical problem.	<ul style="list-style-type: none"> <li>Press and hold  to turn the machine off, wait a few minutes, and then turn it on again.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Cartridge Error	The toner cartridge is not installed correctly.	<p>Remove the toner cartridge and drum unit assembly for the colour that is indicated on the LCD. Take out the toner cartridge, and put it back into the drum unit again. Re-install the toner cartridge and drum unit assembly back in the machine.</p> <p>If the problem continues, contact Brother customer service or your local Brother dealer.</p>

Error Message	Cause	Action
Condensation	Condensation may have formed inside the machine after a room temperature change.	Leave the machine turned on. Wait for 30 minutes with the top cover in the open position. Then turn off the machine and close the cover. Turn it on again.
Cooling Down	The temperature inside the machine is too hot. The machine pauses its current print job and goes into Cooling Down mode.	Wait until the machine has finished cooling down. Make sure all vents on the machine are clear of obstructions. When the machine has cooled down, it will resume printing.
Cover is Open	The top cover is not completely closed.	Open and then firmly close the top cover of the machine.
	The fuser cover is not completely closed.	Close the fuser cover located under the back cover of the machine.
Drum !	The corona wire on the drum unit must be cleaned.	Clean the corona wire on the drum unit.  <i>See Related Information: Clean the Corona Wires.</i> If the problem continues, replace the drum unit with a new one.
Drum End Soon	The drum unit is near the end of its life.	Order a new drum unit before the LCD displays <i>Replace Drum</i> .
Drum Stop	It is time to replace the drum unit.	Replace the drum unit. <i>See Related Information: Replace the Drum Unit.</i>
Jam 2-sided	The paper is jammed in the 2-sided tray or inside the back cover.	Remove the 2-sided tray and open the back cover to pull out all jammed paper.
Jam Inside	The paper is jammed inside the machine.	Open the top cover, remove the toner cartridge and drum unit assemblies, and gently remove the jammed paper. Reinstall the toner cartridge and drum unit assemblies into the machine. Close the top cover.
Jam Manual Feed	The paper is jammed in the manual feed slot of the machine.	Gently remove the jammed paper from in and around the manual feed slot. Reload the paper into the manual feed slot, and then press <b>开始</b> .
Jam Rear	The paper is jammed in the back of the machine.	Open the fuser cover and gently remove the jammed paper. Close the fuser cover.
Jam Tray 1	The paper is jammed in the indicated paper tray.	Pull out the paper tray and gently remove all jammed paper.
Limit Exceeded	The print limit set in Secure Function Lock 3.0 was reached.	Ask your administrator to check your Secure Function Lock Settings.
Manual Feed	<b>Manual</b> was selected as the paper source in the printer driver, but there is no paper in the manual feed slot.	Place paper in the manual feed slot.



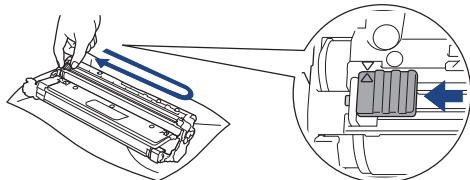
Error Message	Cause	Action
Media Mismatch	The media type specified in the printer driver differs from the paper type specified in the machine's menu.	Load the correct type of paper in the tray, and then select the correct media type in the Paper Type setting on the machine.
No Belt Unit	The belt unit is not installed or not installed correctly.	Reinstall the belt unit.
No Drum Unit	The drum unit is not installed correctly.	Reinstall the toner cartridge and drum unit assembly.
No Paper T1	The machine failed to feed paper from the indicated paper tray.	Do one of the following: <ul style="list-style-type: none"> <li>• Refill paper in the paper tray indicated on the LCD. Make sure the paper guides are set to the correct size.</li> <li>• If paper is in the tray, remove it and load it again. Make sure the paper guides are set to the correct size.</li> <li>• Do not overfill the paper tray.</li> </ul>
No Toner	The toner cartridge is not installed or not installed correctly.	Remove the toner cartridge and drum unit assembly. Remove the toner cartridge from the drum unit, and reinstall the toner cartridge back into the drum unit. Reinstall the toner cartridge and drum unit assembly back in the machine. If the problem continues, replace the toner cartridge.
No Tray T1	The paper tray is not installed or not installed correctly.	Reinstall the paper tray indicated on the LCD.
No Waste Toner	The waste toner box is not installed or not installed correctly.	Reinstall the waste toner box.
Out of Memory	The machine's memory is full.	Press and hold <b>开始</b> for about two seconds and reduce the print resolution.
Print Data Full	The machine's memory is full.	Press <b>取消</b> and delete the previously stored secure print data.
Registration	Registration failed.	<ul style="list-style-type: none"> <li>• If the error continues, press and hold down  to turn the machine off. Wait a few seconds, and then turn on the machine again. Perform the colour registration using the control panel.</li> <li>• Install a new belt unit.</li> <li>• If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Replace Belt	It is time to replace the belt unit.	Replace the belt unit with a new one. <i>See Related Information: Replace the Belt Unit.</i>
Replace Drum	It is time to replace the drum unit.	Replace the drum unit for the colour indicated on the LCD. <i>See Related Information: Replace the Drum Unit.</i>
	If this message is displayed even after replacing the drum unit with new one, the drum unit counter was not reset.	Reset the drum unit counter. <i>See Related Information: Replace the Drum Unit.</i>








Error Message	Cause	Action
Replace Toner	The toner cartridge is at the end of its life. The machine stops all print operations.	Replace the toner cartridge for the colour indicated on the LCD. <i>See Related Information: Replace the Toner Cartridge.</i>
Replace WT Box	It is time to replace the waste toner box.	Replace the waste toner box with a new one. <i>See Related Information: Replace the Waste Toner Box.</i>
Self-Diagnostic	The temperature of the fuser unit does not rise to a specified temperature within the specified time.	Press and hold  to turn the machine off, wait a few seconds, and then turn it on again. Leave the machine idle for 15 minutes with the power on.
	The fuser unit is too hot.	
Size Error	The paper size defined in the printer driver is not supported by the defined tray.	Choose a paper size supported by the defined tray.
Size Error DX	The paper size specified in the machine's paper size setting is not available for automatic 2-sided printing.	Press <b>开始</b> . Load the correct size of paper in the tray and set the tray for that paper size.
	The paper in the tray is not the correct size and is not available for automatic 2-sided printing.	Choose a paper size supported by 2-sided printing. Paper size available for automatic 2-sided printing is A4.
Size Mismatch	The paper in the tray is not the correct size.	Load the correct size of paper in the tray and set the size of paper for the tray. Press <b>开始</b> .
Toner Error	One or more toner cartridges are not installed or not installed correctly.	Pull out the drum units. Remove all the toner cartridges, and then put them back into the drum units.
Toner Low: BK Toner Low: C Toner Low: M Toner Low: Y (BK=Black, C=Cyan, M=Magenta, Y=Yellow.)	If the LCD displays this message, you can still print. The toner cartridge is near the end of its life.	Order a new toner cartridge before the LCD displays <i>Replace Toner</i> .
WT Box End Soon	The waste toner box is almost full.	Order a new waste toner box before the LCD displays <i>Replace WT Box</i> .

## HL-L3288CDW

Error Message	Cause	Action
2-sided Disabled	The back cover of the machine is not closed completely.	Close the back cover of the machine until it locks in the closed position.
	The 2-sided tray is not installed completely.	Install the 2-sided tray firmly in the machine.
Access Denied	The function you want to use is restricted by Secure Function Lock 3.0.	Ask your administrator to check your Secure Function Lock Settings.

Error Message	Cause	Action
Calibration	Calibration failed.	<ul style="list-style-type: none"> <li>Press and hold down  to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour calibration again using the LCD.</li> <li>Install a new belt unit.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Cannot Detect	Your machine cannot detect the toner cartridge.	<p>Remove the toner cartridge and drum unit assembly for the colour that is indicated on the LCD. Take out the toner cartridge, and put it back into the drum unit again. Re-install the toner cartridge and drum unit assembly back in the machine.</p> <p><i>See Related Information: Replace the Toner Cartridge.</i></p>
Cannot Print ##	The machine has a mechanical problem.	<ul style="list-style-type: none"> <li>Press and hold  to turn the machine off, wait a few minutes, and then turn it on again.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Cartridge Error	The toner cartridge is not installed correctly.	<p>Remove the toner cartridge and drum unit assembly for the colour that is indicated on the LCD. Take out the toner cartridge, and put it back into the drum unit again. Install the toner cartridge and drum unit assembly back in the machine.</p> <p>If the problem continues, contact Brother customer service or your local Brother dealer.</p>
Condensation	Condensation may have formed inside the machine after a room temperature change.	Leave the machine turned on. Wait for 30 minutes with the top cover in the open position. Then turn off the machine and close the cover. Turn it on again.
Cooling Down	The temperature inside the machine is too high. The machine pauses its current print job and goes into cooling down mode.	<p>Wait until the machine has finished cooling down. Make sure all vents on the machine are clear of obstructions.</p> <p>When the machine has cooled down, it will resume printing.</p>
Cover is Open	The top cover is not completely closed.	Open and then firmly close the top cover of the machine.
	The fuser cover is not completely closed.	Close the fuser cover located under the back cover of the machine.
Drum !	The corona wire on the drum unit must be cleaned.	<p>Clean the corona wire on the drum unit.</p>  <p><i>See Related Information: Clean the Corona Wires.</i></p> <p>If the problem continues, replace the drum unit with a new one.</p>

Error Message	Cause	Action
Drum Stop	It is time to replace the drum unit.	Replace the drum unit. <i>See Related Information: Replace the Drum Unit.</i>
Jam 2-sided	The paper is jammed in the 2-sided tray or inside the back cover.	Remove the 2-sided tray and open the back cover to pull out all jammed paper.
Jam Inside	The paper is jammed inside the machine.	Open the top cover, remove the toner cartridge and drum unit assemblies, and gently remove the jammed paper. Reinstall the toner cartridge and drum unit assemblies into the machine. Close the top cover.
Jam Manual Feed	The paper is jammed in the manual feed slot of the machine.	Gently remove the jammed paper from in and around the manual feed slot. Reload the paper into the manual feed slot, and then press <i>Retry</i> .
Jam Rear	The paper is jammed in the back of the machine.	Open the fuser cover and gently remove the jammed paper. Close the fuser cover. If the error message remains, press <i>Retry</i> .
Jam Tray1	The paper is jammed in the indicated paper tray.	Pull out the paper tray and gently remove all jammed paper as shown in the animation on the LCD.
Limit Exceeded	The print limit set in Secure Function Lock 3.0 was reached.	Ask your administrator to check your Secure Function Lock Settings.
Manual Feed	<b>Manual</b> was selected as the paper source in the printer driver, but there is no paper in the manual feed slot.	Place paper in the manual feed slot.
Media Type Mismatch	The media type specified in the printer driver differs from the paper type specified in the machine's menu.	Load the correct type of paper in the tray indicated on the LCD, and then select the correct media type in the Paper Type setting on the machine.
No Belt Unit	The belt unit is not installed or not installed correctly.	Reinstall the belt unit.
No Drum Unit	The drum unit is not installed correctly.	Reinstall the toner cartridge and drum unit assembly.
No Paper Tray1	The machine failed to feed paper from the indicated paper tray.	Do one of the following: <ul style="list-style-type: none"> <li>• Refill paper in the paper tray indicated on the LCD. Make sure the paper guides are set to the correct size.</li> <li>• If paper is in the tray, remove it and load it again. Make sure the paper guides are set to the correct size.</li> <li>• Do not overfill the paper tray.</li> </ul>
No Toner	The toner cartridge is not installed or not installed correctly.	Remove the toner cartridge and drum unit assembly. Remove the toner cartridge from the drum unit, and reinstall the toner cartridge back into the drum unit. Reinstall the toner cartridge and drum unit assembly back in the machine. If the problem continues, replace the toner cartridge.
No Tray1	The paper tray is not installed or not installed correctly.	Reinstall the paper tray indicated on the LCD.
No Waste Toner	The waste toner box is not installed or not installed correctly.	Reinstall the waste toner box.

Error Message	Cause	Action
Out of Memory	The machine's memory is full.	Press  and reduce the print resolution.
Print Data Full	The machine's memory is full.	Press  and delete the previously stored secure print data.
Registration	Registration failed.	<ul style="list-style-type: none"> <li>Press and hold down  to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour registration again using the LCD.</li> <li>Install a new belt unit.</li> <li>If the problem continues, contact Brother customer service or your local Brother dealer.</li> </ul>
Replace Toner	The toner cartridge is at the end of its life. The machine stops all print operations.	Replace the toner cartridge for the colour indicated on the LCD. See <i>Related Information: Replace the Toner Cartridge.</i>
Replace WT Box	It is time to replace the waste toner box.	Replace the waste toner box with a new one. See <i>Related Information: Replace the Waste Toner Box.</i>
Screen Init. Fail	The touchscreen was pressed before the power on initialisation was completed.	Make sure nothing is touching the touchscreen.
	Debris may be stuck between the lower part of the touchscreen and its frame.	Insert a piece of stiff paper between the lower part of the touchscreen and its frame and slide it back and forth to push out any debris.
Self-Diagnostic	The temperature of the fuser unit does not rise to a specified temperature within the specified time.	Press and hold  to turn the machine off, wait a few seconds, and then turn it on again. Leave the machine idle for 15 minutes with the power on.
	The fuser unit is too hot.	
Size Error	The paper size defined in the printer driver is not supported by the defined tray.	Choose a paper size supported by the defined tray.
Size Error 2-sided	The paper size specified in the machine's paper size setting is not available for automatic 2-sided printing.	Press  (if required). Load the correct size of paper in the tray and set the tray for that paper size.
	The paper in the tray is not the correct size and is not available for automatic 2-sided printing.	Choose a paper size supported by 2-sided printing. Paper size available for automatic 2-sided printing is A4.
Size Mismatch	The paper in the tray is not the correct size.	Load the correct size of paper in the tray and set the size of paper for the tray. Press <code>Retry</code> .
Supplies Belt End Soon	The belt unit is near the end of its life.	Order a new belt unit before the LCD displays <code>Replace Belt</code> .
Supplies Drum End Soon	The drum unit is near the end of its life.	Order a new drum unit before the LCD displays <code>Replace Drum</code> .
Supplies Replace Belt	It is time to replace the belt unit.	Replace the belt unit with a new one. See <i>Related Information: Replace the Belt Unit.</i>

Error Message	Cause	Action
Supplies Replace Drum	It is time to replace the drum unit.	Replace the drum unit for the colour indicated on the LCD. <i>See Related Information: Replace the Drum Unit.</i>
	If this message is displayed even after replacing the drum unit with new one, the drum unit counter was not reset.	Reset the drum unit counter. <i>See Related Information: Replace the Drum Unit.</i>
Supplies Toner Low: X (X indicates the toner cartridge or drum unit colour that is near the end of its life. BK=Black, C=Cyan, M=Magenta, Y=Yellow.)	If the LCD displays this message, you can still print. The toner cartridge is near the end of its life.	Order a new toner cartridge before the LCD displays <code>Replace Toner</code> .
Supplies WT Box End Soon	The waste toner box is almost full.	Order a new waste toner box before the LCD displays <code>Replace WT Box</code> .
Toner Error	One or more toner cartridges are not installed or not installed correctly.	Pull out the drum units. Remove all the toner cartridges, and then put them back into the drum units.



## Related Information

- [Troubleshooting](#)

### Related Topics:

- [Clean the Corona Wires](#)
- [Replace the Toner Cartridge](#)
- [Replace the Drum Unit](#)
- [Replace the Belt Unit](#)
- [Replace the Waste Toner Box](#)

## Paper Jams

Always remove the remaining paper from the paper tray, fan and straighten the stack when you are adding new paper. This helps prevent paper jams.

- [Clear Paper Jams](#)
- [Paper is Jammed in the Manual Feed Slot](#)
- [Paper is Jammed in the Paper Tray](#)
- [Paper is Jammed in the Back of the Machine](#)
- [Paper is Jammed Inside the Machine](#)
- [Paper is Jammed in the 2-sided Tray](#)

## Clear Paper Jams

If paper is jammed or multiple sheets of paper are fed together frequently, do the following:

- Clean the paper pick-up rollers and the separator pad of paper trays.  
*See Related Information: Clean the Paper Pick-up Rollers.*
- Load paper correctly in the tray.  
*See Related Information: Load Paper.*
- Set the correct paper size and paper type on your machine.  
*See Related Information: Paper Settings.*
- Set the correct paper size and paper type on your computer.  
*See Related Information: Print a Document (Windows).*  
*See Related Information: Print Using AirPrint.*
- Use the recommended paper.  
*See Related Information: Using Special Paper.*  
*See Related Information: Recommended Print Media.*



### Related Information

- [Paper Jams](#)

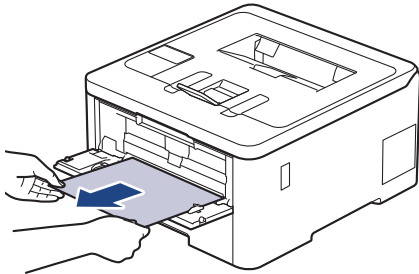
#### Related Topics:

- [Clean the Paper Pick-up Rollers](#)
- [Print Using AirPrint](#)
- [Load Paper](#)
- [Paper Settings](#)
- [Print a Document \(Windows\)](#)
- [Using Special Paper](#)
- [Recommended Print Media](#)

## Paper is Jammed in the Manual Feed Slot

If the machine's control panel or the Status Monitor indicates that there is a jam in the machine's manual feed slot, follow these steps:

1. Gently remove any paper that is jammed in or around the manual feed slot.



2. Reload the paper into the manual feed slot.
3. Do one of the following:
  - HL-L3228CDW  
Press **开始** to resume printing.
  - HL-L3288CDW  
Press [Retry] to resume printing.



### Related Information

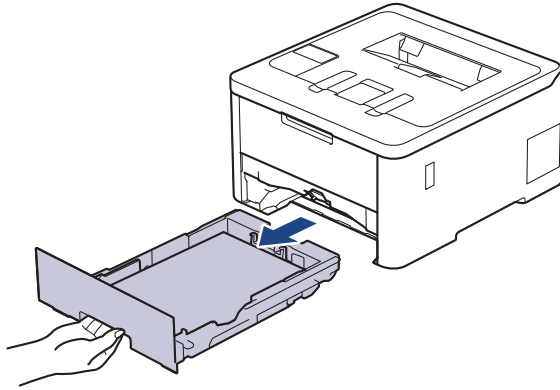
- [Paper Jams](#)



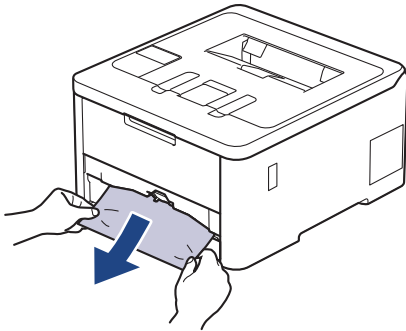
## Paper is Jammed in the Paper Tray

If the machine's control panel or the Status Monitor indicates that there is a jam in the paper tray, follow these steps:

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

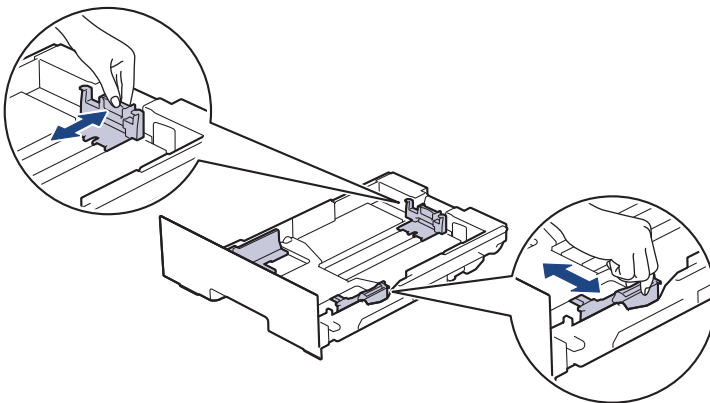


2. Slowly pull out the jammed paper.



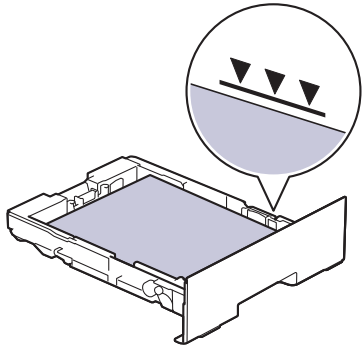
Pulling the jammed paper downwards using both hands allows you to remove the paper more easily.

3. Fan the stack of paper to prevent further jams, and slide the paper guides to fit the paper size. Load paper in the paper tray.



---

4. Make sure the paper is below the maximum paper mark (▼▼▼).



5. Put the paper tray firmly back into the machine.



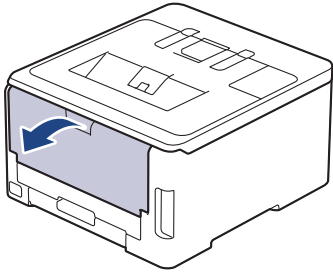
### Related Information

- [Paper Jams](#)

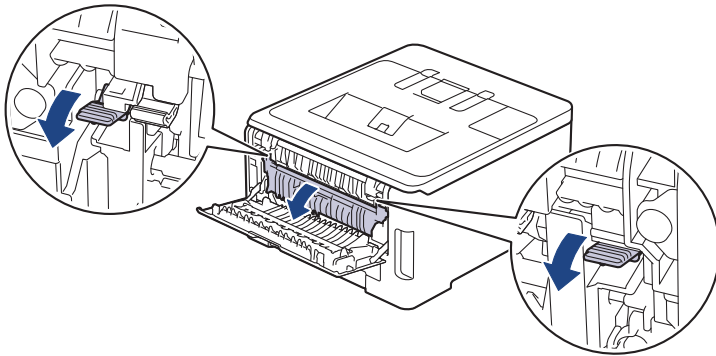
## Paper is Jammed in the Back of the Machine

If the machine's control panel or the Status Monitor indicates that there is a jam in the back of the machine (Jam Rear), do the following:

1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Open the back cover.



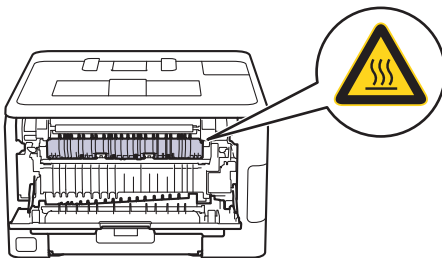
3. Pull the green tabs at the left and right sides towards you to release the fuser cover.



### WARNING

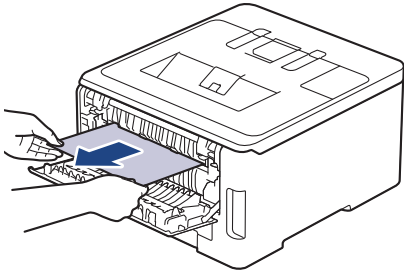
#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.

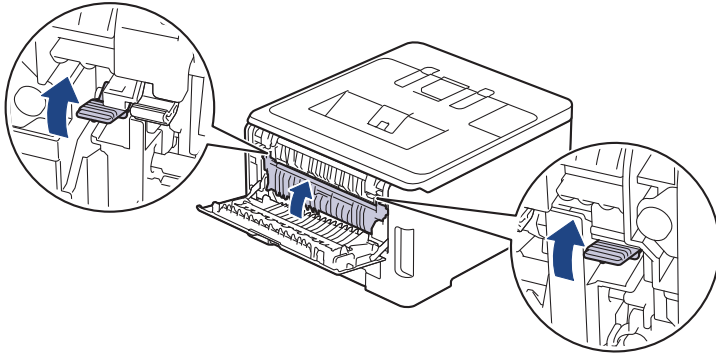


If the grey envelope levers inside the back cover are pulled down to the envelope position, lift these levers to the original position before pulling the green tabs down.

- 
4. Use both hands to gently pull the jammed paper out of the fuser unit.



5. Close the fuser cover.



---

If you print on envelopes, pull down the grey envelope levers to the envelope position again before printing.

---

6. Close the back cover until it locks in the closed position.



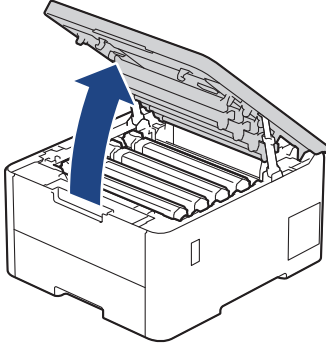
### Related Information

- [Paper Jams](#)
-

## Paper is Jammed Inside the Machine

If the machine's control panel or the Status Monitor indicates that there is a jam inside the machine, follow these steps:

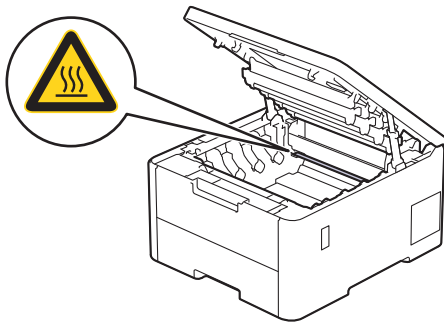
1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Open the top cover until it locks in the open position.



### WARNING

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



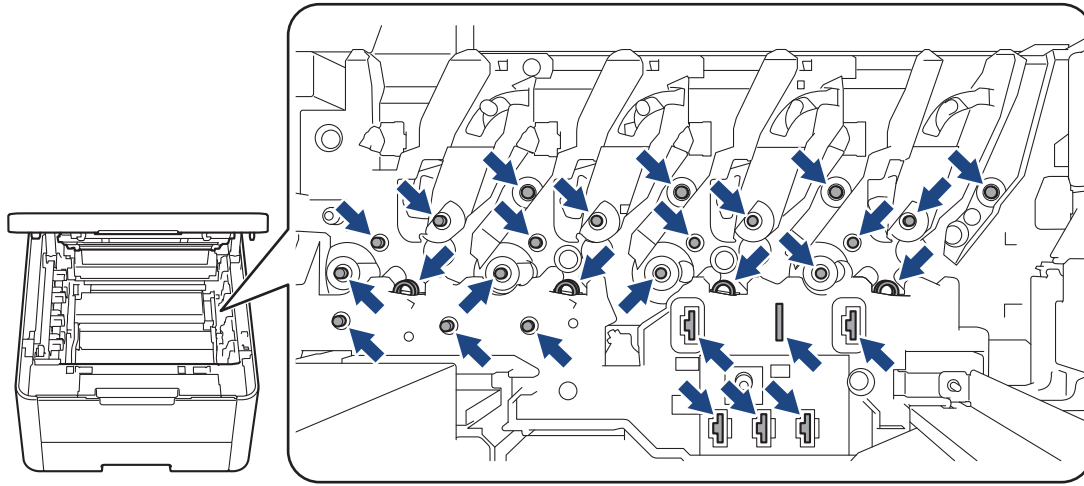
3. Remove all of the toner cartridge and drum unit assemblies.

### CAUTION

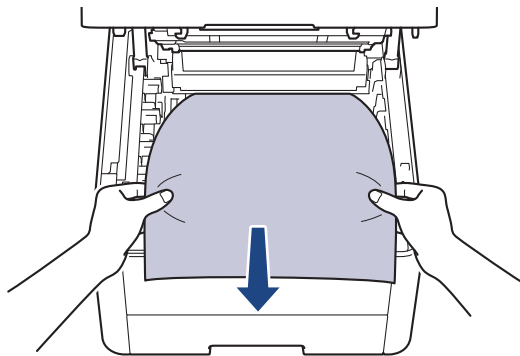
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

### IMPORTANT

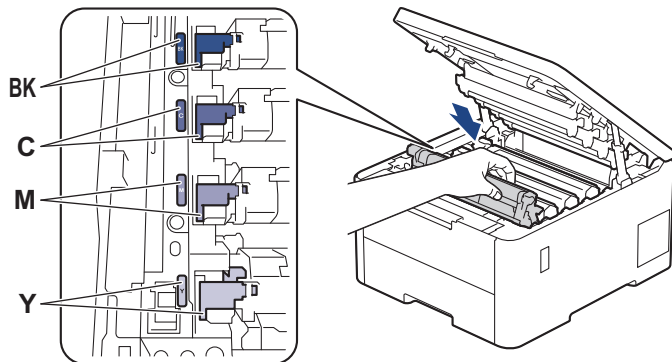
To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



4. Gently remove the jammed paper slowly.



5. Reinsert each toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine for all four toner cartridge and drum unit assemblies.



6. Close the machine's top cover.



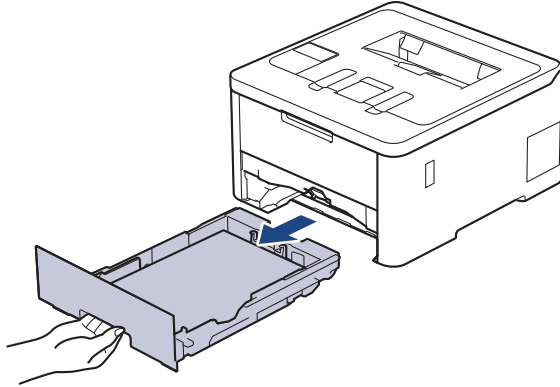
### Related Information

- [Paper Jams](#)

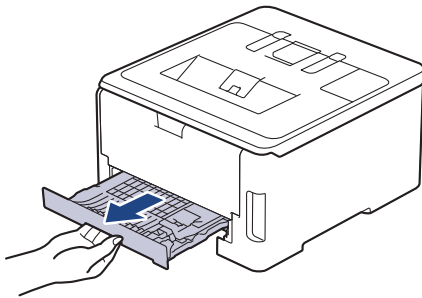
## Paper is Jammed in the 2-sided Tray

If the machine's control panel or the Status Monitor indicates that there is a jam in the 2-sided paper tray, follow these steps:

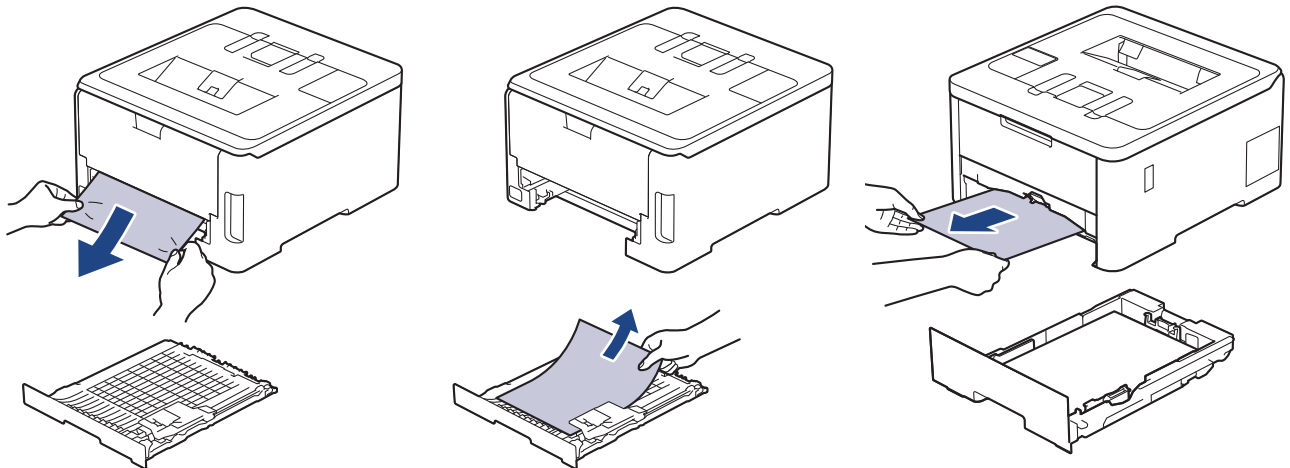
1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Pull the paper tray completely out of the machine.



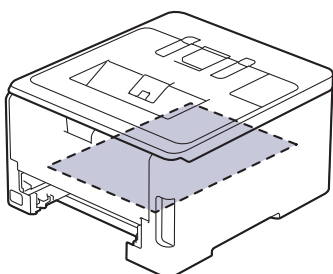
3. At the back of the machine, pull the 2-sided tray completely out of the machine.



4. Pull the jammed paper out of the machine or out of the 2-sided tray.

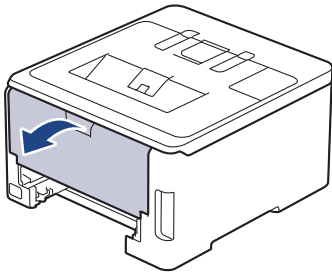


5. Remove paper that may have jammed under the machine due to static electricity.



---

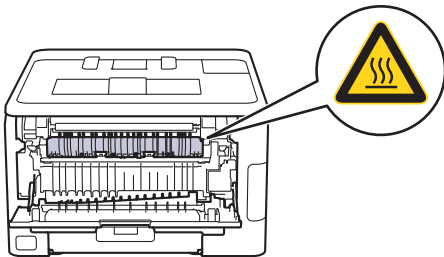
6. If paper is not caught inside the 2-sided tray, open the back cover.



## WARNING

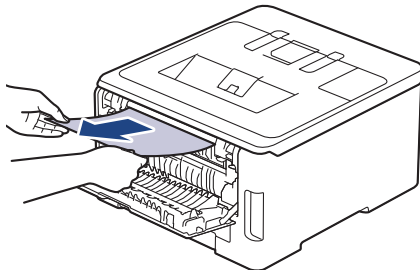
### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



---

7. Use both hands to gently pull the jammed paper out of the back of the machine.



8. Close the back cover until it locks in the closed position.
9. Put the 2-sided tray firmly back in the rear of the machine.
10. Put the paper tray firmly back in the front of the machine.




## Related Information

- [Paper Jams](#)



## Printing Problems

If, after reading the information in this table, you still need help, see the latest troubleshooting tips at [support.brother.com/faqs](http://support.brother.com/faqs).

Difficulties	Suggestions
No printout	<p>Check the machine is not in Power Off mode.</p> <p>If the machine is in Power Off mode, press , and then send the print data again.</p> <p>Check that the correct printer driver has been installed and selected.</p> <p>Check to see if the Status Monitor or the machine's control panel displays an error.</p> <p>Check that the machine is online:</p> <ul style="list-style-type: none"> <li>• Windows 11           <p>Click  &gt; <b>All apps &gt; Windows Tools &gt; Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>. Right-click your model's icon, and click <b>See what's printing</b>. If printer driver options appear, select your printer driver. Click <b>Printer</b> in the menu bar and make sure <b>Use Printer Offline</b> is not selected.</p> </li> <li>• Windows 10, Windows Server 2016, Windows Server 2019, and Windows Server 2022           <p>Click  &gt; <b>Windows System &gt; Control Panel</b>. In the <b>Hardware and Sound (Hardware)</b> group, click <b>View devices and printers</b>. Right-click your model's 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 that <b>Use Printer Offline</b> is not selected.</p> </li> <li>• Windows Server 2012 R2           <p>Click <b>Control Panel</b> on the <b>Start</b> screen. In the <b>Hardware</b> group, click <b>View devices and printers</b>. Right-click your model's 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.</p> </li> <li>• Windows Server 2012           <p>Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings &gt; Control Panel &gt; Hardware &gt; View devices and printers</b>. Right-click your model's 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 that <b>Use Printer Offline</b> is not selected.</p> </li> </ul>
The machine is not printing or has stopped printing.	<p>Cancel the print job and clear it from the machine's memory. The printout may be incomplete. Send the print data again.</p> <p>See <i>Related Information:Cancel a Print Job</i>.</p>
The headers or footers appear when the document displays on the screen but they do not show up when it 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>

Difficulties	Suggestions
The machine prints unexpectedly or it prints garbage.	Cancel the print job and clear it from the machine's memory. The printout may be incomplete. Send the print data again. <i>See Related Information:Cancel a Print Job.</i>
	Check the settings in your application to make sure they are set up to work with your machine.
	Confirm that the Brother printer driver is selected in your application's Print window.
The machine prints the first couple of pages correctly, then some pages have missing text.	Check the settings in your application to make sure they are set up to work with your machine.
	Your machine is not receiving all of the data sent from the computer. Make sure you connected the interface cable correctly.
The machine does not print on both sides of the paper even though the printer driver setting is 2-sided and the machine supports automatic 2-sided printing.	Check the paper size setting in the printer driver. You must select A4 paper. Supported paper weight is 60 to 105 g/m <sup>2</sup> .
Print speed is too slow.	Reduce the resolution in the printer driver.
	If you have enabled Quiet Mode, disable it in the printer driver or the machine's menu.
	When printing continuously, the printing speed may be automatically reduced to lower the temperature inside the machine.
The machine does not feed paper.	If there is paper in the paper tray, make sure it is straight. If the paper is curled, straighten it. Sometimes it is helpful to remove the paper, turn the stack over and place it back in the paper tray.
	Fan the stack of paper well and place it back to the paper tray.
	Reduce the amount of paper in the paper tray, and then try again.
	(For models with Manual Feed Slot) Make sure <b>Manual</b> is not selected for <b>Paper Source</b> in the printer driver.
	Clean the paper pick-up rollers.
The machine does not feed paper from the Manual feed slot. (For models with Manual Feed Slot)	Use both hands to push one sheet of paper firmly into the manual feed slot until the top edge of the paper presses against the paper feed rollers. Continue pressing the paper against the rollers until the machine grabs the paper and pulls it in further.
	Put only one sheet of paper in the manual feed slot.
	Make sure <b>Manual</b> is selected as <b>Paper Source</b> in the printer driver.
The machine does not feed envelopes.	Load one envelope at a time in the manual feed slot. Your application must be set to print the envelope size you are using. This is usually done in the Page Setup or Document Setup menu of your application.
Print position is misaligned with the preprinted objects.	Adjust the print position using the Print Position setting for each paper tray.



## Related Information

- [Troubleshooting](#)

### Related Topics:

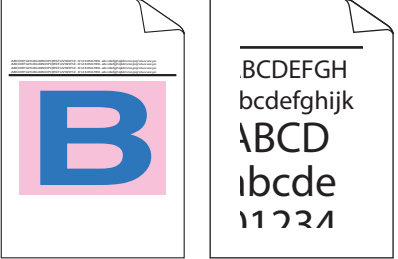
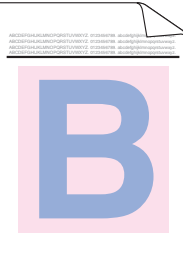
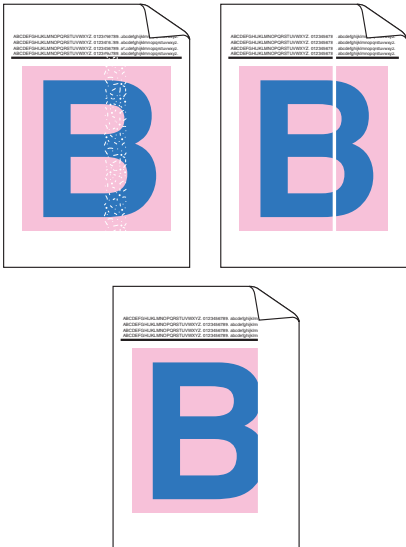
- [Monitor the Status of the Machine from Your Computer \(Windows\)](#)

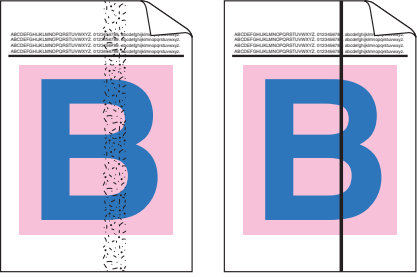
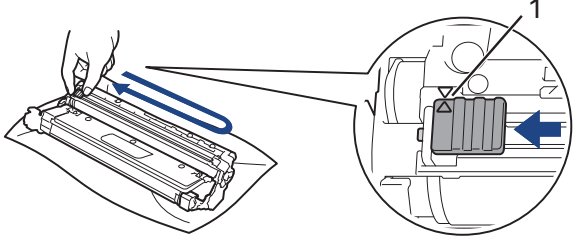
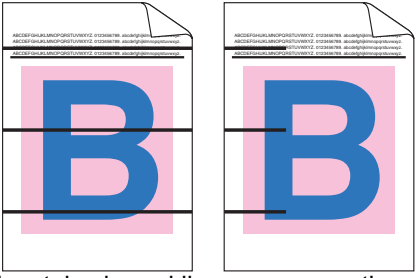

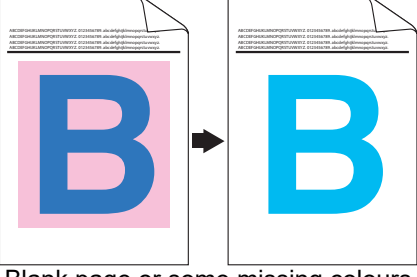
- 
- Load and Print Using the Paper Tray
  - Clean the Paper Pick-up Rollers
  - Cancel a Print Job
-

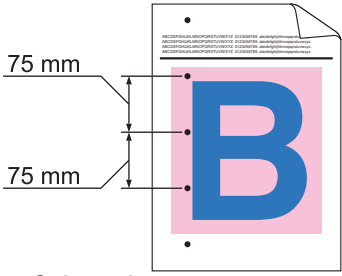
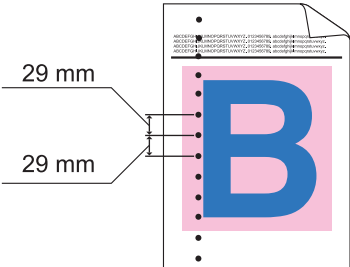

## Improve the Print Quality

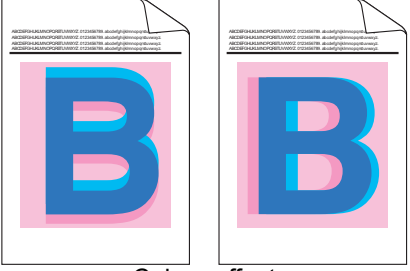

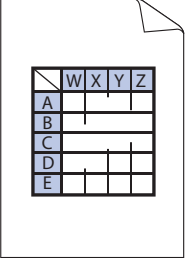
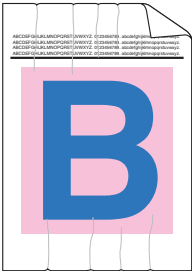
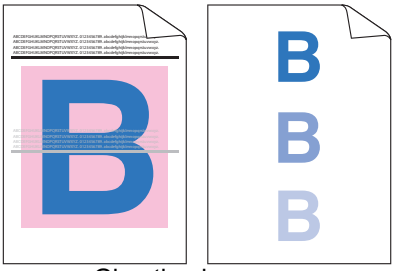
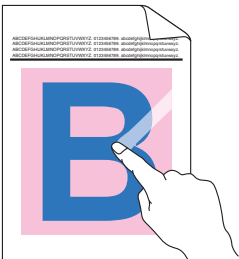
If you have a print quality problem, print a test page first. If the printout looks good, the problem is probably not the machine. Check the interface cable connections and try printing a different document. If the printout or test page printed from the machine has a quality problem, check the examples of poor print quality and follow the recommendations in the table.

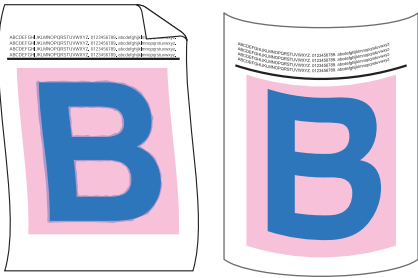
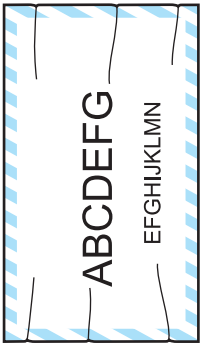
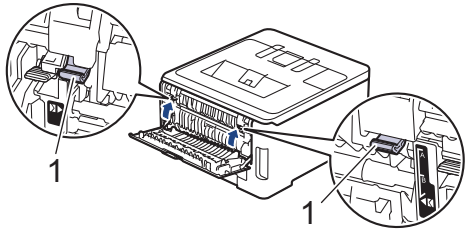
1. To get the best print quality, we suggest using recommended print media. Make sure you use paper that meets our specifications.
2. Check that the toner cartridge and drum unit assemblies are installed correctly.

Examples of poor print quality	Recommendation
 <p>Printed pages are compressed, horizontal stripes appear, or characters in the top, bottom, left, or right margins are cut off</p>	<p>Adjust the print margins in your document's application and reprint the job.</p>
 <p>Colours are light or faint on the whole page</p>	<ul style="list-style-type: none"> <li>• Use the machine's LCD to perform calibration. See <i>Related Information: Correct Colour Printing</i>.</li> <li>• Make sure Toner Save mode is off on the LCD or in the printer driver. See <i>Related Information: Reduce Toner Consumption</i>.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Shake all four toner cartridges gently.</li> <li>• Wipe the windows of all four LED heads with a dry, soft lint-free cloth. See <i>Related Information: Clean the LED Heads</i>.</li> </ul>
 <p>Vertical white streaks or bands appear on the page</p>	<ul style="list-style-type: none"> <li>• Wipe the windows of all four LED heads with a dry, soft lint-free cloth.</li> <li>• Make sure foreign material such as a torn piece of paper, sticky notes, or dust is not inside the machine or around the toner cartridge and drum unit assemblies.</li> </ul>

Examples of poor print quality	Recommendation
 <p data-bbox="172 488 785 519">Vertical coloured streaks or bands appear on the page</p>	<ul data-bbox="821 174 1471 295" style="list-style-type: none"> <li>• Clean all four corona wires (one for each colour) inside the drum unit by sliding the green tab. Make sure the green tab of the corona wire is in the home position (1).</li> </ul>  <ul data-bbox="821 609 1471 884" style="list-style-type: none"> <li>• Replace the toner cartridge that matches the colour of the streak or band. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> and view the <b>FAQs &amp; Troubleshooting</b> page for your model. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="226 1176 730 1207">Horizontal coloured lines appear on the page</p>	<ul data-bbox="821 907 1471 1182" style="list-style-type: none"> <li>• Identify the colour causing the problem and replace the toner cartridge that matches the colour of the line. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="411 1496 542 1527">White spots</p>	<ul data-bbox="821 1220 1471 1624" style="list-style-type: none"> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Check the machine's environment. Conditions such as high humidity and high temperatures may cause this print quality problem.</li> <li>• If the problem is not solved after printing a few pages, the drum may have foreign material, such as glue from a label, stuck on the drum surface. Clean the drum unit. <i>See Related Information: Clean the Drum Unit.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="274 1921 679 1953">Blank page or some missing colours</p>	<ul data-bbox="821 1646 1471 1921" style="list-style-type: none"> <li>• Identify the colour causing the problem and install a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>

Examples of poor print quality	Recommendation
 <p data-bbox="331 439 620 465">Coloured spots at 75 mm</p>	<ul data-bbox="820 170 1465 409" style="list-style-type: none"> <li>• If the problem is not solved after printing a few pages, the drum may have foreign material, such as glue from a label, stuck on the drum surface. Clean the drum unit. <i>See Related Information: Clean the Drum Unit.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="331 752 620 779">Coloured spots at 29 mm</p>	<p data-bbox="820 483 1458 539">Identify the colour causing the problem and install a new toner cartridge.</p> <p data-bbox="820 551 1358 640">To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> to see the <b>FAQs &amp; Troubleshooting</b> page.</p> <p data-bbox="820 651 1434 678"><i>See Related Information: Replace the Toner Cartridge.</i></p>
 <p data-bbox="323 1070 628 1097">Toner scatter or toner stain</p>	<ul data-bbox="820 804 1474 1178" style="list-style-type: none"> <li>• Check the machine's environment. Conditions such as high humidity and high temperatures may cause this print quality problem.</li> <li>• Identify the colour causing the problem and put in a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
<p data-bbox="177 1200 775 1227">The colour of your printouts is not what you expected</p>	<ul data-bbox="820 1200 1474 1850" style="list-style-type: none"> <li>• To improve the colour density, perform the colour correction using the LCD.</li> <li>• To adjust the print position of colours for sharper edges, perform the colour registration using the LCD.</li> <li>• Make sure Toner Save mode is off on the LCD or in the printer driver.</li> <li>• If the print quality of the black portion is not what you expected, select the <b>Enhance Black Printing</b> checkbox in the printer driver.</li> <li>• Clear the <b>Improve Gray Color</b> checkbox in the printer driver.</li> <li>• Identify the colour causing the problem and put in a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>

Examples of poor print quality	Recommendation
 <p data-bbox="400 439 555 461">Colour offset</p>	<ul data-bbox="818 170 1422 394" style="list-style-type: none"> <li>• Make sure the machine is on a solid level surface.</li> <li>• Perform the colour correction using the LCD.</li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> <li>• Install a new belt unit. <i>See Related Information: Replace the Belt Unit.</i></li> </ul>
 <p data-bbox="256 752 699 775">Uneven colour density across the page</p>	<ul data-bbox="818 483 1473 864" style="list-style-type: none"> <li>• Perform the colour correction using the LCD.</li> <li>• Clear the <b>Improve Gray Color</b> checkbox in the printer driver.</li> <li>• Identify the colour causing the problem and put in a new toner cartridge. To identify the colour of the toner cartridge, visit <a href="http://support.brother.com/faqs">support.brother.com/faqs</a> to see the <b>FAQs &amp; Troubleshooting</b> page. <i>See Related Information: Replace the Toner Cartridge.</i></li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
 <p data-bbox="320 1144 635 1167">Missing thin lines in images</p>	<ul data-bbox="818 887 1437 1055" style="list-style-type: none"> <li>• Make sure Toner Save mode is off on the LCD or in the printer driver.</li> <li>• Change the print resolution.</li> <li>• If you use a Windows printer driver, select <b>Improve Pattern Printing</b> in Print Setting of the <b>Basic</b> tab.</li> </ul>
 <p data-bbox="379 1458 571 1480">Wrinkled printout</p>	<ul data-bbox="818 1189 1453 1402" style="list-style-type: none"> <li>• Check the paper type and quality.</li> <li>• Make sure the back cover is closed correctly.</li> <li>• Make sure the two grey levers inside the back cover are in the up position.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> </ul>
 <p data-bbox="379 1783 571 1805">Ghosting images</p>	<ul data-bbox="818 1503 1473 1805" style="list-style-type: none"> <li>• Check the machine's environment. Conditions such as low humidity and low temperatures may cause this print quality problem.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Make sure the two grey levers inside the back cover are in the up position.</li> <li>• Install a new drum unit. <i>See Related Information: Replace the Drum Unit.</i></li> </ul>
	<ul data-bbox="818 1827 1453 2029" style="list-style-type: none"> <li>• Make sure the two grey levers inside the back cover are in the up position.</li> <li>• Make sure the media type setting in the printer driver matches the type of paper you are using.</li> <li>• Select <b>Improve Toner Fixing</b> mode in the printer driver. If this selection does not provide enough improvement, change the printer driver setting in</li> </ul>

Examples of poor print quality	Recommendation
<p>Toner smears easily</p>	<p><b>Media Type</b> to a thick setting. If you are printing an envelope, select <b>Env. Thick</b> in the media type setting.</p>
 <p>Curled or wavy image</p>	<ul style="list-style-type: none"> <li>• Select <b>Reduce Paper Curl</b> mode in the printer driver. If the problem is not solved, select <b>Plain Paper</b> in the media type setting.</li> <li>• If you are printing an envelope, select <b>Env. Thin</b> in the Media Type Setting of the printer driver.</li> <li>• If you do not use the machine often, the paper may have been in the paper tray too long. Turn over the stack of paper in the paper tray. Also, fan the paper stack and then rotate the paper 180° in the paper tray.</li> <li>• Store the paper where it will not be exposed to high temperatures and high humidity.</li> <li>• Open the back cover (Face up output tray) to let the printed paper exit onto the Face up output tray.</li> </ul>
 <p>Envelope creases</p>	<p>Make sure the envelope levers inside the back cover are pulled down to the envelope position when you print envelopes.</p> <p><b>NOTE</b></p> <p>When you have finished printing, open the back cover and reset the two grey levers back to their original position (1) by lifting them up until they stop.</p> 



## Related Information

- [Troubleshooting](#)

### Related Topics:

- [Correct Colour Printing](#)
- [Replace the Toner Cartridge](#)
- [Reduce Toner Consumption](#)
- [Replace the Drum Unit](#)
- [Replace the Belt Unit](#)
- [Clean the Drum Unit](#)
- [Clean the LED Heads](#)
- [Test Print](#)



## Network Problems

- [Error Messages](#)
- [Use the Network Connection Repair Tool \(Windows\)](#)
- [Check Your Machine's Network Settings](#)
- [If You Are Having Difficulty with Your Machine's Network](#)

## Error Messages

The most common error messages are shown in the table.

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

Error Messages	Cause	Action
Authentication Error, contact your administrator.	Your authentication setting for the Store Print Log to Network feature is not correct.	<ul style="list-style-type: none"> <li>Make sure the <b>Username</b> and <b>Password in Authentication Setting</b> are correct. If the username is part of a domain, enter the username in one of the following styles: user@domain or domain\user.</li> <li>Make sure the SNTP time server settings are configured correctly so the time matches the time used for authentication by Kerberos or NTLMv2.</li> </ul>
Connection Error	Other devices are trying to connect to the Wi-Fi Direct network at the same time.	Make sure there are no other devices trying to connect to the Wi-Fi Direct network, and then try to configure the Wi-Fi Direct settings again.
Connection Fail	The Brother machine and your mobile device cannot communicate during the Wi-Fi Direct network configuration.	<ul style="list-style-type: none"> <li>Move the mobile device closer to your Brother machine.</li> <li>Move your Brother machine and the mobile device to an obstruction-free area.</li> <li>If you are using the PIN Method of WPS, make sure you have entered the correct PIN.</li> </ul>
File Access Error, contact your administrator.	The Brother machine cannot access the destination folder for the Store Print Log to Network feature.	<ul style="list-style-type: none"> <li>Make sure the destination folder name is correct.</li> <li>Make sure the destination folder is write-enabled.</li> <li>Make sure the print log file is not locked. If it is, contact your network administrator.</li> </ul>
Log Access Error	In Web Based Management, you have selected the <b>Cancel Print</b> option in the <b>Error Detection Setting</b> section of the <b>Store Print Log to Network</b> feature.	Wait for about 30 seconds until this message disappears from the LCD.
Cannot Connect Maximum limit of connected devices has been reached.	Four mobile devices are already connected to the Wi-Fi Direct network when the Brother machine is the Group Owner.	After the current connection between your Brother machine and another mobile device has shut down, try to configure the Wi-Fi Direct settings again. You can confirm the connection status by printing the Network Configuration Report. <i>See Related Information: Print the Network Configuration Report.</i>
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> </ul>

Error Messages	Cause	Action
		<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 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 obtaining an IP address, make sure your mobile device's IP address has been configured via DHCP.</li> </ul>
Server Timeout, contact your administrator.	The Brother machine cannot connect to the server for the Store Print Log to Network feature.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
Wrong Date & Time, contact your administrator.	The Brother machine does not obtain the time from the SNTP time server.	Make sure the settings to access the SNTP time server are configured correctly in Web Based Management.

## HL-L3288CDW

Error Messages	Cause	Action
Authentication error, contact your administrator.	Your authentication setting for the Store Print Log to Network feature is not correct.	<ul style="list-style-type: none"> <li>• Make sure the <b>Username</b> and <b>Password</b> in <b>Authentication Setting</b> are correct. If the username is part of a domain, enter the username in one of the following styles: user@domain or domain\user.</li> <li>• Make sure the SNTP time server settings are configured correctly so the time matches the time used for authentication by Kerberos or NTLMv2.</li> </ul>
Check User ID and Password.	The Kerberos Authentication error.	Make sure you have entered a correct user name and a password for the Kerberos server. For more information on the Kerberos server settings, contact your network administrator.
	The DNS server configuration is not correct.	Contact your network administrator for the information on the DNS server settings.
	The Brother machine cannot connect to the Kerberos server.	Contact your network administrator for the information on the Kerberos server settings.
Connection Error	Other devices are trying to connect to the Wi-Fi Direct network at the same time.	Make sure there are no other devices trying to connect to the Wi-Fi Direct network, and then try to configure the Wi-Fi Direct settings again.
Connection Failed	The Brother machine and your mobile device cannot communicate during the Wi-Fi Direct network configuration.	<ul style="list-style-type: none"> <li>• Move the mobile device closer to your Brother machine.</li> <li>• Move your Brother machine and the mobile device to an obstruction-free area.</li> <li>• If you are using the PIN Method of WPS, make sure you have entered the correct PIN.</li> </ul>
File access error, contact your administrator.	The Brother machine cannot access the destination folder for the Store Print Log to Network feature.	<ul style="list-style-type: none"> <li>• Make sure the destination folder name is correct.</li> <li>• Make sure the destination folder is write-enabled.</li> <li>• Make sure the print log file is not locked. If it is, contact your network administrator.</li> </ul>

Error Messages	Cause	Action
Log Access Error	In Web Based Management, you have selected the <b>Cancel Print</b> option in the <b>Error Detection Setting</b> section of the <b>Store Print Log to Network</b> feature.	Wait for about 60 seconds until this message disappears from the LCD.
No Device	When configuring the Wi-Fi Direct network, the Brother machine cannot find your mobile device.	<ul style="list-style-type: none"> <li>• Make sure your machine and mobile device are in the Wi-Fi Direct mode.</li> <li>• Move the mobile device closer to your Brother machine.</li> <li>• Move your Brother machine and the mobile device to an obstruction-free area.</li> <li>• If you are manually configuring the Wi-Fi Direct network, make sure you have entered the correct password.</li> <li>• If your mobile device has a configuration page for obtaining an IP address, make sure your mobile device's IP address has been configured via DHCP.</li> </ul>
Server timeout, contact your administrator.	The Brother machine cannot connect to the server for the Store Print Log to Network feature.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
Server Timeout	The Brother machine cannot connect to the LDAP server.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
	The Brother machine cannot connect to the Active Directory server.	<ul style="list-style-type: none"> <li>• Make sure your server address is correct.</li> <li>• Make sure your server is connected to the network.</li> <li>• Make sure the machine is connected to the network.</li> </ul>
The maximum number of devices are already connected using Wi-Fi Direct. Press [OK].	Four mobile devices are already connected to the Wi-Fi Direct network when the Brother machine is the Group Owner.	After the current connection between your Brother machine and another mobile device has shut down, try to configure the Wi-Fi Direct settings again. You can confirm the connection status by printing the Network Configuration Report. <i>See Related Information: Print the Network Configuration Report.</i>
Wrong Date & Time, contact your administrator.	The Brother machine does not obtain the time from the SNTP time server.	Make sure the settings to access the SNTP time server are configured correctly in Web Based Management.
Internal Error	The Brother machine's LDAP protocol is disabled.	Confirm your authentication method, and then enable the necessary protocol setting in Web Based Management.
	The Brother machine's CIFS protocol is disabled.	



## Related Information

- [Network Problems](#)


### Related Topics:

- [Print the Network Configuration Report](#)

## Use the Network Connection Repair Tool (Windows)

Use the Network Connection Repair Tool to fix the Brother machine's network settings. It will assign the correct IP address and Subnet Mask.

Make sure your machine is turned on and is connected to the same network as your computer.

1. Launch  (**Brother Utilities**), and then click the drop-down list and select your model name (if not already selected).
2. Click **Tools** in the left navigation bar, and then click **Network Connection Repair Tool**.
3. Follow the on-screen instructions.
4. Check the diagnosis by printing the Network Configuration Report or the Printer Settings page.



The Network Connection Repair Tool will start automatically if you select the **Enable Connection Repair Tool** option in the Status Monitor. Right-click the Status Monitor screen, and then click **Other Settings > Enable Connection Repair Tool**. This is not recommended when your network administrator has set the IP address to Static, since it will automatically change the IP address.

If the correct IP address and the Subnet Mask are still not assigned even after using the Network Connection Repair Tool, ask your network administrator for this information.



### Related Information

- [Network Problems](#)

#### Related Topics:

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

## **Check Your Machine's Network Settings**

- [Print the Network Configuration Report](#)
- [Change Machine Settings Using Web Based Management](#)
- [If You Are Having Difficulty with Your Machine's Network](#)

## If You Are Having Difficulty with Your Machine's Network

If you think there is a problem with your machine's network environment, check the following topics. You can correct most problems yourself.

If you need additional help, visit [support.brother.com/faqs](http://support.brother.com/faqs).

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

## I Cannot Complete the Wireless Network Setup Configuration

Turn your wireless router off and back on. Then, try to configure the wireless settings again. If you are unable to resolve the problem, follow the instructions below:

Investigate the problem using the WLAN Report.

Cause	Action	Interface
Your security settings (SSID/ Network Key) are not correct.	<p>Confirm the security settings using <b>Wireless Setup Helper</b> (Windows). For more information and to download the utility, go to your model's <b>Downloads</b> page at <a href="http://support.brother.com/downloads">support.brother.com/downloads</a>. Select and confirm that you are using the correct security settings.</p> <ul style="list-style-type: none"> <li>- See the instructions supplied with your wireless LAN access point/router for information on how to find the security settings.</li> <li>- The manufacturer's name or model number of the wireless LAN access point/router may be used as the default security settings.</li> <li>- Consult with the access point/router manufacturer, your Internet provider, or network administrator.</li> </ul>	Wireless
Your Brother machine's MAC address is not allowed.	<p>Confirm that the Brother machine's MAC Address is allowed in the filter. You can find the MAC Address on your Brother machine's control panel.</p>	Wireless
Your wireless LAN access point/router is in Stealth mode (not broadcasting the SSID).	<ul style="list-style-type: none"> <li>• Enter the correct SSID or Network Key manually.</li> <li>• Check the SSID or the Network Key in the instructions supplied with your wireless LAN access point/router and reconfigure the wireless network setup.</li> </ul>	Wireless
Your security settings (SSID/ password) are not correct.	<p>Confirm the SSID and password. When you are configuring the network manually, the SSID and password are displayed on your Brother machine. If your mobile device supports the manual configuration, the SSID and password will be displayed on your mobile device's screen.</p>	Wi-Fi Direct
You are using Android™ 4.0.	<p>If your mobile device disconnects (approximately six minutes after using Wi-Fi Direct), try the one-push configuration using WPS (recommended) and set the Brother machine as a Group Owner.</p>	Wi-Fi Direct
Your Brother machine is placed too far from your mobile device.	<p>Move your Brother machine within about 3.3 feet (1 metre) of the mobile device when you configure the Wi-Fi Direct network settings.</p>	Wi-Fi Direct
There are some obstructions (walls or furniture, for example) between your machine and the mobile device.	<p>Move your Brother machine to an obstruction-free area.</p>	Wi-Fi Direct
There is a wireless computer, Bluetooth®-supported device, microwave oven, or digital cordless phone near the Brother machine or your mobile device.	<p>Move other devices away from the Brother machine or your mobile device.</p>	Wi-Fi Direct
You have checked and tried all of the above, but your Brother machine still cannot complete the Wi-Fi Direct configuration.	<ul style="list-style-type: none"> <li>• Turn your Brother machine off and back on. Then, try to configure the Wi-Fi Direct settings again.</li> <li>• If you are using your Brother machine as a client, confirm how many devices are allowed on the current Wi-Fi Direct network, and then check how many devices are connected.</li> </ul>	Wi-Fi Direct



---

**For Windows**

If your wireless connection has been interrupted, and you have checked and tried all of the above, we recommend using the Network Connection Repair Tool.



**Related Information**

- [If You Are Having Difficulty with Your Machine's Network](#)

**Related Topics:**

- [Configure Your Machine for a Wireless Network When the SSID Is Not Broadcast](#)
-

## My Machine Cannot Print over the Network

Cause	Action	Interface
Your security software blocks your machine's access to the network.	Some security software might block access without showing a security alert dialog box even after successful installation. To allow access, see the instructions for your security software or ask the software manufacturer.	Wired/Wireless
Your Brother machine was not assigned an available IP address.	<ul style="list-style-type: none"> <li>Confirm the IP address and the Subnet Mask. Verify that both the IP addresses and Subnet Masks of your computer and the Brother machine are correct and located on the same network. For more information about how to verify the IP address and the Subnet Mask, ask your network administrator.</li> <li>Windows Confirm the IP address and the Subnet Mask using the Network Connection Repair Tool.</li> </ul>	Wired/Wireless
A failed print job is still in your computer's print queue.	<ul style="list-style-type: none"> <li>If a 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 11 Click  &gt; <b>All apps &gt; Windows Tools &gt; Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>Windows 10, Windows Server 2016, Windows Server 2019, and Windows Server 2022 Click  &gt; <b>Windows System &gt; Control Panel</b>. In the <b>Hardware and Sound (Hardware)</b> group, click <b>View devices and printers</b>.</li> <li>Windows Server 2012 R2 Click <b>Control Panel</b> on the <b>Start</b> screen. In the <b>Hardware</b> group, click <b>View devices and printers</b>.</li> <li>Windows Server 2012 Move your mouse to the lower right corner of your desktop. When the menu bar appears, click <b>Settings &gt; Control Panel</b>. In the <b>Hardware</b> group, click <b>View devices and printers &gt; Printers</b>.</li> <li>Mac Click <b>System Preferences &gt; Printers &amp; Scanners</b>.</li> </ul> </li> </ul>	Wired/Wireless
Your machine is not connected to the wireless network.	Print the WLAN Report to check the error code on the printed report. See <i>Related Information: Print the WLAN Report</i> .	Wireless

If you have checked and tried all of the above, but your machine still cannot print, uninstall the driver (Windows) and reinstall it.

### Related Information

- [If You Are Having Difficulty with Your Machine's Network](#)

#### Related Topics:

- [Print the WLAN Report](#)
- [Wireless LAN Report Error Codes](#)
- [Use the Network Connection Repair Tool \(Windows\)](#)

- 
- I Want to Check that My Network Devices are Working Correctly
-

## I Want to Check that My Network Devices are Working Correctly

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 LED is blinking.</li> <li>All protective packaging has been removed from the machine.</li> <li>The toner cartridge and drum unit assembly is installed correctly.</li> <li>The machine's cover is fully closed.</li> <li>Paper is loaded correctly in the paper tray.</li> <li>(For wired networks) A network cable is securely connected to the Brother machine and to the router or hub.</li> </ul>	Wired/Wireless
Check the <b>Link Status</b> on the Network Configuration Report or the Printer Settings page.	Print the Network Configuration Report and check that <b>Ethernet Link Status</b> or <b>Wireless Link Status</b> is <b>Link OK</b> .	Wired/Wireless
Check that you can "ping" the Brother machine from your computer.	<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 your administrator about the IP address and the subnet mask, and then use the Network Connection Repair Tool.</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.	<p>Print the WLAN Report to check the error code on the printed report.</p> <p>See <i>Related Information: Print the WLAN Report</i>.</p>	Wireless

If you have checked and tried all of the above but you are still having problems, see the instructions supplied with your wireless access point/router to find the SSID (Network Name) and the Network Key (Password) information and set them correctly.

### ✓ Related Information

- [If You Are Having Difficulty with Your Machine's Network](#)

#### Related Topics:

- [Print the Network Configuration Report](#)
- [Print the WLAN Report](#)
- [Wireless LAN Report Error Codes](#)
- [Use the Network Connection Repair Tool \(Windows\)](#)
- [My Machine Cannot Print over the Network](#)

## AirPrint Problems

Difficulties	Suggestions
My machine is not displayed in the printer list.	Make sure your machine is turned on.
	Make sure your machine and your mobile device or Mac are connected to the same network.
	Move your mobile device closer to the wireless access point/router, or to your machine.
I cannot print.	Make sure your machine is turned on.
	Make sure your machine and your mobile device or Mac are connected to the same network.
I am trying to print a multi-page document from an iOS device, but ONLY the first page is printing.	Make sure you are running the latest OS version.





### Related Information

- [Troubleshooting](#)

#### Related Topics:

- [AirPrint Overview](#)

## Other Problems

Difficulties	Suggestions
<p>The machine will not turn on.</p>	<p>Adverse conditions on the power connection (such as lightning or a power surge) may have triggered the machine's internal safety mechanisms. Unplug the power cord. Wait for ten minutes, then plug in the power cord and press  to turn the machine on.</p> <p>If the problem is not solved and you are using a power breaker, disconnect it to make sure it is not the problem. Plug the machine's power cord directly into a different known working wall electrical socket. If there is still no power, try a different power cable.</p>
<p>The machine cannot print EPS data that includes binary with the BR-Script3 printer driver.</p>	<p><b>(Windows)</b></p> <p>To print EPS data, do the following:</p> <ol style="list-style-type: none"> <li>Windows 11: <ul style="list-style-type: none"> <li>Click  &gt; <b>All apps &gt; Windows Tools &gt; Control Panel</b>. In the <b>Hardware and Sound</b> group, click <b>View devices and printers</b>.</li> <li>For Windows 10, Windows Server 2016, Windows Server 2019, and Windows Server 2022: <ul style="list-style-type: none"> <li>Click  &gt; <b>Windows System &gt; Control Panel</b>. In the <b>Hardware and Sound (Hardware)</b> group, click <b>View devices and printers</b>.</li> <li>For Windows Server 2012: <ul style="list-style-type: none"> <li>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>.</li> <li>For Windows Server 2012 R2: <ul style="list-style-type: none"> <li>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> </ul> </li> </ul> </li> </ul> </li> <li>Right-click your model's icon with <b>BR-Script3</b> in the name, select <b>Printer properties</b>. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p> If your model with <b>BR-Script3</b> in the name does not appear, right-click your model's icon, select <b>Printer properties</b>, and then select your model with <b>BR-Script3</b> in the name.</p> </div> </li> </ul></li></ol> <ol style="list-style-type: none"> <li>From the <b>Device Settings</b> tab, choose TBCP (Tagged Binary Communication Protocol) in <b>Output Protocol</b>.</li> </ol>
<p>The Brother software cannot be installed.</p>	<p><b>(Windows)</b></p> <p>If the Security Software warning appears on the computer screen during the installation, change the Security Software settings to permit the Brother product setup program or other program to run.</p> <p><b>(Mac)</b></p> <p>If you are using a firewall function of anti-spyware or antivirus security software, temporarily disable it and then install the Brother software.</p>



## Related Information

- [Troubleshooting](#)
-

## Check the Machine Information

Follow these instructions to check your machine's serial number and firmware version.

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)


### HL-L3228CDW

1. Press ▲ or ▼ to select the [Machine Info.] option, and then press 确定.
2. Press ▲ or ▼ to select one of the following options:

Option	Description
Serial No.	Check your machine's serial number.
Firmware Version	Check your machine's firmware version.
Page Counter	Check the total number of pages the machine has printed.
Parts Life	Check the supplies' life that remains available.

3. Press 确定.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Machine Information].
2. Press one of the following options:

Option	Description
Serial No.	Check your machine's serial number.
Firmware Version	Check your machine's firmware version.
Firmware Update	Update your machine to the latest firmware.
Firmware Auto Check	View firmware information on the Home screen.
Page Counter	Check the total number of pages the machine has printed.
Parts Life	Check the percentage of the supplies' life that remains available.

3. Press .

### Related Information

- [Troubleshooting](#)



## Reset Functions

- [Machine Reset](#)
- [Network Reset](#)
- [Factory Reset](#)

## Machine Reset

Use the Machine Reset function to reset the machine's settings to the factory settings.

The network settings and the security settings will not be reset by the Machine Reset function.


>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [Initial Setup]. Press 确定.
  - b. Select [Reset]. Press 确定.
  - c. Select [Machine Reset]. Press 确定.
2. Press ▲ to select [Reset].
3. Press ▲ to restart the machine.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset] > [Machine Reset].
2. Do one of the following:

Option	Description
Press Yes for 2 seconds	Reboot the machine. The machine will begin the reset.
No	The machine will exit without rebooting.



If you exit without rebooting, your machine will not reset and your settings will remain unchanged.

### ✓ Related Information

- [Reset Functions](#)

## Network Reset

Use the Network Reset function to restore the machine's network settings, such as password and IP address, back to the factory settings.

Unplug all the interface cables before you perform a Network Reset.


>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [Initial Setup]. Press 确定.
  - b. Select [Reset]. Press 确定.
  - c. Select [Network Reset]. Press 确定.
2. Press ▲ to select [Reset].
3. Press ▲ to restart the machine.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset] > [Network Reset].
2. Do one of the following:

Option	Description
Press Yes for 2 seconds	Reboot the machine. The machine will begin the reset.
No	The machine will exit without rebooting.



If you exit without rebooting, your machine will not reset and your settings will remain unchanged.

### ✓ Related Information

- [Reset Functions](#)

## Factory Reset

Use the Factory Reset function to restore all settings back to the factory settings.

Unplug all the interface cables before you perform a Factory Reset.


>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [Initial Setup]. Press 确定.
  - b. Select [Reset]. Press 确定.
  - c. Select [Factory Reset]. Press 确定.
2. Press ▲ to select [Reset].
3. Press ▲ to restart the machine.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Reset] > [Factory Reset].
2. Do one of the following:

Option	Description
Press Yes for 2 seconds	Reboot the machine. The machine will begin the reset.
No	The machine will exit without rebooting.



If you exit without rebooting, your machine will not reset and your settings will remain unchanged.

### ✓ Related Information

- [Reset Functions](#)

## **Routine Maintenance**

- [Replace Supplies](#)
- [Clean the Machine](#)
- [Correct Colour Printing](#)
- [Check the Remaining Part Life](#)
- [Pack and Ship Your Machine](#)
- [Replace Periodic Maintenance Parts](#)

## Replace Supplies

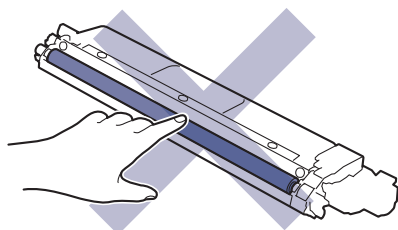
You must replace supplies when the machine indicates that the life of the supply is over.

The toner cartridge and drum unit are two separate supplies. Make sure both are installed as an assembly. The product code of supplies may vary depending on the country.

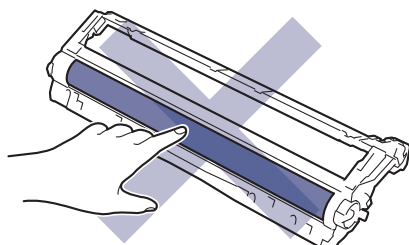
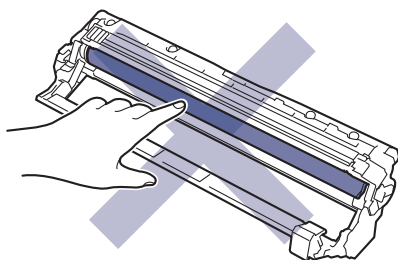
### IMPORTANT

To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.

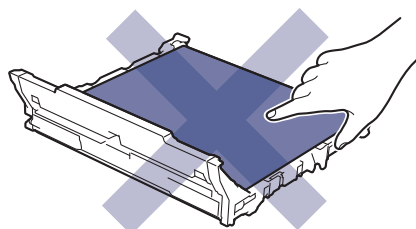
#### Toner Cartridge

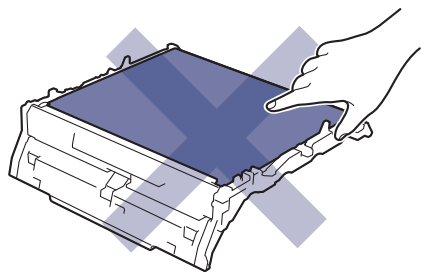


#### Drum Unit

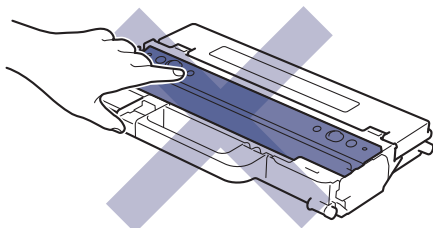


#### Belt Unit





**Waste Toner Box**



## NOTE

- Be sure to seal the used supplies tightly in a bag so that toner powder does not spill out of the cartridge.
- Discard used consumable items according to local regulations, keeping it separate from domestic waste. If you have questions, call your local waste disposal office. Be sure to reseal the consumable items tightly so that the material inside does not spill.
- We recommend placing both the new and the used supplies on a piece of paper to prevent accidentally spilling or scattering the contents.
- Using paper that is not a direct equivalent for a recommended print media may reduce the life of supplies and machine parts.
- The projected life for each of the toner cartridges is based on ISO/IEC 19798. Frequency of replacement will vary depending on the print volume, percentage of coverage, types of media used, and powering on/off the machine.
- Frequency of replacing supplies except toner cartridges will vary depending on the print volume, types of media used, and powering on/off the machine.
- Handle the toner cartridge carefully. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.



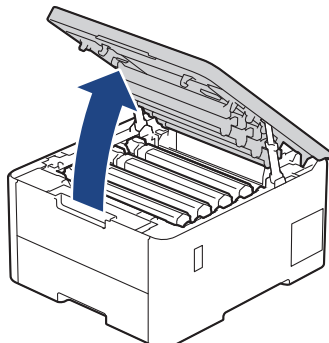
### Related Information

- [Routine Maintenance](#)
  - [Replace the Toner Cartridge](#)
  - [Replace the Drum Unit](#)
  - [Replace the Belt Unit](#)
  - [Replace the Waste Toner Box](#)

## Replace the Toner Cartridge

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

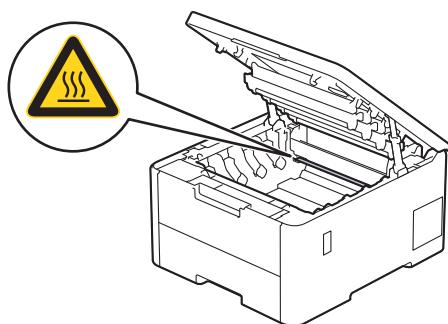
1. Make sure the machine is turned on.
2. Open the top cover until it locks in the open position.



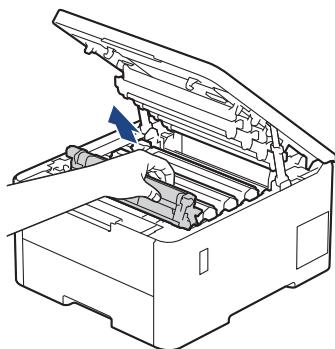
### **WARNING**

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



3. Remove the toner cartridge and drum unit assembly for the colour shown on the LCD.



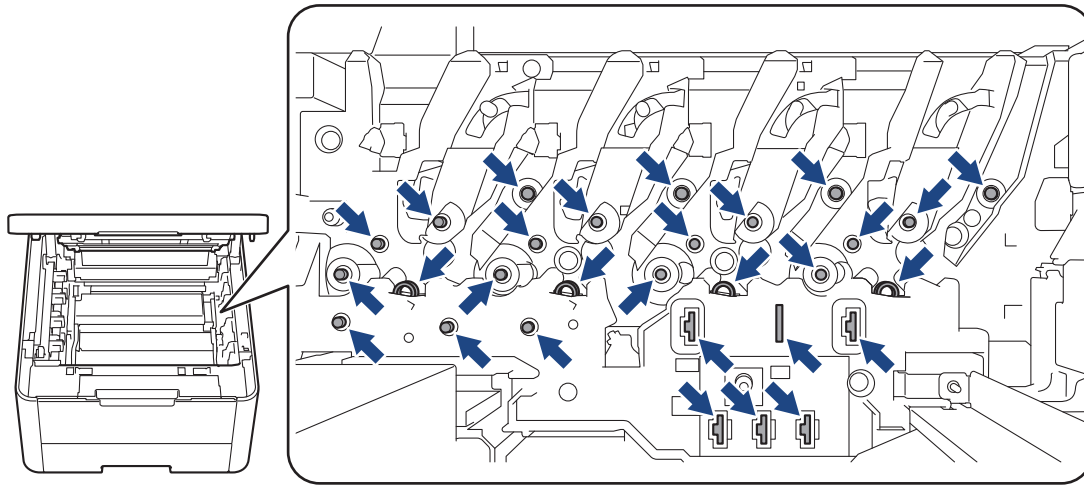
### **CAUTION**

We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

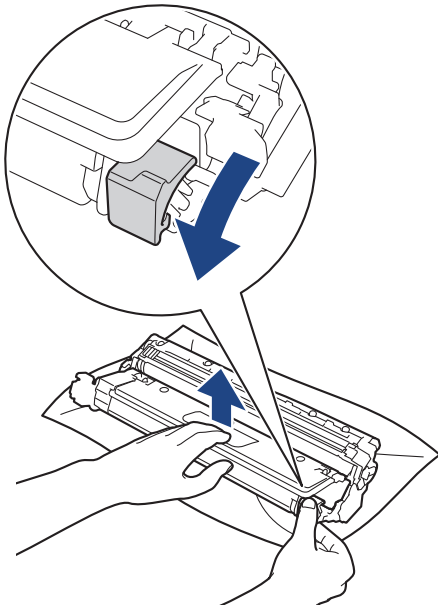


## IMPORTANT

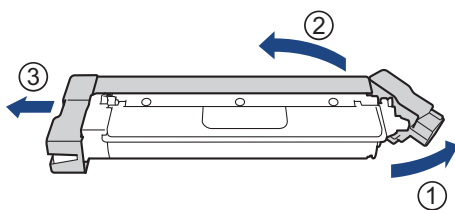
To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



4. Push down the green lock lever and remove the toner cartridge from the drum unit.



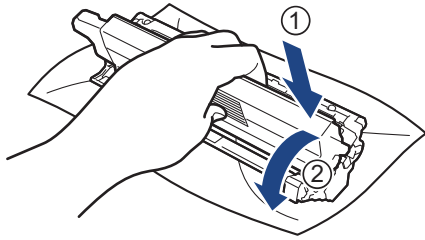
5. Unpack the new toner cartridge.
6. Remove the protective materials.



The shape of the toner cartridge will vary depending on your country and region.

---

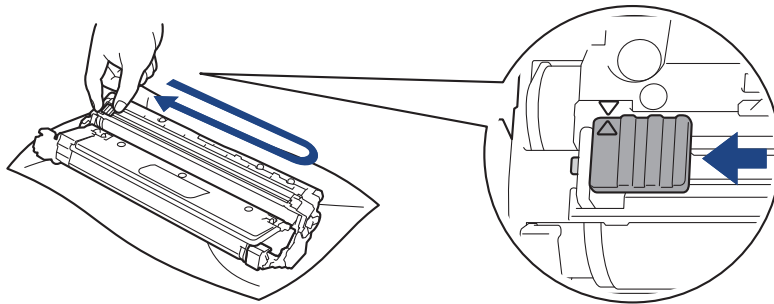
7. Insert the new toner cartridge firmly into the drum unit until you hear it lock into place.



---

Make sure you put the toner cartridge in correctly or it may separate from the drum unit.

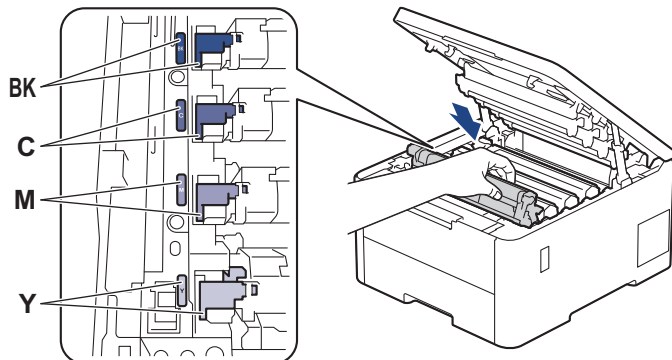
8. Clean the corona wire inside the drum unit by gently sliding the green tab from left to right and right to left several times.



---

Be sure to return the green tab to the Home position (▲). The arrow on the tab must be aligned with the arrow on the drum unit. If it is not, printed pages may have a vertical stripe.

9. Slide the toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine.



10. Close the machine's top cover.



- 
- After replacing a toner cartridge, DO NOT turn the machine off or open the top cover until the machine's display returns to Ready Mode.
  - The toner cartridge that comes with your Brother machine is an Inbox toner cartridge.
  - We recommend keeping a new toner cartridge ready for use when you see the Toner Low warning.
  - DO NOT unpack the new toner cartridge until you are ready to install it.
  - If a toner cartridge is left unpacked for a long time, the toner life will be shortened.
  - We recommend using genuine Brother supplies to ensure stable print quality and performance. Although not all non-genuine supplies may cause quality issues, it is possible that some may adversely affect print quality or cause machine malfunction. Brother may charge for repairing your machine if it is proven that non-genuine supplies caused the damage, even if the machine is still covered by the warranty.
-



---

## Related Information

- [Replace Supplies](#)

### **Related Topics:**

- [Improve the Print Quality](#)
  - [Error and Maintenance Messages](#)
-

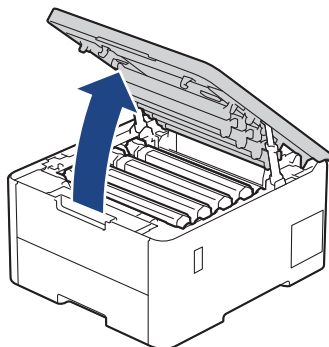
## Replace the Drum Unit

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

- >> [Replace the Drum Unit](#)
- >> [Reset the Drum Counter \(HL-L3228CDW\)](#)
- >> [Reset the Drum Counter \(HL-L3288CDW\)](#)

### Replace the Drum Unit

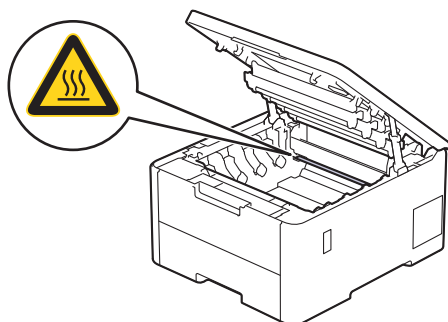
1. Make sure the machine is turned on.
2. Open the top cover until it locks in the open position.



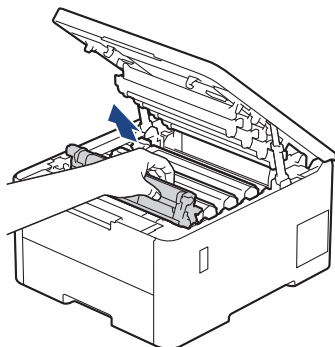
### **WARNING**

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



3. Remove the toner cartridge and drum unit assembly for the colour shown on the LCD.

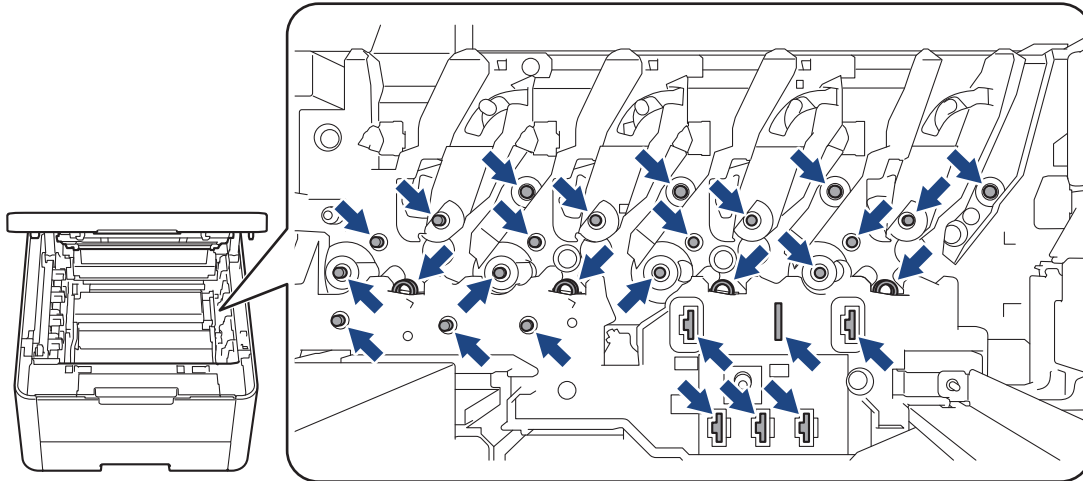


## CAUTION

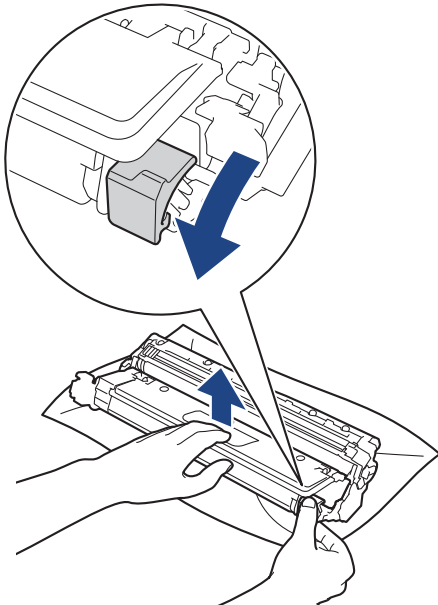
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

## IMPORTANT

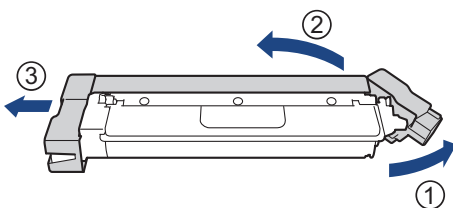
To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



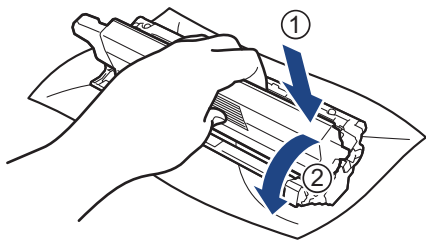
4. Push down the green lock lever and remove the toner cartridge from the drum unit.



5. Unpack the new drum unit.
6. Remove the protective cover.

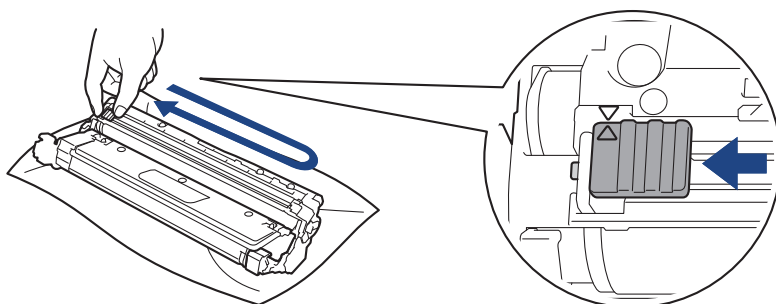


7. Reinsert the toner cartridge firmly into the new drum unit until you hear it lock into place.



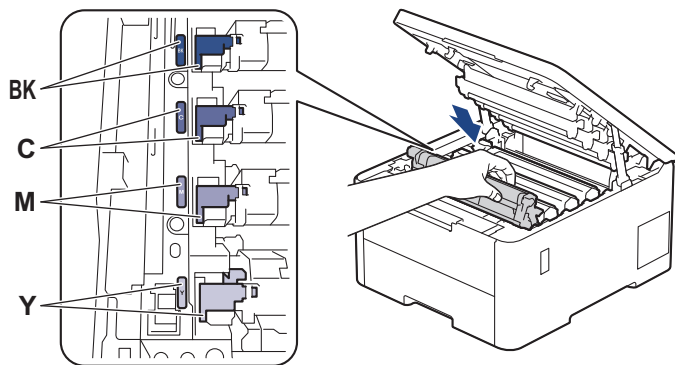
Make sure you put the toner cartridge in correctly or it may separate from the drum unit.

8. Clean the corona wire inside the drum unit by gently sliding the green tab from left to right and right to left several times.



Be sure to return the green tab to the Home position (▲). The arrow on the tab must be aligned with the arrow on the drum unit. If it is not, printed pages may have a vertical stripe.

9. Slide the toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine.



10. Close the machine's top cover.

11. Reset the drum counter by following the next section.

## NOTE

- Drum wear and tear occurs due to use and rotation of the drum and interaction with paper, toner and other materials in the paper path. When a drum reaches the factory-established rotation limit corresponding to the rated page yield, the product's LCD will advise you to replace the drum. The product will continue to function; however, print quality may not be optimal.
- If an unpacked drum unit is placed in direct sunlight (or artificial light for long periods of time), the unit may be damaged.
- There are many factors that determine the actual drum life, such as the temperature, humidity, type of paper, type of toner used and so on. Under ideal conditions, the average drum life is estimated at approximately 20,000 pages based on one page per job (A4/Letter single-sided pages). The number of pages may be affected due to a variety of factors including but not limited to media type and media size.

---

Because we have no control over the many factors that determine the actual drum life, we cannot guarantee a minimum number of pages that will be printed by your drum.

- The machine should be used only in a clean, dust-free environment with adequate ventilation.
  - We recommend using genuine Brother supplies to ensure stable print quality and performance. Although not all non-genuine supplies may cause quality issues, it is possible that some may adversely affect print quality or cause machine malfunction. Brother may charge for repairing your machine if it is proven that non-genuine supplies caused the damage, even if the machine is still covered by the warranty.
- 


## IMPORTANT

- To avoid print quality issues or damage to the machine, DO NOT reset the drum counter unless you are replacing the drum unit.
  - If you reset the drum counter without replacing the drum unit, the machine will not be able to correctly calculate the remaining drum life.
- 

### Reset the Drum Counter (HL-L3228CDW)

1. Make sure the machine is turned on.
2. Make sure the machine's cover is closed.
3. Press **确定** and ▲ at the same time.
4. Press **确定** to select [Drum].
5. Select the toner colour for the drum unit you just replaced, and then press **确定**.
6. Select ▲ to reset the drum counter.

### Reset the Drum Counter (HL-L3288CDW)

1. Make sure the machine is turned on.
2. Press and hold  for about five seconds.
3. Press [Drum].
4. Select the toner colour for the drum unit you just replaced.
5. Press [Yes].

### Related Information

- [Replace Supplies](#)

#### Related Topics:

- [Improve the Print Quality](#)
  - [Error and Maintenance Messages](#)
-

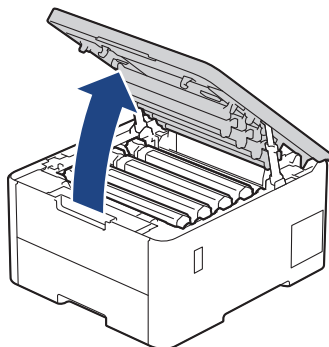
## Replace the Belt Unit

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

- >> [Replace the Belt Unit](#)
- >> [Reset the Belt Unit Counter \(HL-L3228CDW\)](#)
- >> [Reset the Belt Unit Counter \(HL-L3288CDW\)](#)

### Replace the Belt Unit

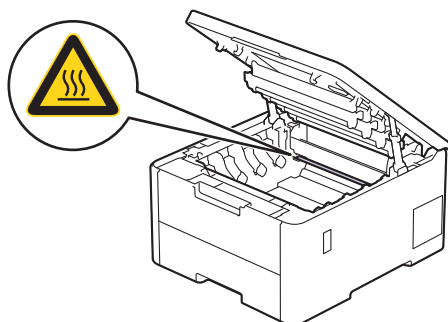
1. Make sure the machine is turned on.
2. Open the top cover until it locks in the open position.



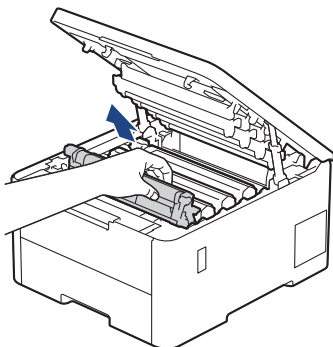
### WARNING

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



3. Remove all of the toner cartridge and drum unit assemblies.



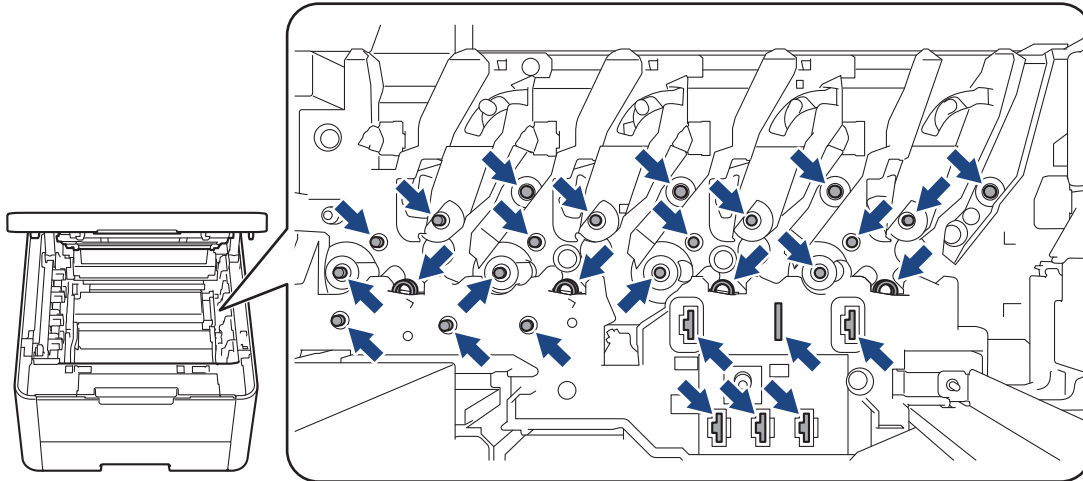


## CAUTION

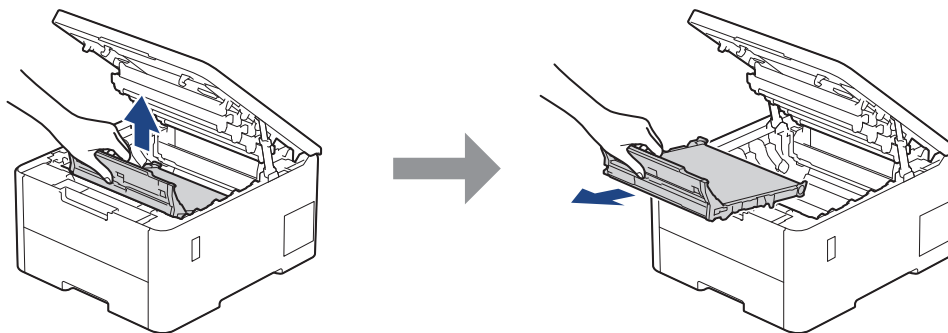
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

## IMPORTANT

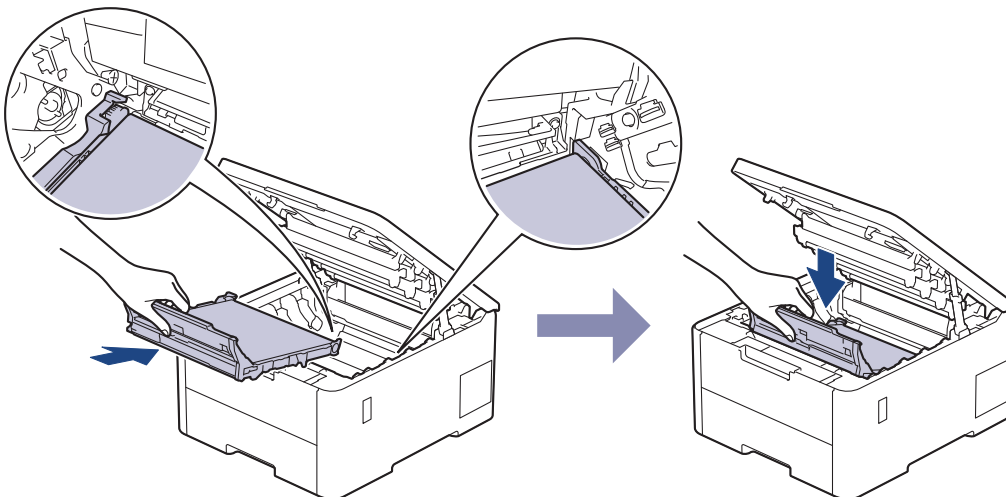
To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



4. Hold the green handle of the belt unit and lift the belt unit up, and then pull it out without letting it touch the machine.

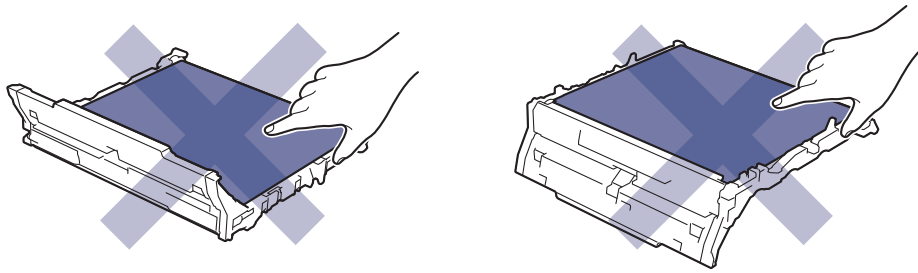


5. Unpack the new belt unit and insert it into the machine.

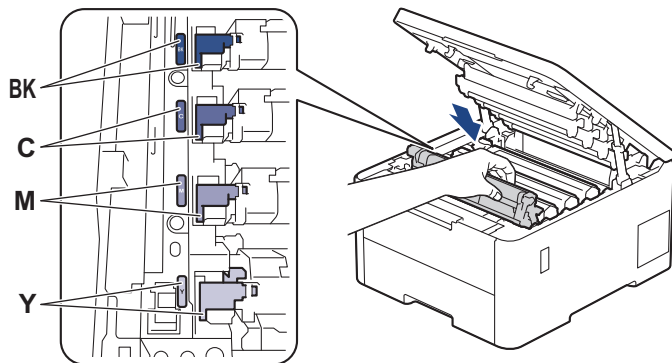


## NOTE

To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.



6. Reinsert each toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine for all four toner cartridge and drum unit assemblies.



7. Close the machine's top cover.
8. Reset the belt unit counter by following the next section.


## IMPORTANT

To avoid print quality issues or damage to the machine, DO NOT reset the belt unit counter unless you are replacing the belt unit.

### Reset the Belt Unit Counter (HL-L3228CDW)

1. Make sure the machine is turned on.
2. Make sure the machine's cover is closed.
3. Press **确定** and **▲** at the same time.
4. Press **▲** or **▼** to display the [Belt] option, and then press **确定**.
5. Select **▲** to reset the belt counter.

### Reset the Belt Unit Counter (HL-L3288CDW)

1. Make sure the machine is turned on.
2. Press and hold  for about five seconds.
3. Press [Belt].
4. Press [Yes].



## Related Information

- [Replace Supplies](#)

---

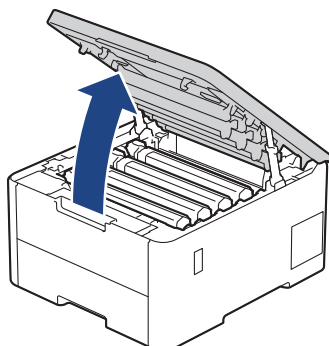
**Related Topics:**

- [Improve the Print Quality](#)
  - [Error and Maintenance Messages](#)
-

## Replace the Waste Toner Box

Before starting the replacement procedure, see *Related Information: Replace Supplies*.

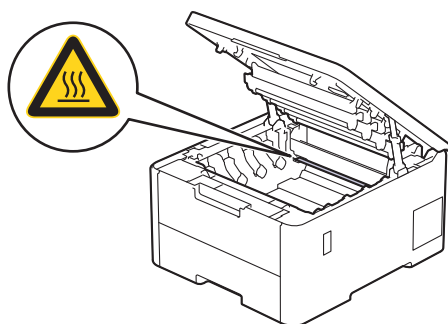
1. Make sure the machine is turned on.
2. Open the top cover until it locks in the open position.



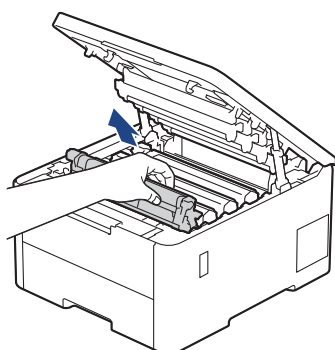
### **WARNING**

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



3. Remove all of the toner cartridge and drum unit assemblies.

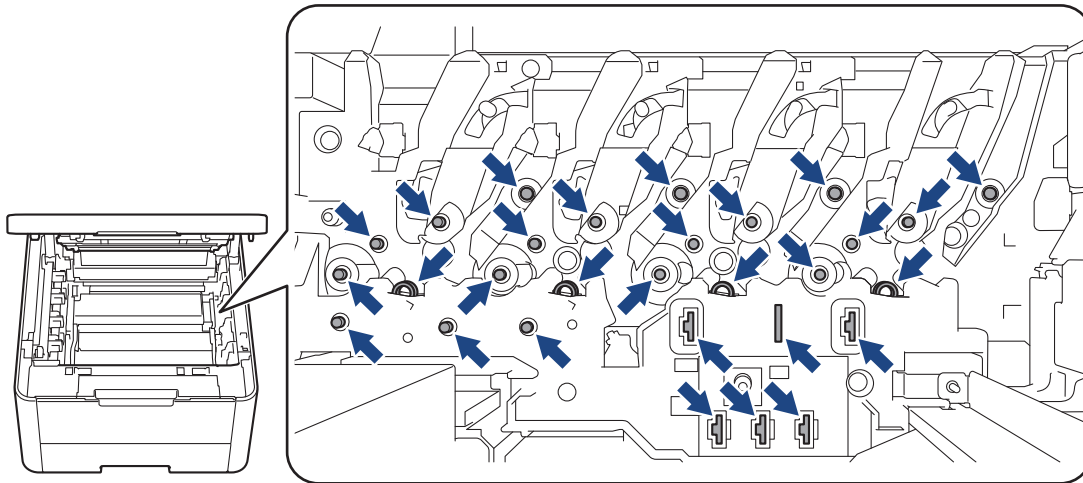


### **CAUTION**

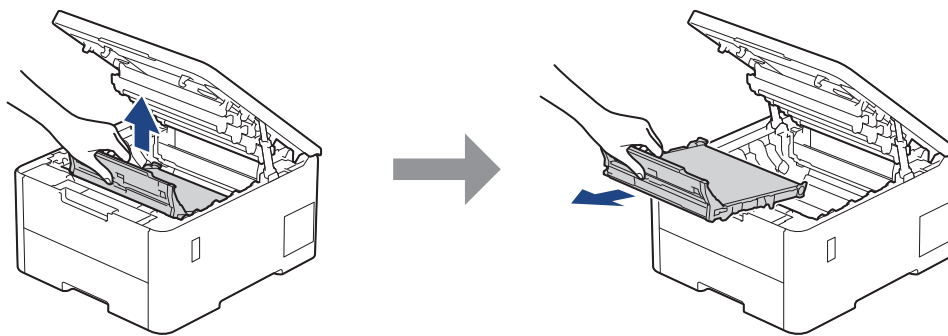
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

## IMPORTANT

To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.

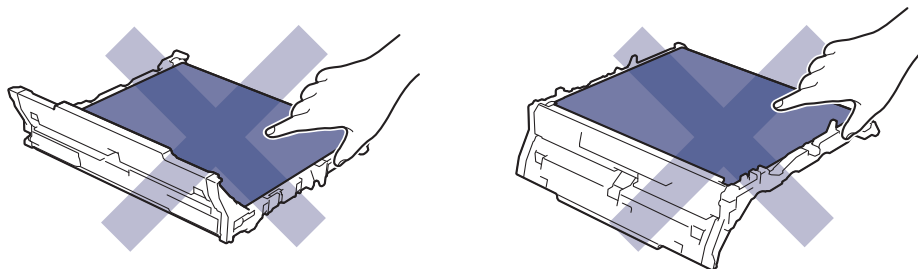


4. Hold the green handle of the belt unit and lift the belt unit up, and then pull it out without letting it touch the machine.

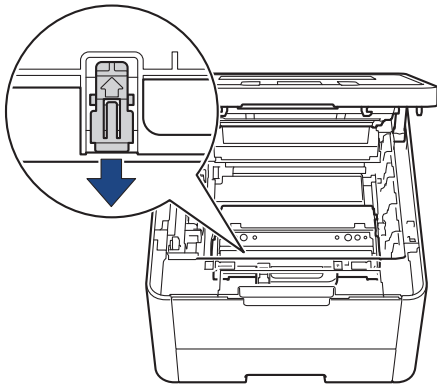


## NOTE

To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.

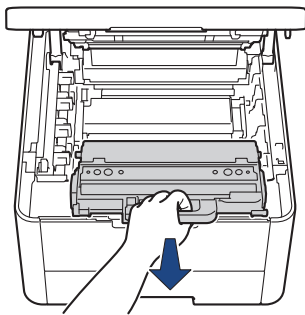


5. Remove the orange packing material and discard it.



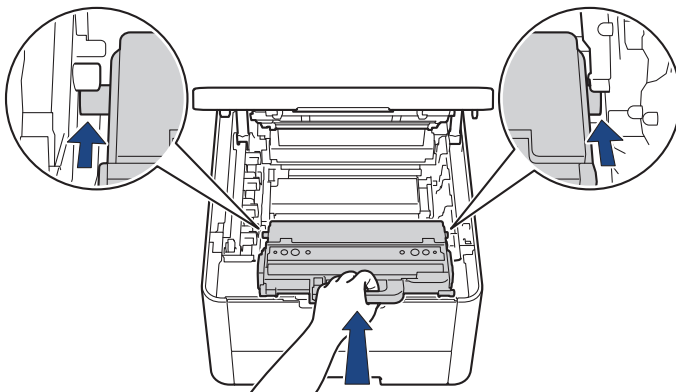
This step is only necessary when you are replacing the waste toner box for the first time, and is not required for the replacement waste toner box. The orange packing pieces are installed at the factory to protect your machine during shipment.

6. Hold the green handle of the waste toner box and remove the waste toner box from the machine.



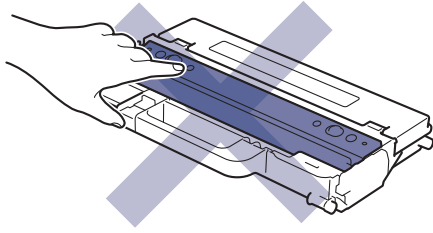
**DO NOT** reuse the waste toner box.

7. Unpack the new waste toner box and install the new waste toner box in the machine. Make sure the waste toner box is level and fits firmly into place.

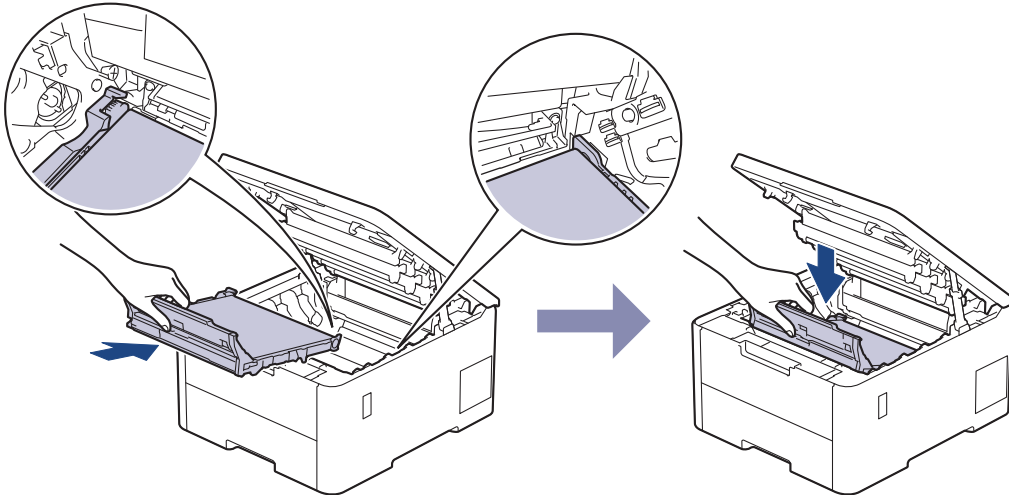


## NOTE

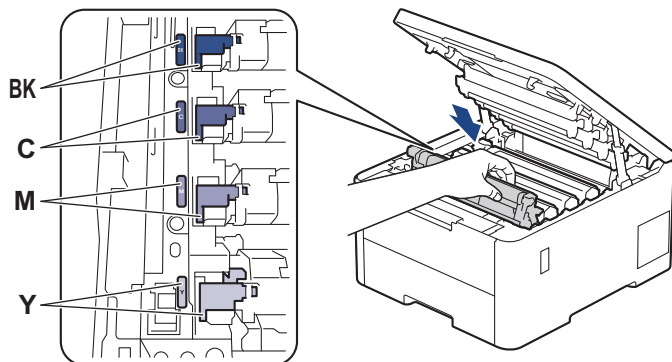
To avoid print quality problems, **DO NOT** touch the shaded parts shown in the illustrations.



8. Reinsert the belt unit into the machine.



9. Reinsert each toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine for all four toner cartridge and drum unit assemblies.



10. Close the machine's top cover.



### Related Information

- [Replace Supplies](#)

#### Related Topics:

- [Error and Maintenance Messages](#)

## Clean the Machine

Clean the outside and inside of the machine regularly with a dry, lint-free cloth.

When you replace the toner cartridge or the drum unit, make sure you clean the inside of the machine. If printed pages are stained with toner, clean the inside of the machine with a dry, lint-free cloth.

### WARNING

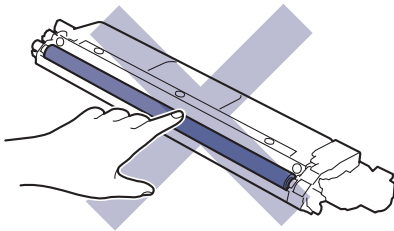
DO NOT use flammable substances, any type of spray, or an organic solvent/liquid containing alcohol or ammonia to clean the inside or outside of the product. Doing so could cause a fire. Instead, use only a dry, lint-free cloth.



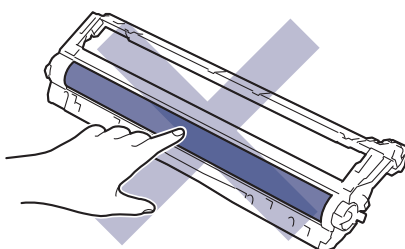
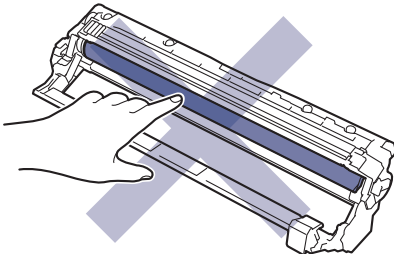
### IMPORTANT

- DO NOT use isopropyl alcohol to remove dirt from the control panel. It may crack the panel.
- To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.

#### Toner Cartridge



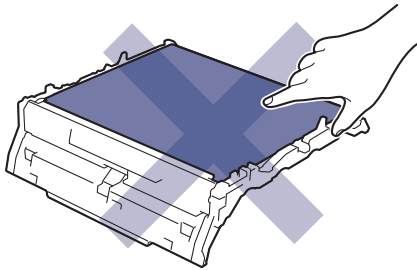
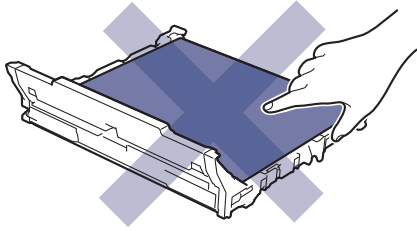
#### Drum Unit



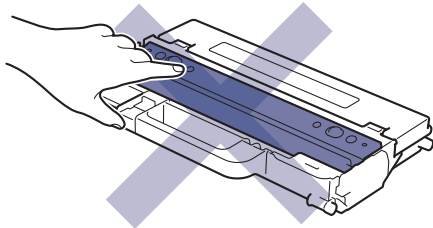


---

## Belt Unit



## Waste Toner Box



**DO NOT** turn the waste toner box upside down, otherwise the toner may spill out.

---




### Related Information

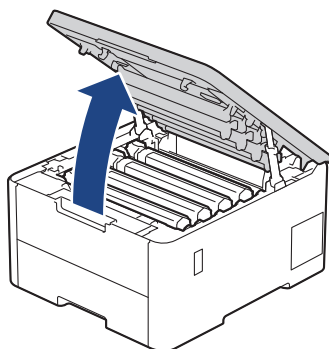
- Routine Maintenance
    - Clean the LED Heads
    - Clean the Touchscreen LCD
    - Clean the Corona Wires
    - Clean the Drum Unit
    - Clean the Paper Pick-up Rollers
-

## Clean the LED Heads

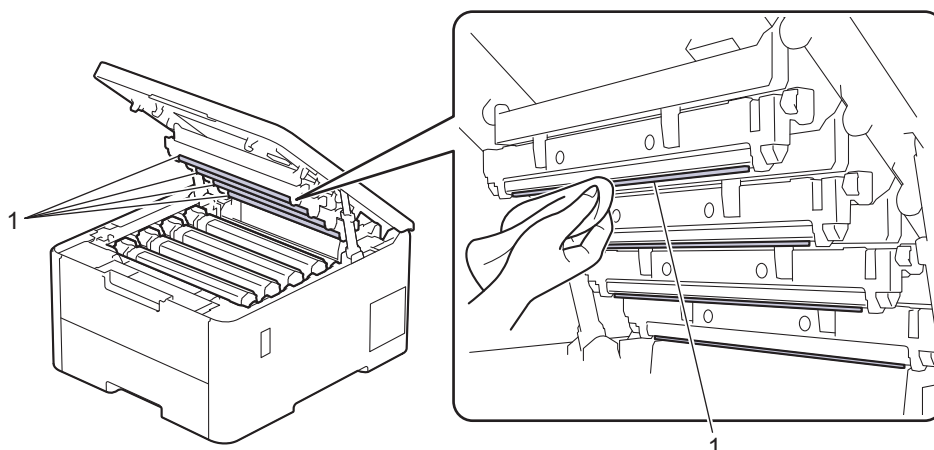
Before starting the cleaning procedure, see *Related Information: Clean the Machine*.


If there is a problem with the print quality, such as light or faded colours, white streaks, or bands that run down the page, clean the LED heads as follows:

1. Press and hold  to turn the machine off.
2. Open the top cover until it locks in the open position.



3. Wipe each LED head window (1) with a dry, soft, lint-free cloth. Do not touch the windows with your fingers.



4. Close the machine's top cover.
5. Press  to turn the machine on.



### Related Information

- [Clean the Machine](#)


## Clean the Touchscreen LCD

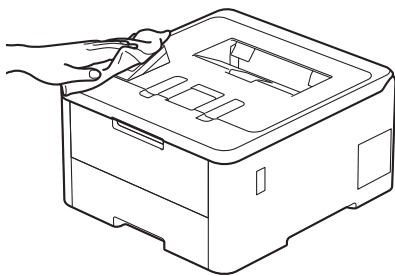
Related Models: HL-L3288CDW


Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

### IMPORTANT

DO NOT use any type of liquid cleaners (including ethanol).

1. Press and hold  to turn the machine off.
2. Clean the touchscreen with a dry, soft lint-free cloth.



3. Press  to turn the machine on.

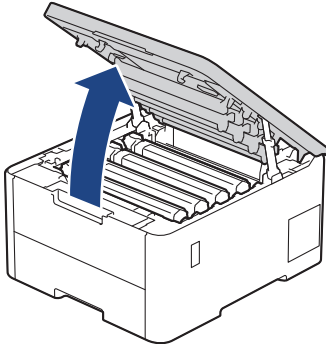
### ✓ Related Information

- [Clean the Machine](#)

## Clean the Corona Wires

Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

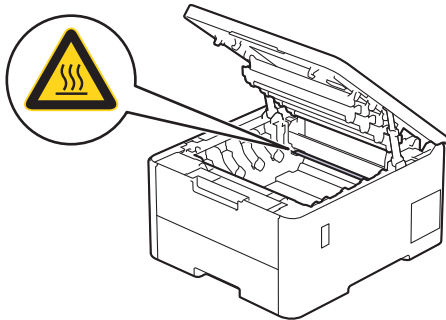
1. Open the top cover until it locks in the open position.



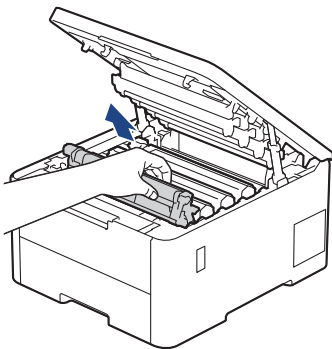
### WARNING

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



2. Remove the toner cartridge and drum unit assembly.

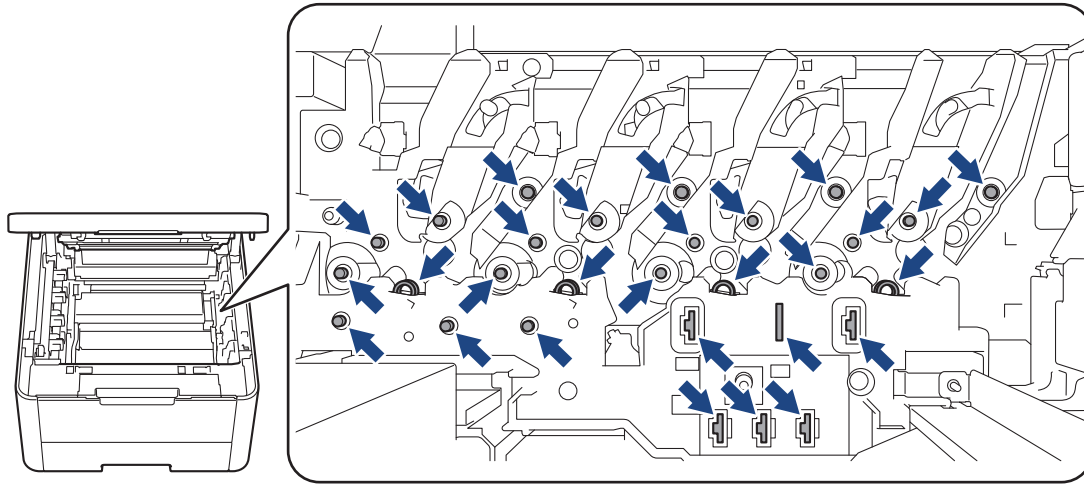


### CAUTION

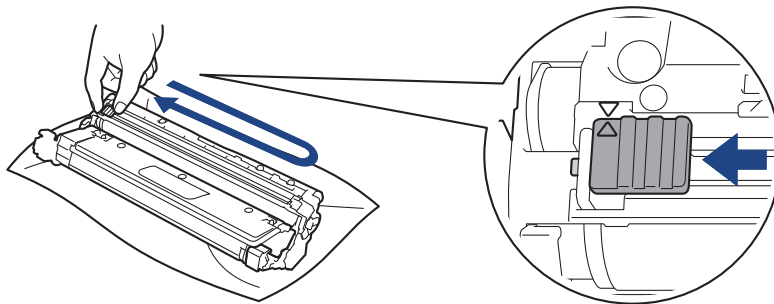
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.


### IMPORTANT

To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.

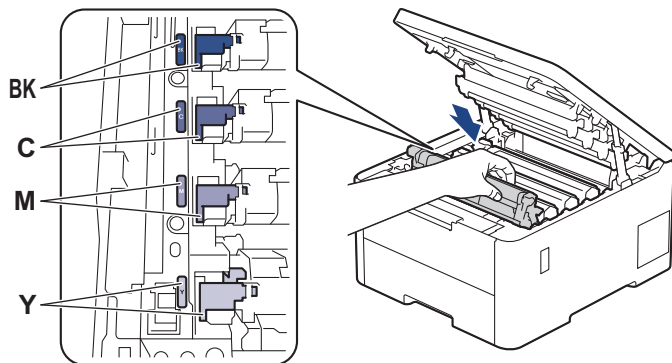


3. Clean the corona wire inside the drum unit by gently sliding the green tab from left to right and right to left several times.



 Be sure to return the green tab to the Home position (▲). The arrow on the tab must be aligned with the arrow on the drum unit. If it is not, printed pages may have a vertical stripe.

4. Slide the toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine.



5. Close the machine's top cover.

### Related Information

- [Clean the Machine](#)

#### Related Topics:

- [Error and Maintenance Messages](#)

## Clean the Drum Unit

- If your printout has black or white dots or other repeating marks at 75 mm intervals, the drum may have foreign material, such as glue from a label, stuck on the drum surface.
- Before starting the cleaning procedure, see *Related Information: Clean the Machine*.


>> [HL-L3228CDW](#)

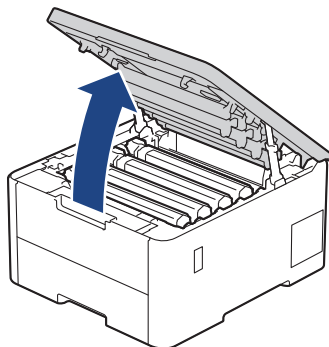
>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Make sure the machine is in Ready Mode.
2. Press ▲ or ▼ to display the [Print Reports] option, and then press 确定.
3. Press ▲ or ▼ to select the [Drum Dot Print] option, and then press 确定.
4. Press 开始.

The machine prints the Drum Dot Check Sheet.

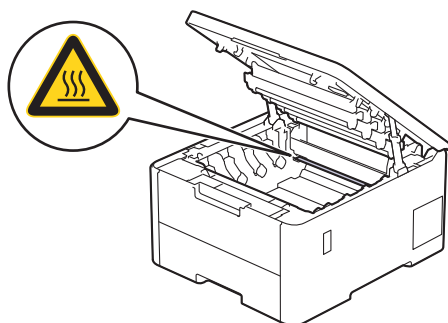
5. Press and hold  to turn the machine off.
6. Open the top cover until it locks in the open position.



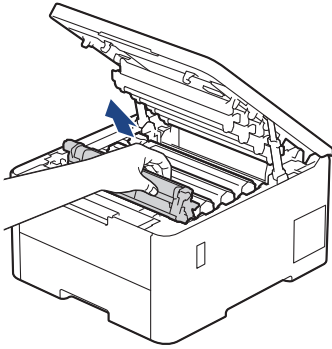
### WARNING

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



- The colour of printed dots on the Drum Dot Check Sheet is the colour of the drum you should clean. Remove the toner cartridge and drum unit assembly that matches the colour causing the problem.

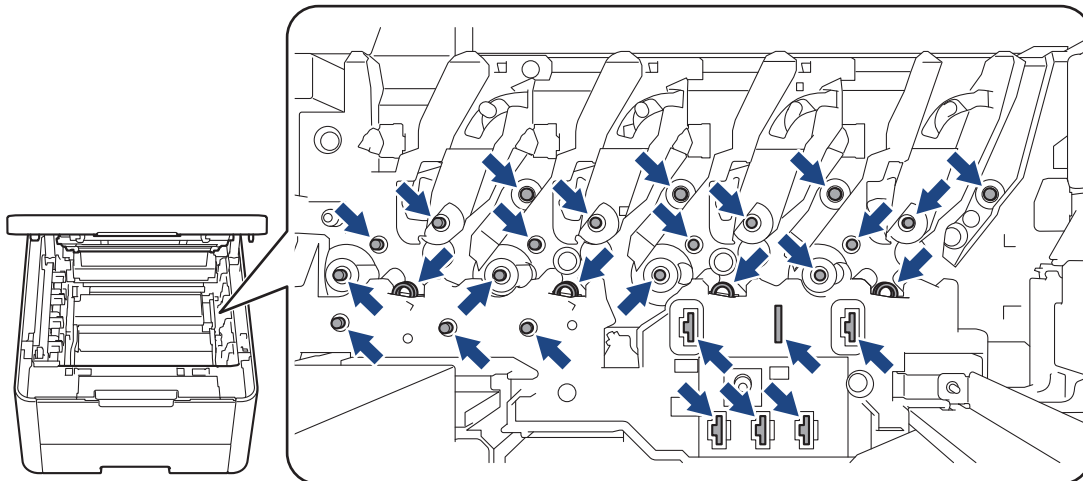


## CAUTION

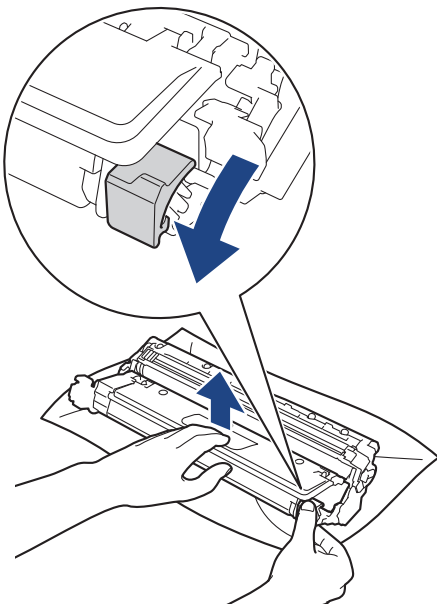
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

## IMPORTANT

To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



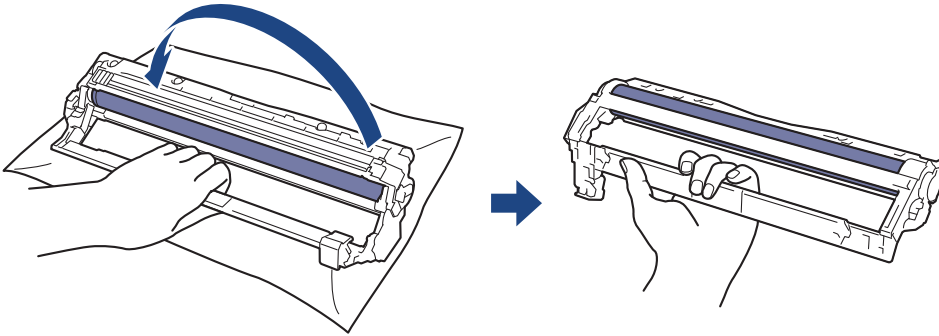
- Push down the green lock lever and remove the toner cartridge from the drum unit.



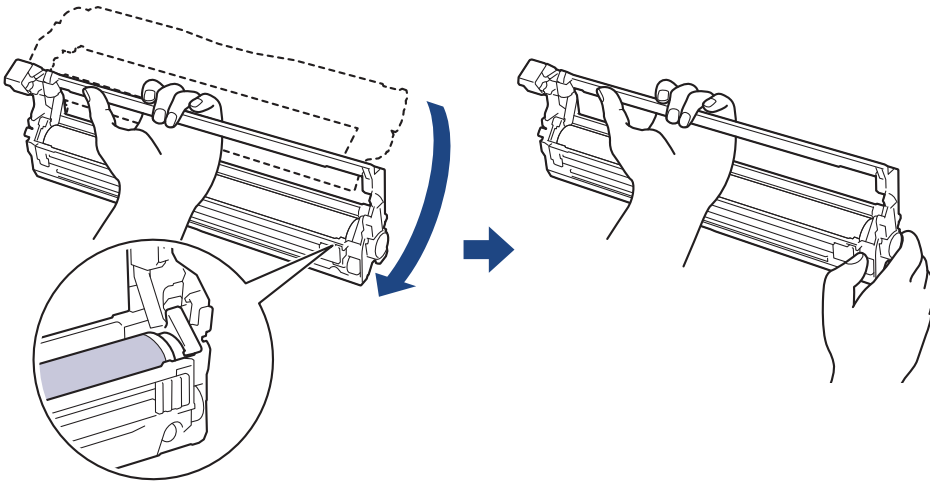


To avoid print quality problems, DO NOT touch any surface of the drum unit except the drum unit gear.

9. Lift the drum unit frame by the handle and rotate it counterclockwise, as shown.

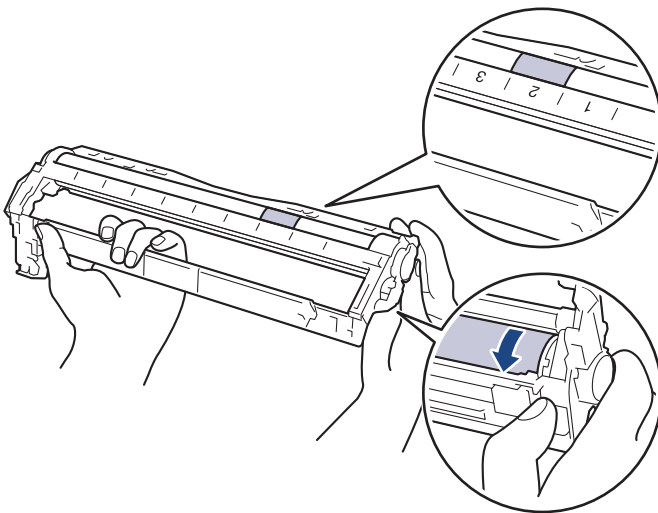


10. Loosen your grip so the frame drops forward, and then use your right hand to locate the drum unit gear inside the right side of the frame.



To avoid print quality problems, DO NOT touch any surface of the drum unit except the drum unit gear.

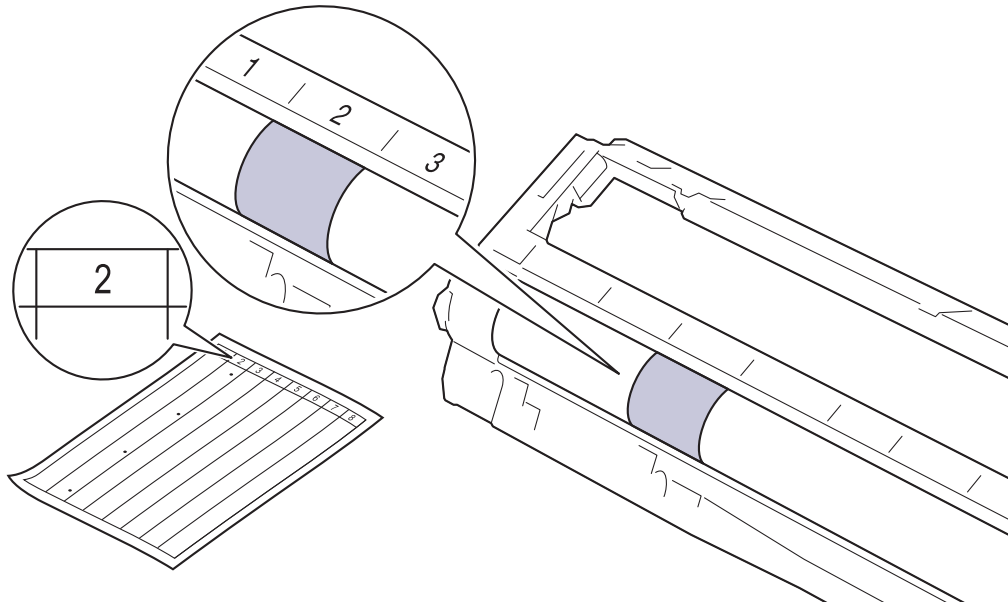
11. Tilt your left hand up to lift the frame so the numbered grid is visible, as shown. Use your right hand to rotate the drum while you look for marks or debris on the drum surface.



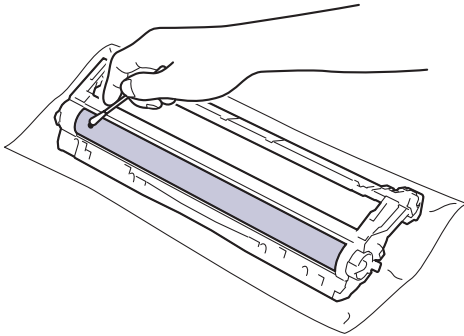




Use the column numbers next to the drum roller to find the mark. For example, a dot in column 2 on the Drum Dot Check Sheet would mean that there is a mark in the “2” region of the drum.



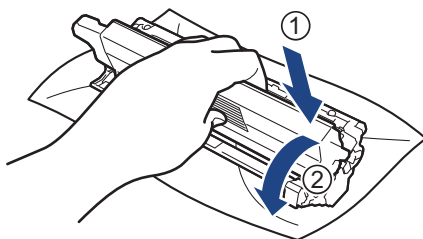
12. Wipe the surface of the drum gently with a dry cotton swab until the mark on the surface comes off.



## NOTE

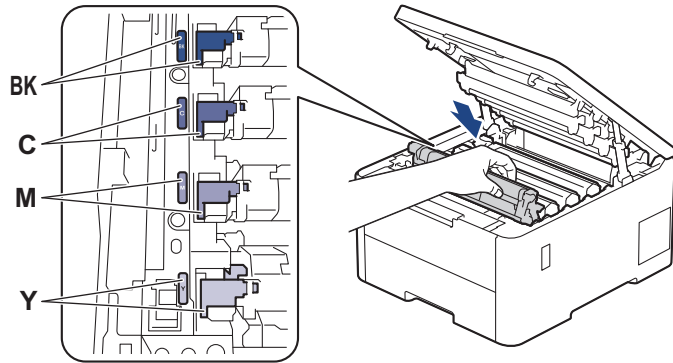
DO NOT clean the surface of the photosensitive drum with a sharp object or any liquids.

13. Reinsert the toner cartridge firmly into the drum unit until you hear it lock into place.




Make sure you put the toner cartridge in correctly or it may separate from the drum unit.



- Slide the toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine.

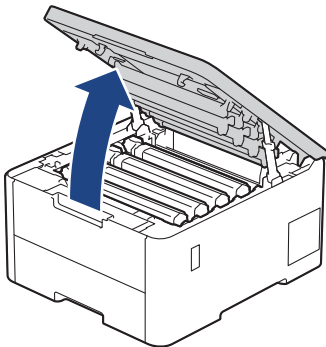


- Close the machine's top cover.

- Press  to turn the machine on.

## HL-L3288CDW

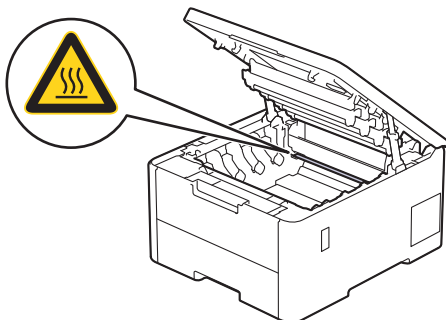
- Make sure the machine is in Ready Mode.
- Press  [Settings] > [All Settings] > [Print Reports] > [Drum Dot Print].
- Press [Yes].  
The machine prints the Drum Dot Check Sheet.
- Press and hold  to turn the machine off.
- Open the top cover until it locks in the open position.



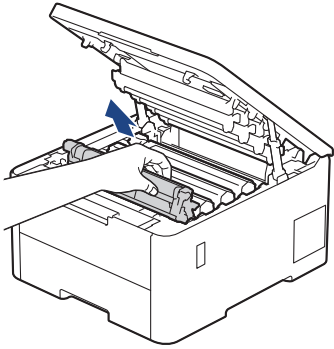
### **WARNING**

#### HOT SURFACE

The machine's internal parts will be extremely hot. Wait for the machine to cool down before touching them.



- The colour of printed dots on the Drum Dot Check Sheet is the colour of the drum you should clean. Remove the toner cartridge and drum unit assembly that matches the colour causing the problem.

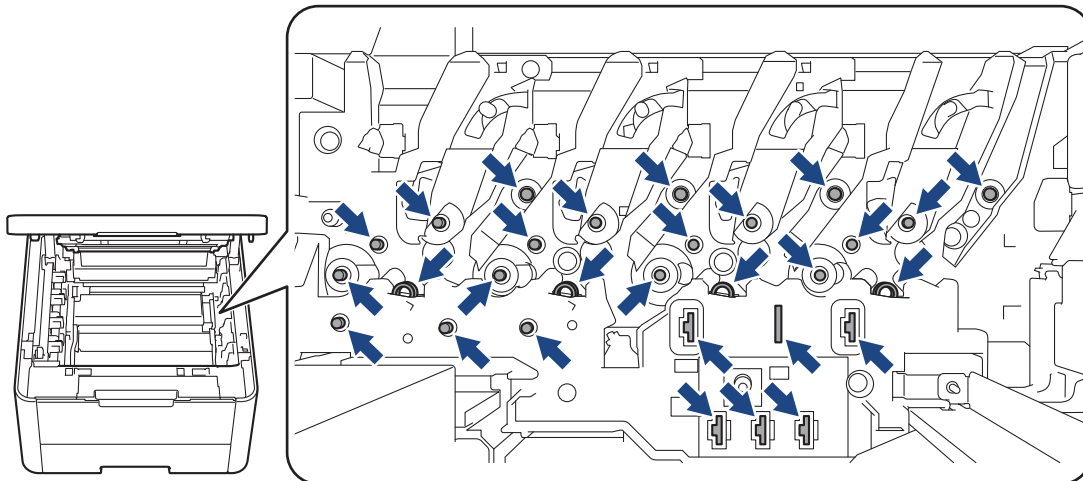


## CAUTION

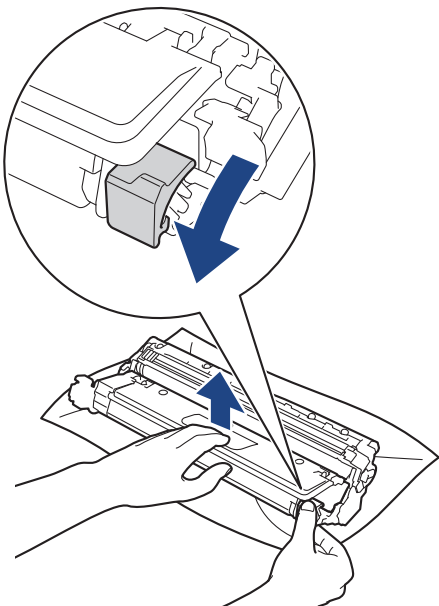
We recommend placing the toner cartridge and drum unit assembly on a clean, flat surface with disposable paper underneath it in case you accidentally spill or scatter toner.

## IMPORTANT

To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



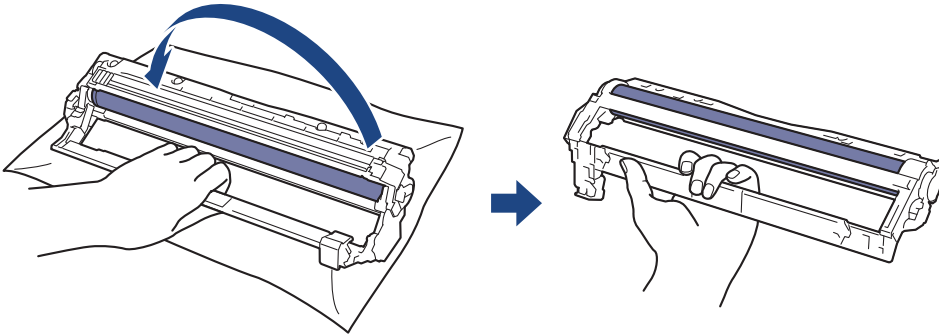
- Push down the green lock lever and remove the toner cartridge from the drum unit.



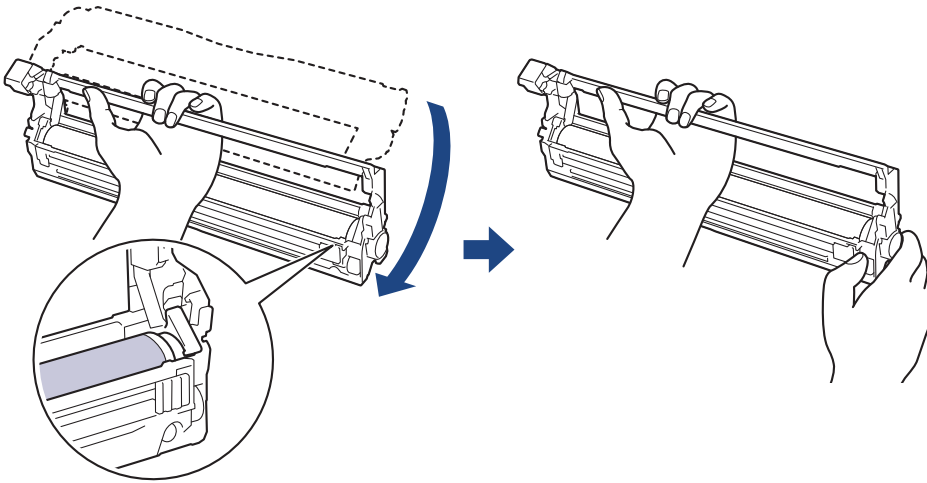


To avoid print quality problems, DO NOT touch any surface of the drum unit except the drum unit gear.

8. Lift the drum unit frame by the handle and rotate it counterclockwise, as shown.

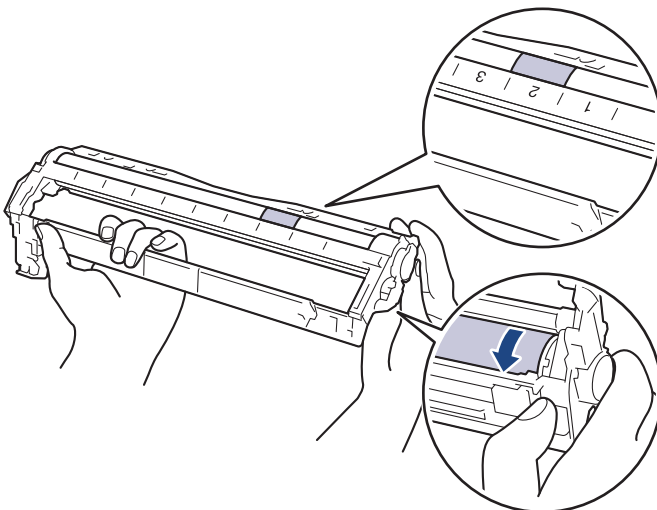


9. Loosen your grip so the frame drops forward, and then use your right hand to locate the drum unit gear inside the right side of the frame.



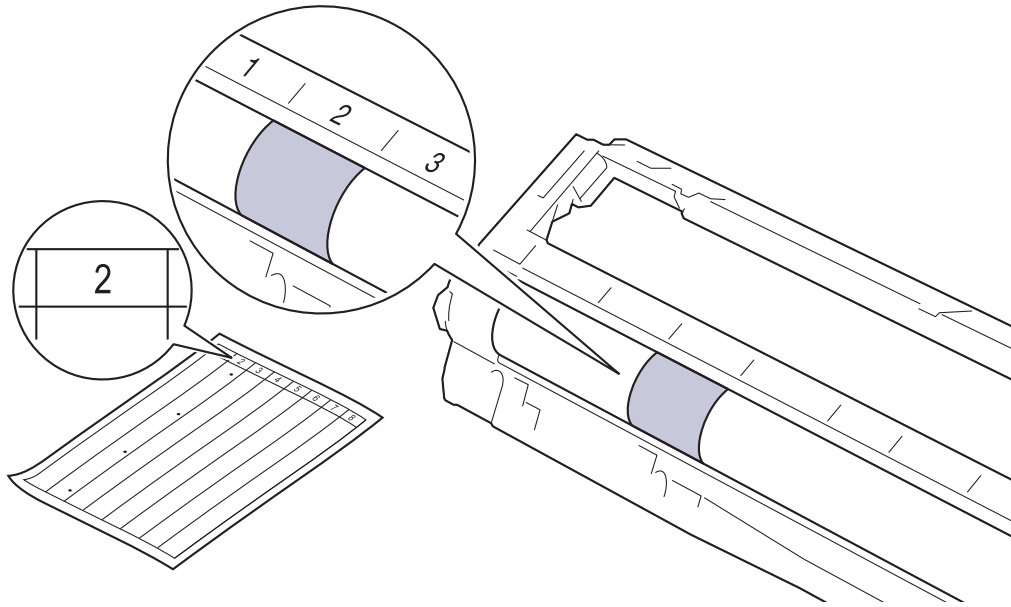
To avoid print quality problems, DO NOT touch any surface of the drum unit except the drum unit gear.

10. Tilt your left hand up to lift the frame so the numbered grid is visible, as shown. Use your right hand to rotate the drum while you look for marks or debris on the drum surface.

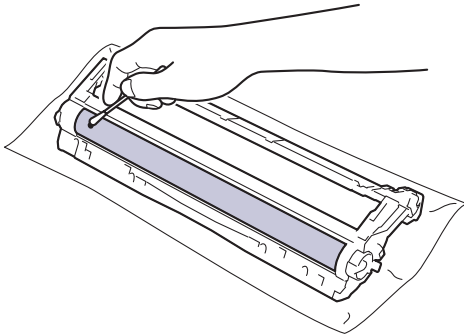




Use the column numbers next to the drum roller to find the mark. For example, a dot in column 2 on the Drum Dot Check Sheet would mean that there is a mark in the “2” region of the drum.



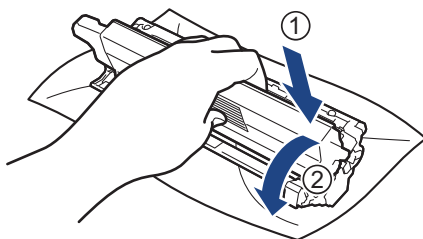
11. Wipe the surface of the drum gently with a dry cotton swab until the mark on the surface comes off.



## NOTE

DO NOT clean the surface of the photosensitive drum with a sharp object or any liquids.

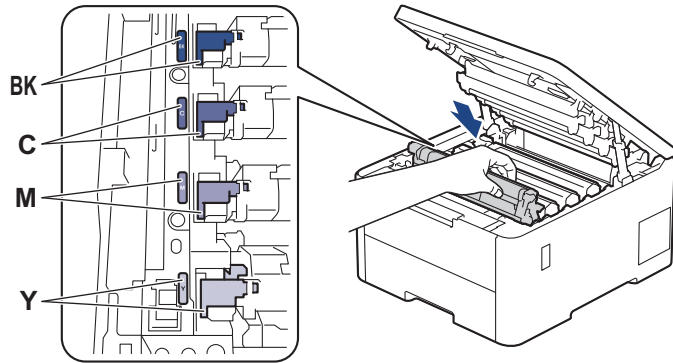
12. Reinsert the toner cartridge firmly into the drum unit until you hear it lock into place.




Make sure you put the toner cartridge in correctly or it may separate from the drum unit.

---

13. Slide the toner cartridge and drum unit assembly into the machine. Make sure that you match the toner cartridge colour to the same colour label on the machine.



14. Close the machine's top cover.

15. Press  to turn the machine on.

### Related Information

- [Clean the Machine](#)

#### **Related Topics:**


- [Improve the Print Quality](#)
-

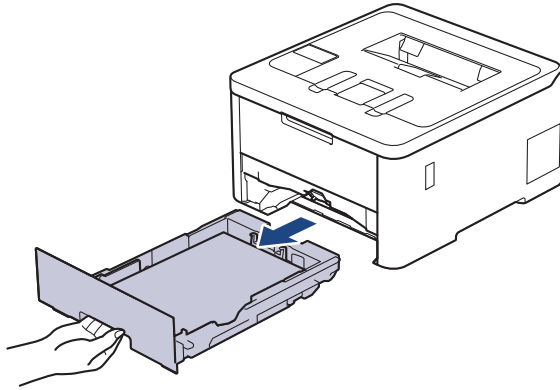
## Clean the Paper Pick-up Rollers

Cleaning the paper pick-up rollers periodically may prevent paper jams by ensuring that paper feeds correctly.

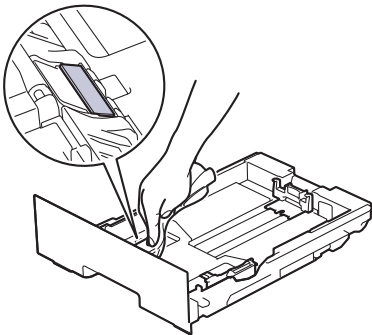
Before starting the cleaning procedure, see *Related Information: Clean the Machine*.

If you have paper feed problems, clean the pick-up rollers as follows:

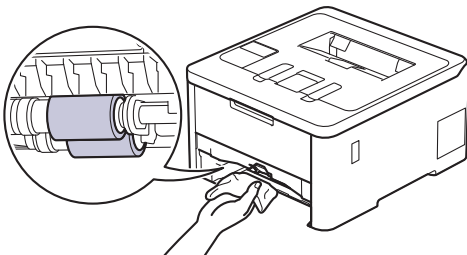
1. Press and hold  to turn the machine off.
2. Pull the paper tray completely out of the machine.




3. If paper is loaded or something is stuck inside in the paper tray, remove it.
4. Tightly wring out a lint-free cloth soaked in lukewarm water, and then wipe the separator pad on the paper tray to remove dust.



5. Wipe the two pick-up rollers inside the machine to remove dust.



6. Reload the paper and put the paper tray firmly back in the machine.
7. Press  to turn the machine on.

### Related Information

- [Clean the Machine](#)

#### Related Topics:

- [Printing Problems](#)

- 
- Clear Paper Jams
-



## Correct Colour Printing

If the colour print quality is poor, calibrate the output density of each colour, and then perform the colour alignment.

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Printer] option, and then press 确定.
2. Press ▲ or ▼ to select the [ColourCorrection] option, and then press 确定.
3. Press ▲ or ▼ to select the [Correction Start] option, and then press 确定.
4. Press ▲ to select [Yes].




The colour correction starts automatically and will take a few minutes.

5. Press 取消.

### HL-L3288CDW



To perform the calibrations of each colour's output density and colour alignment in sequence, set the Auto Correction function to On.

1. Press  [Toner] > [Colour Correction] > [Correction Start].
2. Press [Yes].



The colour correction starts automatically and will take a few minutes.

3. Press .



### Related Information

- [Routine Maintenance](#)
  - [Set the Auto Correction Function](#)
  - [Reset the Machine's Colour Correction Settings](#)

### Related Topics:

- [Improve the Print Quality](#)

## Set the Auto Correction Function

If you want your machine to automatically perform colour alignment after calibrating colours, turn on the Auto Correction function.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Printer] option, and then press 确定.
2. Press ▲ or ▼ to select the [ColourCorrection] option, and then press 确定.
3. Press ▲ or ▼ to select the [Auto Correction] option, and then press 确定.
4. Press ▲ or ▼ to select [On] and then press 确定.
5. Press 取消.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Printer] > [Colour Correction] > [Auto Correction] > [On].
2. Press .



### Related Information

- [Correct Colour Printing](#)

## Reset the Machine's Colour Correction Settings

If the output colour differs from what you see on your screen, try resetting your machine's colour correction settings.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the [Printer] option, and then press 确定.
2. Press ▲ or ▼ to select the [ColourCorrection] option, and then press 确定.
3. Press ▲ or ▼ to select the [Reset] option, and then press 确定.
4. Press ▲ to select [Reset].
5. Press 取消.

### HL-L3288CDW

1. Press  [Toner] > [Colour Correction] > [Reset].
2. Press [Yes].
3. Press .

### ✓ Related Information

- [Correct Colour Printing](#)

## Check the Remaining Part Life



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)


### HL-L3228CDW

1. Press ▲ or ▼ to select the [Machine Info.] option, and then press 确定.
2. Press ▲ or ▼ to display the [Parts Life] option, and then press 确定.
3. Press ▲ or ▼ to select the machine part you want to check, and then press 确定.  
The LCD displays the approximate remaining part life.
4. Press 取消.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Machine Information] > [Parts Life].
2. Press ▲ or ▼ to display the machine parts, and then press the machine part you want to check.  
The LCD displays the approximate remaining part life.
3. Press .



To display the approximate remaining life of toner cartridges, press  [Toner] > [Toner Life].

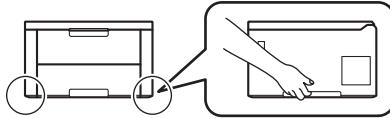
### ✓ Related Information

- [Routine Maintenance](#)

## Pack and Ship Your Machine

### WARNING


- When you move the machine, carry the machine as shown in the illustration.

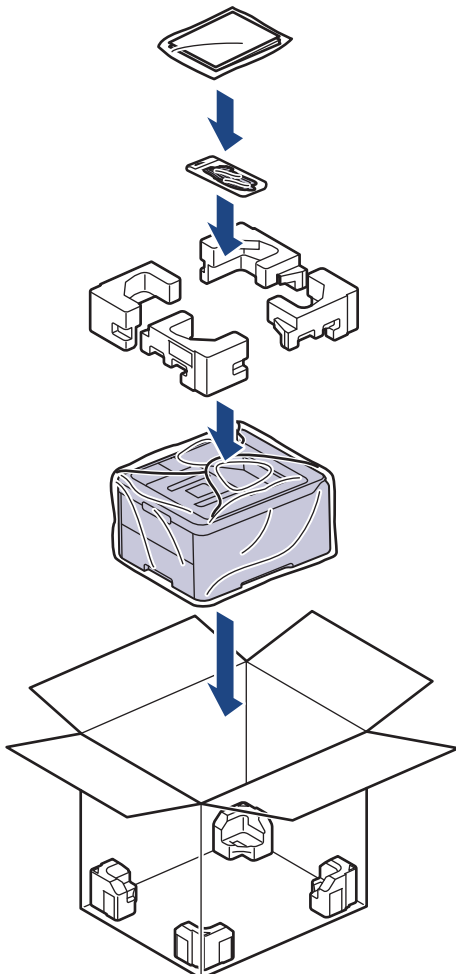


- If the machine has Optional Tray(s) installed, remove the Optional Tray(s) BEFORE moving the machine. Attempting to move the machine without removing the Optional Tray(s) may cause injury to you or damage to the machine.
- Pack the Optional Tray(s) separately in the original carton with original packing material.



If for any reason you must ship your machine, carefully repack the machine in the original packaging to avoid any damage during transit. The machine should be adequately insured with the carrier.

- Press and hold  to turn the machine off. Leave the machine off for at least 10 minutes to cool down.
- Disconnect all the cables, and then unplug the power cord from the electrical socket.
- Put the machine into the bag it originally came in.
- Pack the machine, the printed materials, and the AC power cord (if applicable) in the original carton with the original packing material as shown.



- Close the carton and tape it shut.



## Related Information

- [Routine Maintenance](#)
-

## Replace Periodic Maintenance Parts

Replace the following parts regularly to maintain print quality. The part listed below must be replaced after printing approximately 50,000 pages <sup>1</sup> based on two pages per job for the Fuser Unit.

Contact Brother customer service or your local Brother dealer when the following messages appear on the LCD:

LCD Message	Description
Maintenance Replace Fuser <sup>2</sup>	Replace the Fuser Unit.



### Related Information

- [Routine Maintenance](#)

<sup>1</sup> Letter or A4 size single-sided pages

<sup>2</sup> The replacement frequency depends on the complexity of printed pages, percentage of coverage, and the type of media used.

## Machine Settings

Customise settings and features to make your machine a more efficient work tool.

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



## Change Machine Settings from the Control Panel

- [General Settings](#)
- [Settings and Features Tables](#)

## General Settings

- [Set Sleep Mode Countdown](#)
- [About Deep Sleep Mode](#)
- [Set Auto Power Off Mode](#)
- [Adjust the LCD Backlight Brightness](#)
- [Change How Long the LCD Backlight Stays On](#)
- [Reduce Toner Consumption](#)
- [Reduce Printing Noise](#)
- [Change the Language on the LCD](#)

## Set Sleep Mode Countdown

The Sleep Mode (or Power Save Mode) setting can reduce power consumption. Select how long the machine must be idle before it goes into Sleep Mode. The Sleep Mode timer is reset when the machine receives a print job.

When the machine is in Sleep Mode, it acts as if it is turned off. The machine will wake up and start printing when it receives a print job. Use these instructions to set a time delay (countdown) before the machine enters Sleep Mode.



The Sleep Mode setting cannot be disabled due to environmental considerations.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [General Setup]. Press 确定.
  - b. Select [Ecology]. Press 确定.
  - c. Select [Sleep Time]. Press 确定.
2. Press ▲ or ▼ to enter the length of time (up to 50 minutes), in minutes, that the machine should remain idle before entering Sleep Mode.  
Press 开始.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Sleep Time].
2. Enter the length of time (maximum 50 minutes) the machine will remain idle before entering Sleep Mode, and then press [OK].
3. Press .



### Related Information

- [General Settings](#)



## About Deep Sleep Mode

If the machine is in Sleep Mode and does not receive any jobs for a certain length of time, the machine will automatically enter Deep Sleep Mode. The length of time is based on your specific model and settings.

Deep Sleep Mode uses less power than Sleep Mode.



The Deep Sleep Mode setting cannot be disabled due to environmental considerations.

Applicable Models	Machine's Control Panel in Deep Sleep Mode	Conditions That Will Wake the Machine
HL-L3228CDW	The LCD displays <i>Deep Sleep</i> .	<ul style="list-style-type: none"><li>The machine receives a job.</li><li>Someone presses a button on the control panel.</li></ul>
HL-L3288CDW	The LCD backlight turns off and the Power LED blinks.	<ul style="list-style-type: none"><li>The machine receives a job.</li><li>Someone presses , , or the touchscreen LCD.</li></ul>




### Related Information

- [General Settings](#)

## Set Auto Power Off Mode

If the machine is in Deep Sleep Mode for certain length of time, based on your model and settings, the machine will go into Power Off Mode automatically. The machine does not go into Power Off Mode when the machine is connected to a network or has secure print data in the memory(available for certain models).

To start printing, press  on the control panel and then send a print job.

>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)



### HL-L3228CDW



Select how long the machine must be in Deep Sleep Mode before it goes into Auto Power Off Mode.

1. Press **▲** or **▼** to select the following:
  - a. Select [General Setup]. Press **确定**.
  - b. Select [Ecology]. Press **确定**.
  - c. Select [Auto Power Off]. Press **确定**.
2. Press **▲** or **▼** to select the length of time (1, 2, 4, or 8 hours) that the machine should remain idle before entering Power Off Mode.
3. Press **开始**.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Auto Power Off].
2. Press **▲** or **▼** to display the length of time the machine will remain idle before entering Power Off Mode, and then press the option you want.
3. Press .





### Related Information

- [General Settings](#)

## Adjust the LCD Backlight Brightness

Related Models: HL-L3288CDW

If you are having difficulty reading the LCD, changing the brightness setting may help.

1. Press  [Settings] > [All Settings] > [General Setup] > [LCD Settings] > [Backlight].
2. Press the option you want:
  - [Light]
  - [Med]
  - [Dark]
3. Press .





### Related Information

- [General Settings](#)

## Change How Long the LCD Backlight Stays On

**Related Models:** HL-L3288CDW

Set how long the LCD backlight stays on.

1. Press  [Settings] > [All Settings] > [General Setup] > [LCD Settings] > [Dim Timer].
2. Press the option you want:
  - [10 Secs]
  - [20 Secs]
  - [30 Secs]
3. Press .



### Related Information

- [General Settings](#)

## Reduce Toner Consumption

Using the Toner Save feature may reduce toner consumption. When Toner Save is set to on, the print on your documents appears lighter.

We DO NOT recommend using the Toner Save feature for printing photo or greyscale images.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [General Setup]. Press 确定.
  - b. Select [Ecology]. Press 确定.
  - c. Select [Toner Save]. Press 确定.
2. Press ▲ or ▼ to display [On], and then press 开始.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Toner Save].
2. Press [On] or [Off].
3. Press .



### Related Information

- [General Settings](#)

#### Related Topics:

- [Improve the Print Quality](#)



## Reduce Printing Noise

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



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [General Setup]. Press 确定.
  - b. Select [Ecology]. Press 确定.
  - c. Select [Quiet Mode]. Press 确定.
2. Press ▲ or ▼ to display the [On] or [Off] option, and then press 开始.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [General Setup] > [Ecology] > [Quiet Mode].
2. Press [On] or [Off].
3. Press .

### Related Information

- [General Settings](#)

## Change the Language on the LCD

Change the LCD language if needed.

This feature is not available in some countries.



>> [HL-L3228CDW](#)

>> [HL-L3288CDW](#)

### HL-L3228CDW

1. Press ▲ or ▼ to select the following:
  - a. Select [Initial Setup]. Press 确定.
  - b. Select [Local Language]. Press 确定.
2. Press ▲ or ▼ to display your language, and then press 开始.

### HL-L3288CDW

1. Press  [Settings] > [All Settings] > [Initial Setup] > [Local Language].
2. Press your language.
3. Press .

### Related Information

- [General Settings](#)

## Settings and Features Tables

The Settings tables will help you understand the menu selections and options that are found in the machine's programs.

- [Settings Tables \(HL-L3228CDW\)](#)
- [Settings Tables \(HL-L3288CDW\)](#)
- [Feature Tables \(HL-L3288CDW\)](#)

## Settings Tables (HL-L3228CDW)

Related Models: HL-L3228CDW

Use these tables to understand the various menus and options that you will use to set your preferences on the machine.

>> [General Setup]  
 >> [Printer]  
 >> [Network]  
 >> [Print Reports]  
 >> [Machine Info.]  
 >> [Initial Setup]

### [General Setup]

Level 3	Level 4	Level 5	Description
Tray Setting	Paper Type	-	Select the paper type that matches the paper in the standard paper tray.
	Paper Size	-	Select the paper size you loaded in the standard paper tray.
	Manual Feed	-	Select whether to print from the Manual Feed Slot.
	Print Position	X Offset	Move the print start position (at the upper left corner of pages) horizontally from -500 (left) to +500 (right) dots in 300 dpi.
		Y Offset	Move the print start position (at the upper left corner of pages) vertically from -500 (up) to +500 (down) dots in 300 dpi.
Check Paper	-	Select whether to display a message telling you to check that the size of the paper in the machine and the machine's Paper Size setting match.	
Ecology	Eco Mode	-	Turn the following machine settings on at the same time: <ul style="list-style-type: none"> <li>2-sided Print: Long Edge<sup>1</sup> (available for certain models)</li> <li>Sleep Time: 0Min</li> <li>Quiet Mode: On<sup>1</sup></li> <li>Toner Save: On<sup>1</sup></li> </ul>
	Toner Save	-	Increase the page yield of the toner cartridge.
	Sleep Time	-	Set how much time should pass before the machine enters Power Saving mode.
	Quiet Mode	-	Decrease printing noise.
	Auto Power Off	-	Set the number of hours that the machine will remain in Deep Sleep mode before going into Power Off mode.
Panel Control	Button Repeat	-	Set the time for the LCD message to change when holding ▲ or ▼.
	Message Scroll	-	Set the time in seconds that an LCD message will scroll across the LCD. From Level 1 (0.2 s) to Level 10 (2 s).
	LCD Contrast	-	Adjust the contrast of the LCD.
	Auto Online	-	Set the machine to return to Ready mode after it has been idle for 30 seconds.
Setting Lock	-	-	Lock your machine's settings using the Setting Lock password.
Interface	Select	-	Select the interface to use. If you select Auto, the machine changes the interface to USB or network depending on which interface is receiving data.

Level 3	Level 4	Level 5	Description
Interface	Auto IF Time	-	Set the time-out period for the auto interface selection.
	Input Buffer	-	Increase or decrease the input buffer capacity.

<sup>1</sup> Changing this setting is possible only after you change certain other machine settings in Web Based Management.

## [Printer]

Level 3	Level 4	Level 5	Description
Emulation	-	-	Choose the emulation mode.
Quality	-	-	Select the print quality.
Print Options	Font List	HP LaserJet	Print the font list and samples of HP LaserJet.
		BR-Script 3	Print the font list and samples of BR-Script.
	Test Print	-	Print the test page.
	PrintRedPatch	-	Print the red colour patch page.
2-sided	2-sided Print	-	Select whether to print on both sides of the paper.
	Single Image	-	For a print job where the last page is a 1-sided image, select the 1-sided Feed option to reduce printing time. When you use preprinted paper, you must select the 2-sided Feed option. If you select 1-sided Feed for preprinted paper, the last page will be printed on the reverse side.
Auto Continue	-	-	Select if you want the machine to clear paper size errors or media type errors automatically.
Output Colour	-	-	Set the output colour.
Paper Type	-	-	Set the paper type.
Paper Size	-	-	Set the paper size.
Copies	-	-	Set the number of printed pages.
Orientation	-	-	Set pages to print in either portrait or landscape orientation.
Edge Emphasis	-	-	Make the text appear sharper.
Print Position	X Offset	-	Move the print start position (at the upper left corner of pages) horizontally from -500 (left) to +500 (right) dots in 300 dpi.
	Y Offset	-	Move the print start position (at the upper left corner of pages) vertically from -500 (up) to +500 (down) dots in 300 dpi.
Auto FF	-	-	Allow the machine to print any remaining data automatically.
HP LaserJet	Font No.	-	Set the font number.
	Font Pitch	-	Set the font pitch. (Available only for certain fonts.)
	Font Point	-	Set the font size. (Available only for certain fonts.)
	Symbol Set	-	Select the symbol or character set.
	Table Print	-	Print the code table.
	Auto LF	-	ON: CR -> CR+LF, OFF: CR -> CR
	Auto CR	-	ON: LF -> LF+CR, FF -> FF+CR, or VT -> VT+CR

Level 3	Level 4	Level 5	Description	
HP LaserJet			OFF: LF -> LF, FF -> FF, or VT -> VT	
	Auto WRAP	-	Select whether you want a line feed and carriage return when the carriage position reaches the right margin.	
	Auto SKIP	-	Select whether you want a line feed and carriage return when the carriage position reaches the bottom margin.	
	Left Margin	-	Set the left margin at column 0 to 70 columns at 1 cpi.	
	Right Margin	-	Set the right margin at column 10 to 80 columns at 1 cpi.	
	Top Margin	-	Set the top margin distance from the top edge of the paper.	
	Bottom Margin	-	Set the bottom margin distance from the bottom edge of the paper.	
	Lines	-	Set the number of lines on each page.	
	Tray Command	-	Select this setting if a tray mismatch appears when you use the HP drivers.	
BR-Script 3	Error Print	-	Choose whether the machine prints the error information when errors occur.	
	CAPT	-	Use CAPT (Colour Advanced Printing Technology) for optimal print quality when printing a PS file created by a non-Brother PS driver. Colours and photos appear clearer and more accurate. Print speed will be slower.	
PDF	Multiple Page	-	Set the page layout when printing multiple pages.	
	PDF Print Opt	-	Set the PDF Print setting to print either comments (Markup) or stamps in the PDF file, along with the text.	
	Fit to Page	-	Select if the machine scales or resizes the pages in the PDF file to fit the selected paper size.	
ColourCorrection	Correction Start	-	Initiate colour calibration to check and correct colours.	
	Reset	-	Reset the calibration parameters to the default settings.	
	Auto Correction	-	Set the machine to perform Colour Calibration and Registration automatically.	
	Colour Settings	Setting Mode		Select whether to apply the colour print settings of the machine or the printer driver.
		Colour Mode		Select the colour mode.
		Improve Gray		Turn on or off to improve the image quality of shaded areas.
		Enhance Black		Turn on or off if a black graphic does not print correctly.
		Brightness		Adjust the brightness.
		Contrast		Adjust the contrast.
		Red		Adjust the red colour.
Green			Adjust the green colour.	
Blue		Adjust the blue colour.		

Level 3	Level 4	Level 5	Description
Reset Printer	-	-	Restore the machine settings to the factory settings.

## [Network]

Level 3	Level 4	Level 5	Level 6	Descriptions	
WLAN (Wi-Fi)	Find Network	-	-	Configure the wireless network settings using the setup wizard.	
	TCP/IP	Boot Method	-	Choose the IP method that best suits your needs.	
		IP Address	-	Enter the IP address.	
		Subnet Mask	-	Enter the Subnet mask.	
		Gateway	-	Enter the Gateway address.	
		Node Name	-	Enter the Node name.	
		WINS Config	-	Select the WINS configuration mode.	
		WINS Server	Primary	-	Specify the IP address of the primary WINS server.
			Secondary	-	Specify the IP address of the secondary WINS server.
		DNS Server	Primary	-	Specify the IP address of the primary DNS server.
			Secondary	-	Specify the IP address of the secondary DNS server.
	APIPA	-	Allocate the IP address from the link-local address range automatically <sup>1</sup> .		
	IPv6	-	Turn the IPv6 protocol on or off.		
	WPS/Push Button	-	-	Configure your wireless network settings using the one-button push method.	
	WPS/PIN Code	-	-	Configure the wireless network settings using WPS with a PIN code.	
	WLAN Status	Status	-	Display the wireless network connection status.	
		Signal	-	Display the wireless network signal strength.	
		Channel	-	Display the channel in use when Status is Active.	
		Speed	-	Display the connection speed when Status is Active.	
		SSID	-	Display the wireless SSID (Network Name).	
		Comm. Mode	-	Display the current Communication mode.	
	MAC Address	-	-	Display your machine's MAC address.	
	WLAN Enable	-	-	Turn the wireless interface on or off.	
Wi-Fi Direct	Manual	-	-	Configure your Wi-Fi Direct network settings manually.	
	Group Owner	-	-	Set your machine as the Group Owner.	
	Push Button	-	-	Configure your Wi-Fi Direct network settings using the one-button push method quickly.	

Level 3	Level 4	Level 5	Level 6	Descriptions
Wi-Fi Direct	PIN Code	-	-	Configure your Wi-Fi Direct network settings using WPS with a PIN code quickly.
	Device Info.	Device Name	-	View your machine's device name.
		SSID	-	Display the Group Owner's SSID (Network Name).
		IP Address	-	Display your machine's IP Address.
	Status Info.	Status	-	Display the Wi-Fi Direct network status.
		Signal	-	Display the current Wi-Fi Direct network signal strength. When your machine acts as Group Owner, the LCD always displays <i>Strong</i> .
		Channel	-	Display the channel in use when the Status is <i>G/O Active</i> or <i>Client Active</i> .
		Speed	-	Display the connection speed when the Status is <i>G/O Active</i> or <i>Client Active</i> .
I/F Enable	-	-	Enable or disable the Wi-Fi Direct connection.	
Web Based Mgmt	-	-	-	Enable or disable Web Based Management. If you enable this function, make sure you specify the connection method to use Web Based Management.
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.
Global Detect	Allow Detect	-	-	Enable or disable Global Detect, a function that detects and notifies the user when the user unintentionally connects to a global network.
	Reject Access	-	-	Disable connections to the global network.
Network Reset	-	-	-	Restore all network settings of your machine to the factory settings.

- <sup>1</sup> On connection to the network, if the machine's 'Boot Method' is 'Auto' the machine will attempt to set the IP address and Subnet Mask from a boot server such as DHCP. If a boot server cannot be found, an APIPA IP address will be allocated, such as 169. 254. (001-254). (000-255). If the 'Boot Method' of the machine is set to 'Static', you must manually enter an IP address from the machine's control panel.

### [Print Reports]

Level 3	Level 4	Description
Printer Settings	-	Print the Printer Settings page.
Network Config	-	Print the Network Configuration Report.
Print File List	-	Print a list of data saved in the memory.
Drum Dot Print	-	Print the Drum Dot Check Sheet.
WLAN Report	-	Print the wireless connection diagnostics report.

### [Machine Info.]

Level 3	Level 4	Description
Serial No.	-	Display the machine's serial number.



Level 3	Level 4	Description
Firmware Version	Main Version	Display the machine's firmware version.
	Security Version	
Page Counter	Total	Display the total number of printed pages.
	Colour	Display the total colour printed pages.
	Black and White	Display the total monochrome printed pages.
Parts Life <sup>1</sup>	Toner	Display the remaining life of each toner.
	Drum	Display the remaining life of each drum unit.
	Belt	Display the remaining life of the belt unit.
	Fuser	Display the remaining life of the fuser unit.

<sup>1</sup> The parts life is approximate and may vary by type of use.

## [Initial Setup]

Level 3	Level 4	Description
Reset	Machine Reset	Restore all the machine settings that you have changed.
	Network Reset	Restore all network settings back to the factory settings.
	Factory Reset	Restore all the machine's settings to the factory defaults. Perform this operation when you dispose of your machine.
Local Language	-	Select the LCD language for your country.



## Related Information

- [Settings and Features Tables](#)

## Settings Tables (HL-L3288CDW)

Related Models: HL-L3288CDW

>> [Settings]  
 >> [General Setup]  
 >> [Printer]  
 >> [Network]  
 >> [Print Reports]  
 >> [Machine Information]  
 >> [Initial Setup]

### [Settings]



### [Settings]

Level 2	Level 3	Level 4	Descriptions	
Toner	Toner Life	-	View the approximate remaining toner life.	
	Test Print	-	Print a test page.	
	Colour Correction	Correction Start		Initiate colour calibration to check and correct colours.
		Reset		Reset the calibration parameters to the default settings.
	Toner Cartridge Check		Black	View the installed toner cartridge information on the LCD, for example, if the toner cartridge is genuine.
Magenta				
Cyan				
Yellow				
Network	Wired LAN	-	Access the Wired LAN setting menus.	
	WLAN (Wi-Fi)	-	Access the WLAN setting menus.	
Wi-Fi Direct	-	-	Access the Wi-Fi Direct setting menus.	
Tray Setting	-	-	Access the tray setting menus.	
Eco Mode	-	-	Turn the following machine settings on at the same time: <ul style="list-style-type: none"> <li>2-sided Print: Long Edge<sup>1</sup></li> <li>Sleep Time: 0 Min</li> <li>Dim Timer: 10 Secs</li> <li>Quiet Mode: On<sup>1</sup></li> <li>Toner Save: On<sup>1</sup></li> </ul>	
All Settings	-	-	Configure the detailed settings.	

<sup>1</sup> Changing this setting is possible only after you change certain other machine settings in Web Based Management.

### [General Setup]

[All Settings] > [General Setup]

Level 3	Level 4	Level 5	Level 6	Descriptions
Tray Setting	Paper Type	-	-	Select the paper type that matches the paper in the standard paper tray.

Level 3	Level 4	Level 5	Level 6	Descriptions
Tray Setting	Paper Size	-	-	Select the paper size you loaded in the standard paper tray.
	Manual Feed	-	-	Select whether to print from the Manual Feed Slot.
	Print Position	X Offset	-	Move the print start position (at the upper left corner of pages) horizontally from -500 (left) to +500 (right) dots in 300 dpi.
		Y Offset	-	Move the print start position (at the upper left corner of pages) vertically from -500 (up) to +500 (down) dots in 300 dpi.
	Check Paper	-	-	Select whether or not to display a message indicating you must check the paper type and paper size when you pull a paper tray out of the machine.
LCD Settings	Backlight	-	-	Adjust the brightness of the LCD backlight.
	Dim Timer	-	-	Set how long the LCD backlight stays on after the last finger press.
Screen Settings	Display Information	IP Address	-	Select whether to display your machine's IP Address on the Home screen.
Ecology	Eco Mode	-	-	Turn the following machine settings on at the same time: <ul style="list-style-type: none"> <li>• 2-sided Print: Long Edge<sup>1</sup></li> <li>• Sleep Time: 0 Min</li> <li>• Dim Timer: 10 Secs</li> <li>• Quiet Mode: On<sup>1</sup></li> <li>• Toner Save: On<sup>1</sup></li> </ul>
	Toner Save	-	-	Increase the page yield of the toner cartridge.
	Sleep Time	-	-	Set how much time should pass before the machine enters Power Saving mode.
	Quiet Mode	-	-	Decrease printing noise.
	Auto Power Off	-	-	Set the number of hours that the machine will remain in Deep Sleep mode before going into Power Off mode.
Setting Lock	Set Password	-	-	Restrict unauthorised users from changing the machine's settings.
	Lock Off⇒On	-	-	
	New Password (Available only when you enter the password for the first time.)	-	-	
Interface	Select	-	-	Select the interface to use. If you select the <code>Auto</code> option, the machine changes the interface to USB or network depending on which interface is receiving data.
	Auto IF Time	-	-	Set the time-out period for the auto interface selection.
	Input Buffer	-	-	Increase or decrease the input buffer capacity.
Delete Storage	Macro ID	-	-	Delete the registered Macro data.
	Stream ID	-	-	Delete the registered Stream data.

<sup>1</sup> Changing this setting is possible only after you change certain other machine settings in Web Based Management.

Level 3	Level 4	Level 5	Level 6	Descriptions
Delete Storage	Font ID	-	-	Delete the registered Font data.
	Delete All	-	-	Restore your machine's Macro/Stream and Font data to the factory settings.

## [Printer]

[All Settings] > [Printer]

Level 3	Level 4	Level 5	Descriptions
Emulation	-	-	Choose the emulation mode.
Quality	-	-	Select the print quality.
Print Options	Font List	HP LaserJet	Print the font list and samples of HP LaserJet.
		BR-Script 3	Print the font list and samples of BR-Script.
	Test Print	-	Print the test page.
	Print the red colour patch	-	Print the red colour patch page.
2-sided	2-sided Print	-	Select whether to print on both sides of the paper.
	Single Image	-	For a print job where the last page is a 1-sided image, select the 1-sided Feed option to reduce printing time. When you use preprinted paper, you must select the 2-sided Feed option. If you select 1-sided Feed for preprinted paper, the last page will be printed on the reverse side.
Auto Continue	-	-	Select this setting if you want the machine to clear paper size errors or media type errors, and use paper from other trays.
Output Colour	-	-	Set the output colour.
Paper Type	-	-	Set the paper type.
Paper Size	-	-	Set the paper size.
Copies	-	-	Set the number of printed pages.
Orientation	-	-	Set pages to print in either portrait or landscape orientation.
Edge Emphasis	-	-	Make the text appear sharper.
Print Position	X Offset	-	Move the print start position (at the upper left corner of pages) horizontally from -500 (left) to +500 (right) dots in 300 dpi.
	Y Offset	-	Move the print start position (at the upper left corner of pages) vertically from -500 (up) to +500 (down) dots in 300 dpi.
Auto FF	-	-	Allow the machine to print any remaining data automatically.
HP LaserJet	Font No.	Font No.	Set the font number.
		Soft Font No.	Set the soft font number. This menu appears if a soft font is installed on your Brother machine.
	Font Pitch	-	Set the font pitch. (Available only for certain fonts.)
	Font Point	-	Set the font size.

Level 3	Level 4	Level 5	Descriptions	
HP LaserJet			(Available only for certain fonts.)	
	Symbol Set	-	Select the symbol or character set.	
	Table Print	-	Print the code table.	
	Auto LF	-	ON: CR -> CR+LF, OFF: CR -> CR	
	Auto CR	-	ON: LF -> LF+CR, FF -> FF+CR, or VT -> VT+CR OFF: LF -> LF, FF -> FF, or VT -> VT	
	Auto WRAP	-	Select whether you want a line feed and carriage return when the carriage position reaches the right margin.	
	Auto SKIP	-	Select whether you want a line feed and carriage return when the carriage position reaches the bottom margin.	
	Left Margin	-	Set the left margin at column 0 to 70 columns at 1 cpi.	
	Right Margin	-	Set the right margin at column 10 to 80 columns at 1 cpi.	
	Top Margin	-	Set the top margin distance from the top edge of the paper.	
	Bottom Margin	-	Set the bottom margin distance from the bottom edge of the paper.	
	Lines	-	Set the number of lines on each page.	
Tray Command	-	Select this setting if a tray mismatch appears when you use the HP drivers.		
BR-Script 3	Error Print	-	Choose whether the machine prints the error information when errors occur.	
	CAPT	-	Use CAPT (Colour Advanced Printing Technology) for optimal print quality when printing a PS file created by a non-Brother PS driver.  Colours and photos appear clearer and more accurate. Print speed will be slower.	
PDF	Multiple Page	-	Set the page layout when printing multiple pages.	
	PDF Print Options	-	Set the PDF Print setting to print either comments (Markup) or stamps in the PDF file, along with the text.	
	PDF Fit to Page	-	Select if the machine scales or resizes the pages in the PDF file to fit the selected paper size.	
Colour Correction	Correction Start	-	Initiate colour calibration to check and correct colours.	
	Reset	-	Reset the calibration parameters to the default settings.	
	Auto Correction	-	Set the machine to perform Colour Calibration and Registration automatically.	
	Colour Settings	Setting Mode		Select whether to apply the colour print settings of the machine or the printer driver.
		Colour Mode		Select the colour mode.
		Improve Gray Colour		Turn on or off to improve the image quality of shaded areas.
		Enhance Black Printing		Turn on or off if a black graphic does not print correctly.
Brightness		Adjust the brightness.		

Level 3	Level 4	Level 5	Descriptions
Colour Correction	Colour Settings	Contrast	Adjust the contrast.
		Red	Adjust the red colour.
		Green	Adjust the green colour.
		Blue	Adjust the blue colour.
Reset Printer	-	-	Restore the machine settings to the factory settings.

## [Network]

[All Settings] > [Network]

Level 3	Level 4	Level 5	Level 6	Descriptions
Wired LAN	TCP/IP	Boot Method	-	Choose the IP method that best suits your needs.
		IP Address	-	Enter the IP address.
		Subnet Mask	-	Enter the Subnet mask.
		Gateway	-	Enter the Gateway address.
		Node Name	-	Enter the Node name.
		WINS Configuration	-	Select the WINS configuration mode.
		WINS Server	Primary	Specify the IP address of the primary WINS server.
			Secondary	Specify the IP address of the secondary WINS server.
		DNS Server	Primary	Specify the primary DNS server's IP address.
			Secondary	Specify the secondary DNS server's IP address.
	APIPA	-	Allocate the IP address from the link-local address range automatically <sup>1</sup> .	
	IPv6	-	Turn the IPv6 protocol on or off.	
	Ethernet	-	-	Choose the Ethernet link mode.
	Wired Status	-	-	Display the wired network connection status.
MAC Address	-	-	Display your machine's MAC address.	
Set to Default	-	-	Restore your machine's wired network settings to the factory settings.	
Wired Enable	-	-	Turn the wired interface on or off.	
WLAN (Wi-Fi)	Find Wi-Fi Network	-	-	Configure your wireless network settings manually.
	TCP/IP	Boot Method	-	Choose the IP method that best suits your needs.
		IP Address	-	Enter the IP address.
		Subnet Mask	-	Enter the Subnet mask.
		Gateway	-	Enter the Gateway address.
		Node Name	-	Enter the Node name.
		WINS Configuration	-	Select the WINS configuration mode.

Level 3	Level 4	Level 5	Level 6	Descriptions	
WLAN (Wi-Fi)	TCP/IP	WINS Server	Primary	Specify the IP address of the primary WINS server.	
			Secondary	Specify the IP address of the secondary WINS server.	
		DNS Server	Primary	Specify the primary DNS server's IP address.	
			Secondary	Specify the secondary DNS server's IP address.	
		APIPA	-	Allocate the IP address from the link-local address range automatically <sup>1</sup> .	
		IPv6	-	Turn the IPv6 protocol on or off.	
	WPS/Push Button	-	-	Configure your wireless network settings using the one-button push method.	
	WPS/PIN Code	-	-	Configure the wireless network settings using WPS with a PIN code.	
	WLAN Status	Status	-	Display the wireless network connection status.	
		Signal	-	Display the wireless network signal strength.	
		SSID	-	Display the wireless SSID (Network Name).	
		Comm. Mode	-	Display the current Communication mode.	
	MAC Address	-	-	Display your machine's MAC address.	
	Set to Default	-	-	Restore your machine's wireless network settings to the factory settings.	
	WLAN Enable	-	-	Turn the wireless interface on or off.	
	Wi-Fi Direct	Manual	-	-	Configure your Wi-Fi Direct network settings manually.
		Group Owner	-	-	Set your machine as the Group Owner.
Push Button		-	-	Configure your Wi-Fi Direct network settings using the one-button push method quickly.	
PIN Code		-	-	Configure your Wi-Fi Direct network settings using WPS with a PIN code quickly.	
Device Information		Device Name	-	View your machine's device name.	
		SSID	-	Display the Group Owner's SSID (Network Name).	
		IP Address	-	Display your machine's IP Address.	
Status Information		Status	-	Display the Wi-Fi Direct network status.	
		Signal	-	Display the current Wi-Fi Direct network signal strength.	
I/F Enable		-	-	Enable or disable the Wi-Fi Direct connection.	
Web Based Mgmt	-	-	-	Enable or disable Web Based Management.	

Level 3	Level 4	Level 5	Level 6	Descriptions
				If you enable this function, make sure you specify the connection method to use Web Based Management.
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.
Global Detect	Allow Detect	-	-	Enable or disable Global Detect, a function that detects and notifies the user when the user unintentionally connects to a global network.
	Reject Access	-	-	Disable connections to the global network.
Network Reset	-	-	-	Restore all network settings of your machine to the factory settings.

<sup>1</sup> On connection to the network, if the machine's 'Boot Method' is 'Auto' the machine will attempt to set the IP address and Subnet Mask from a boot server such as DHCP. If a boot server cannot be found, an APIPA IP address will be allocated, such as 169. 254. (001-254). (000-255). If the 'Boot Method' of the machine is set to 'Static' you must manually enter an IP address from the machine's control panel.

## [Print Reports]

[All Settings] > [Print Reports]

Level 3	Descriptions
Printer Settings	Print the Printer Settings page.
Network Configuration	Print the Network Configuration Report.
Print File List	Print a list of data saved in the memory.
Drum Dot Print	Print the Drum Dot Check Sheet.
WLAN Report	Print the wireless connection diagnostics report.

## [Machine Information]

[All Settings] > [Machine Information]

Level 3	Level 4	Descriptions
Serial No.	-	Display the machine's serial number.
Firmware Version	Main Version	Check your machine's firmware version.
	Sub3 Version	
	Security Version	
Firmware Update	-	Update your machine's firmware to the latest version.
Firmware Auto Check	-	View firmware information on the Home screen.
Page Counter	Total	Display the total number of printed pages.
	Colour	Display the total colour printed pages.
	Black and White	Display the total monochrome printed pages.
Parts Life <sup>1</sup>	Drum	Display the remaining life of each drum unit.
	Belt	Display the remaining life of the belt unit.
	Fuser	Display the remaining life of the fuser unit.



---

<sup>1</sup> The parts life is approximate and may vary by type of use.

## [Initial Setup]

[All Settings] > [Initial Setup]

Level 3	Level 4	Descriptions
Reset	Machine Reset	Restore all the machine's settings that you have changed, such as Paper Type.
	Network Reset	Restore all network settings of your machine to the factory settings.
	Factory Reset	Reset the machine and restore the printer settings (including command settings) to the factory settings.
Local Language	-	Select the LCD language for your country.



### Related Information

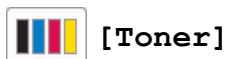
- [Settings and Features Tables](#)


## Feature Tables (HL-L3288CDW)

Related Models: HL-L3288CDW

- >> [\[Toner\]](#)
- >> [Wi-Fi Setup](#)
- >> [\[Functions\]](#)
- >> [\[Secure Print\]](#)


### [Toner]



Level 2	Level 3	Level 4	Descriptions	
 (Toner)	<b>Toner Life</b>	-	View the approximate remaining toner life for each colour.	
	<b>Test Print</b>	-	Print the test page.	
	<b>Colour Correction</b>	<b>Correction Start</b>		Perform colour calibration to check and correct colours, and then perform registration to align the print position of each colour.
		<b>Reset</b>		Reset the calibration parameters to the default settings.
	<b>Toner Cartridge Check</b>	<b>Black</b>		View the installed toner cartridge information on the LCD, for example, if the toner cartridge is genuine.
		<b>Magenta</b>		
		<b>Cyan</b>		
<b>Yellow</b>				

### Wi-Fi Setup



Level 2	Level 3	Descriptions
 (Wi-Fi Setup)	<b>Find Wi-Fi Network</b>	Configure the wireless network settings using the setup wizard.
	<b>TCP/IP</b> 1	Change the TCP/IP settings.
	<b>WPS/Push Button</b>	Configure your wireless network settings using the one-button push method.
	<b>WPS/PIN Code</b> 1	Configure the wireless network settings using WPS with a PIN code.
	<b>WLAN Status</b> 1	Display the wireless network connection status.
	<b>MAC Address</b> 1	Display your machine's MAC address.
	<b>Set to Default</b> 1	Restore your machine's wireless network settings to the factory settings.
	<b>WLAN Enable</b> 1	Turn the wireless interface on or off.


<sup>1</sup> Available after a Wi-Fi® connection has been configured.

---

## [Functions]




### [Functions]

Level 2	Level 3	Descriptions
 (Functions)	Apps	Connect the Brother machine to the Brother Apps service.

## [Secure Print]



### [Secure Print]

Level 2	Descriptions
 (Secure Print)	You can print data saved in the machine's memory when you enter your four-digit password. Active only when the machine has secure print data.



### Related Information

- [Settings and Features Tables](#)
-

## Change Machine Settings Using Web Based Management

Web Based Management is a utility that uses a standard web browser to manage your machine using the Hyper Text Transfer Protocol (HTTP) or Hyper Text Transfer Protocol over Secure Socket Layer (HTTPS).

- [What is Web Based Management?](#)
- [Access Web Based Management](#)
- [Set or Change a Login Password for Web Based Management](#)

## What is Web Based Management?

Web Based Management is a utility that uses a standard web browser to manage your machine using the Hyper Text Transfer Protocol (HTTP) or Hyper Text Transfer Protocol over Secure Socket Layer (HTTPS).



- We recommend using the latest version of the following web browsers:
  - Microsoft Edge, Firefox, and Google Chrome™ for Windows
  - Safari, Firefox, and Google Chrome™ for Mac
  - Google Chrome™ for Android™
  - Safari and Google Chrome™ for iOS
- Ensure that JavaScript and Cookies are always enabled, regardless of which browser you use.
- Make sure your machine is On and connected to the same network as your computer, and that your network supports the TCP/IP protocol.

The screenshot displays the Brother Web Based Management interface. At the top right is the 'brother' logo. The main content area is titled 'Status' and includes the following sections:

- Device Status:** A green bar indicates the device is 'Ready'.
- Automatic Refresh:** Two radio buttons are shown, with 'Off' selected and 'On' unselected.
- Toner Level:** Four vertical bars represent the toner levels for BK (Black), C (Cyan), M (Magenta), and Y (Yellow).
- Web Language:** A dropdown menu is set to 'Auto'.

The left sidebar contains a 'Login' button, a link for 'Trouble logging in?>>', and navigation options for 'Home', 'Status', and 'Auto Refresh Interval'.

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 latest version of the following web browsers:
  - Microsoft Edge, Firefox, and Google Chrome™ for Windows
  - Safari, Firefox, and Google Chrome™ for Mac
  - Google Chrome™ for Android™
  - Safari and Google Chrome™ for iOS
- Ensure that JavaScript and Cookies are always enabled, regardless of which browser you use.
- We recommend using the HTTPS security protocol when configuring settings using Web Based Management.
- When you use HTTPS for Web Based Management configuration, your browser will display a warning dialog box. To avoid displaying the warning dialog box, you can install a self-signed certificate to use SSL/TLS communication. For more information, see *Related Information*.
- The default password to manage this machine's settings is located on the back of the machine and marked "Pwd". We recommend immediately changing the default password to protect your machine from unauthorised access.

>> [Access Web Based Management from your Web Browser](#)

>> [Access Web Based Management from Brother iPrint&Scan \(Windows/Mac\)](#)

>> [Access Web Based Management from Brother Utilities \(Windows\)](#)

### Access Web Based Management from your Web Browser

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef
- The NetBIOS name can be found in the Network Configuration Report.

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




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

4. If you want to pin the navigation menu on the left side of the screen, click ☰ and then click .

You can now change the machine's settings.


### Access Web Based Management from Brother iPrint&Scan (Windows/Mac)

1. Start Brother iPrint&Scan.
  - Windows  
Launch  (Brother iPrint&Scan).
  - Mac

---

In the **Finder** menu bar, click **Go > Applications**, and then double-click the iPrint&Scan icon.

The Brother iPrint&Scan screen appears.



2. If your Brother machine is not selected, click the **Select your Machine** button, and then select your model name from the list. Click **OK**.
3. Click  (**Machine Settings**).
4. Click **All Settings**.  
The Web Based Management page appears.
5. If required, type the password in the **Login** field, and then click **Login**.



---

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

---

6. If you want to pin the navigation menu on the left side of the screen, click  and then click .

You can now change the machine's settings.




---

You can also access Web Based Management from Brother Mobile Connect for mobile devices.

---

## Access Web Based Management from Brother Utilities (Windows)



1. Launch  (**Brother Utilities**), and then click the drop-down list and select your model name (if not already selected).
2. Click **Tools** in the left navigation bar, and then click **Machine Settings**.  
The Web Based Management page appears.
3. If required, type the password in the **Login** field, and then click **Login**.



---

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

---

4. If you want to pin the navigation menu on the left side of the screen, click  and then click .

You can now change the machine's settings.

If you change the protocol settings, you must restart the machine after clicking **Submit** to activate the configuration.

After configuring the settings, click **Logout**.

### **Related Information**

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

#### **Related Topics:**

- [Print the Network Configuration Report](#)
  - [Enable/Disable Web Based Management Using the Control Panel](#)
  - [Use SSL/TLS](#)
  - [Create a Self-signed Certificate](#)
  - [Install the Self-signed Certificate for Windows Users as Administrators](#)
-

## Set or Change a Login Password for Web Based Management

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

1. Start your web browser.
2. Type "https://machine's IP address" in your browser's address bar (where "machine's IP address" is your 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://brn123456abcdef

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

3. Do one of the following:
  - If you have previously set your own password, type it, and then click **Login**.
  - If you have not previously set your own password, type the default login password, and then click **Login**.
4. Go to the navigation menu, and then click **Administrator** > **Login Password**.



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

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

5. To change the password, type your current password in the **Enter Old Password** field.
6. Following the on-screen **Login Password** guidelines, type your new password in the **Enter New Password** field.
7. Retype the new password in the **Confirm New Password** field.
8. Click **Submit**.



You can also change the lockout settings in the **Login Password** menu.



### Related Information

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

#### Related Topics:

- [Access Web Based Management](#)



## Appendix

- [Specifications](#)
- [Supplies](#)
- [Important Information About Toner Cartridge Life](#)
- [Notice](#)
- [Brother Help and Customer Support](#)

## Specifications

- >> General Specifications
- >> Print Media Specifications
- >> Printer Specifications
- >> Interface Specifications
- >> Supported Protocols and Security Features
- >> Computer Requirements Specifications

### General Specifications

<b>Printer Type</b>		LED
<b>Print Method</b>		Electrophotographic LED Printer
<b>Memory Capacity</b>	<b>Standard</b>	256 MB
<b>Machine display</b>		<ul style="list-style-type: none"> <li>• HL-L3228CDW 10 characters x 1 line 2byte / 20 characters x 1 line 1byte</li> <li>• HL-L3288CDW 2.7 in. (67.5 mm) TFT Colour touchscreen LCD <sup>1</sup></li> </ul>
<b>Power Source</b>		220 V to 240 V AC 50/60 Hz
<b>Power Consumption</b> (Average)	<b>Peak</b>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 960 W</li> <li>• HL-L3288CDW Approximately 960 W</li> </ul>
	<b>Printing</b> <sup>2</sup>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 430 W at 25°C</li> <li>• HL-L3288CDW Approximately 520 W at 25°C</li> </ul>
	<b>Printing (Quiet Mode)</b> <sup>2</sup>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 310 W at 25°C</li> <li>• HL-L3288CDW Approximately 310 W at 25°C</li> </ul>
	<b>Ready</b> <sup>2</sup>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 70 W at 25°C</li> <li>• HL-L3288CDW Approximately 70 W at 25°C</li> </ul>
	<b>Sleep</b> <sup>2</sup>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 10 W</li> <li>• HL-L3288CDW Approximately 10 W</li> </ul>
	<b>Deep Sleep</b> <sup>2</sup>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 0.5 W</li> <li>• HL-L3288CDW Approximately 0.45 W</li> </ul>
	<b>Power Off</b> <sup>3 4</sup>	<ul style="list-style-type: none"> <li>• HL-L3228CDW Approximately 0.04 W</li> <li>• HL-L3288CDW Approximately 0.04 W</li> </ul>
<b>Dimensions</b>		Unit: mm

(Typical outline view) (HL-L3228CDW)				<ul style="list-style-type: none"> <li>HL-L3228CDW               <ul style="list-style-type: none"> <li>* : 399</li> <li>** : 239</li> <li>*** : 399</li> </ul> </li> <li>HL-L3288CDW               <ul style="list-style-type: none"> <li>* : 399</li> <li>** : 274</li> <li>*** : 399</li> </ul> </li> </ul>
(HL-L3288CDW)				
<b>Weight (with supplies)</b>				<ul style="list-style-type: none"> <li>HL-L3228CDW 15.2 kg</li> <li>HL-L3288CDW 15.4 kg</li> </ul>
<b>Noise Level</b>	<b>Sound Pressure</b>	<b>Printing</b>	<ul style="list-style-type: none"> <li>HL-L3228CDW LpAm = 46 dB (A)</li> <li>HL-L3288CDW LpAm = 47 dB (A)</li> </ul>	
		<b>Printing (Quiet Mode)</b>	LpAm = 43 dB (A)	
		<b>Ready</b>	Default: Inaudible <sup>5</sup>	
	<b>Sound Power</b>	<b>Printing<sup>6</sup></b>	<b>Monochrome</b>	<ul style="list-style-type: none"> <li>HL-L3228CDW LWAc = 6.25 B (A)</li> <li>HL-L3288CDW LWAc = 6.39 B (A)</li> </ul>
			<b>Colour</b>	<ul style="list-style-type: none"> <li>HL-L3228CDW LWAc = 6.17 B (A)</li> <li>HL-L3288CDW LWAc = 6.47 B (A)</li> </ul>
		<b>Printing (Quiet Mode)</b>	<b>Monochrome</b>	<ul style="list-style-type: none"> <li>HL-L3228CDW LWAc = 5.86 B (A)</li> <li>HL-L3288CDW LWAc = 5.86 B (A)</li> </ul>
<b>Colour</b>			<ul style="list-style-type: none"> <li>HL-L3228CDW LWAc = 5.92 B (A)</li> <li>HL-L3288CDW LWAc = 5.87 B (A)</li> </ul>	
	<b>Ready</b>	Default: Inaudible <sup>7</sup>		
<b>Temperature</b>	<b>Operating</b>	From 10°C to 32.5°C <sup>8</sup>		
	<b>Storage</b>	From 0°C to 40°C		

<b>Humidity</b>	<b>Operating</b>	20% to 80% (without condensation)
	<b>Storage</b>	35% to 85% (without condensation)

- 1 Measured diagonally.
- 2 Measured when the machine is connected using the same network connection as the ENERGY STAR Ver. 3.1 test method.
- 3 Measured according to IEC 62301 Edition 2.0.
- 4 Power consumption varies slightly depending on the usage environment.
- 5 If fan motor is functioning: LpAm = 40 dB (A)
- 6 Measured in accordance with the method described in ISO 7779.
- 7 - HL-L3228CDW  
If fan motor is functioning: LWAc = 4.12 B (A)  
- HL-L3288CDW  
If fan motor is functioning: LWAc = 4.81 B (A)
- 8 To ensure the high print quality, the maximum ambient temperature we recommend is 32.5°C. The maximum ambient temperature to safely use this machine is 35°C.

## Print Media Specifications

<b>Paper Input</b>	<b>Paper Tray (Standard)</b>	<b>Paper Type</b>	Plain Paper, Thin Paper, Thick Paper, Recycled Paper
		<b>Paper Size</b>	A4, Letter, B5 (JIS), B5 (ISO), B6 (JIS), A5, A5 (Long Edge), A6, Executive, Legal, Folio, Mexico Legal, India Legal, 16K (195x270mm), A4 Short (270mm Paper)
		<b>Paper Weight</b>	60 to 163 g/m <sup>2</sup>
		<b>Maximum Paper Capacity</b>	Up to 250 sheets of 80 g/m <sup>2</sup> Plain Paper
	<b>Manual Feed Slot</b>	<b>Paper Type</b>	Plain Paper, Thin Paper, Thick Paper, Recycled Paper, Bond, Label, Envelope, Env. Thin, Env.Thick, Glossy Paper
		<b>Paper Size</b>	<ul style="list-style-type: none"> <li>• Width: 76.2 to 216 mm</li> <li>• Length: 116 to 355.6 mm</li> <li>• Envelope: COM-10, DL, C5, Monarch</li> </ul>
		<b>Paper Weight</b>	60 to 163 g/m <sup>2</sup>
		<b>Maximum Paper Capacity</b>	One sheet
<b>Paper Output</b> <sup>1</sup>	<b>Face Down Output Tray</b>	Up to 150 sheets of 80 g/m <sup>2</sup> Plain Paper (face-down delivery to the face-down output paper tray)	
	<b>Face Up Output Tray</b>	One sheet (face up delivery to the face up output tray)	
<b>2-sided</b>	<b>Automatic 2-sided Printing</b>	<b>Paper Type</b>	Plain Paper, Thin Paper, Recycled Paper
		<b>Paper Size</b>	A4
		<b>Paper Weight</b>	60 to 105 g/m <sup>2</sup>

- 1 For labels, we recommend removing the printed sheets from the output paper tray immediately after they exit the machine to avoid the possibility of smudging.

## Printer Specifications

<b>Automatic 2-sided Print</b>	Yes
--------------------------------	-----

<b>Emulation</b>		PCL5e, PCL5c, PCL6 (PCL XL Class3.0), BR-Script3, PDF Version 1.7, XPS Version 1.0
<b>Resolution</b>		Physical resolution: 600 x 600 dpi Best print resolution: 2,400 dpi (600 x 2400) quality <sup>1</sup>
<b>Print Speed</b> <sup>2</sup>	<b>1-sided Print</b> <sup>3</sup>	<b>Monochrome</b> <ul style="list-style-type: none"> <li>HL-L3228CDW Up to 19 pages/minute (Letter size) Up to 18 pages/minute (A4 size)</li> <li>HL-L3288CDW Up to 27 pages/minute (Letter size) Up to 26 pages/minute (A4 size)</li> </ul>
		<b>Colour</b> <ul style="list-style-type: none"> <li>HL-L3228CDW Up to 19 pages/minute (Letter size) Up to 18 pages/minute (A4 size)</li> <li>HL-L3288CDW Up to 27 pages/minute (Letter size) Up to 26 pages/minute (A4 size)</li> </ul>
	<b>2-sided Print</b>	<b>Monochrome</b> <ul style="list-style-type: none"> <li>HL-L3228CDW Up to 7 sides/minute (Up to 3 sheets/minute) (Letter or A4 size)</li> <li>HL-L3288CDW Up to 10 sides/minute (Up to 5 sheets/minute) (Letter or A4 size)</li> </ul>
		<b>Colour</b> <ul style="list-style-type: none"> <li>HL-L3228CDW Up to 7 sides/minute (Up to 3 sheets/minute) (Letter or A4 size)</li> <li>HL-L3288CDW Up to 10 sides/minute (Up to 5 sheets/minute) (Letter or A4 size)</li> </ul>
<b>First Print Time</b> <sup>4</sup>		<b>Monochrome</b> <ul style="list-style-type: none"> <li>HL-L3228CDW Less than 15 seconds at 23°C / 230 V</li> <li>HL-L3288CDW Less than 13.5 seconds at 23°C / 230 V</li> </ul>
		<b>Colour</b> <ul style="list-style-type: none"> <li>HL-L3228CDW Less than 15 seconds at 23°C / 230 V</li> <li>HL-L3288CDW Less than 13.5 seconds at 23°C / 230 V</li> </ul>

<sup>1</sup> Data is based on Brother lab test results and may vary from actual print quality due to usage environment and settings. Best print resolution is 2,400 dpi (600 x 2400) quality (measured with print quality set to best mode).

<sup>2</sup> The print speed may be slower when the machine is connected by wireless LAN.

<sup>3</sup> These print speeds are for 1-sided printing and measured in accordance with the ISO/IEC 24734 standard.

<sup>4</sup> Printing from Ready mode and standard tray.

## Interface Specifications

<b>USB</b> <sup>1 2</sup>	Hi-Speed USB 2.0 Use a USB 2.0 interface cable that is no more than 2 metres long.
<b>LAN</b>	HL-L3288CDW

	10Base-T/100Base-TX/1000Base-T <sup>3</sup>
<b>Wireless LAN</b>	IEEE 802.11a/b/g/n (Infrastructure Mode) IEEE 802.11a/g/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 hub devices are not supported.

<sup>3</sup> Use a Category 5e (or greater) network cable.

## Supported Protocols and Security Features

### Ethernet (HL-L3288CDW)

10Base-T/100Base-TX/1000Base-T

### Wireless LAN (5 GHz)

IEEE 802.11a/n (Infrastructure Mode), IEEE 802.11a/n (Wi-Fi Direct)

### Wireless LAN (2.4 GHz)

IEEE 802.11b/g/n (Infrastructure Mode), IEEE 802.11g/n (Wi-Fi Direct)

### Protocols (IPv4)

- HL-L3228CDW  
ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), WINS/NetBIOS name resolution, DNS Resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMP, Web Services (Print), CIFS client, SNTP client, Syslog
- HL-L3288CDW  
ARP, RARP, BOOTP, DHCP, APIPA(Auto IP), WINS/NetBIOS name resolution, DNS Resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMP, Web Services (Print), CIFS client, SNTP client, LDAP, Syslog

### Protocols (IPv6)

- HL-L3228CDW  
NDP, RA, DNS resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMPv6, Web Services (Print), CIFS Client, SNTP Client, Syslog
- HL-L3288CDW  
NDP, RA, DNS resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMPv6, Web Services (Print), CIFS Client, SNTP Client, LDAP, Syslog

### Network Security (Wired) (HL-L3288CDW)

SMTP-AUTH, SSL/TLS (IPP, HTTP, SMTP), SNMP v3, 802.1x (EAP-MD5, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPsec

### Network Security (Wireless)

SMTP-AUTH, SSL/TLS (IPP, HTTP, SMTP), SNMP v3, 802.1x (EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPsec

### Wireless Network Security

WEP 64/128 bit, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) (Wi-Fi Direct supports WPA2-PSK (AES) only), WPA3-SAE (AES)

### Wireless Certification

Wi-Fi Certification Mark License (WPA3™ - Enterprise, Personal), Wi-Fi Protected Setup™ (WPS) Identifier Mark License, Wi-Fi CERTIFIED™ Wi-Fi Direct

## Computer Requirements Specifications

### Supported Operating Systems And Software Functions

Computer Platform & Operating System Version		Computer Interface			Processor	Hard Disk Space to Install <sup>1</sup>	
		USB <sup>2</sup>	Wired LAN <sup>3</sup>	Wireless LAN		For Drivers	For Applications (including Drivers)
Windows Operating System	Windows 10 Home / 10 Pro / 10 Education / 10 Enterprise	Printing			32 bit (x86) or 64 bit (x64) processor	50 MB	1.6 GB
	Windows 11 Home / 11 Pro / 11 Education / 11 Enterprise				64 bit (x64) processor		
	Windows Server 2012	Printing			64 bit (x64) processor	50 MB	50 MB
	Windows Server 2012 R2						
	Windows Server 2016						
	Windows Server 2019						
	Windows Server 2022						
Mac Operating System <sup>4</sup>	macOS v11	Printing			64bit processor	N/A	500 MB
	macOS v12						
	macOS v13						

<sup>1</sup> An Internet connection is required to install the software if the installation disc is not supplied.

<sup>2</sup> Third party USB ports are not supported.

<sup>3</sup> HL-L3288CDW

<sup>4</sup> macOS Disclaimer AirPrint capable: Printing via macOS requires the use of AirPrint. Mac drivers are not provided for this machine.

For the latest driver updates, go to your model's **Downloads** page at [support.brother.com/downloads](https://support.brother.com/downloads).

For the latest supported OS, go to your model's **Supported OS** page at [support.brother.com/os](https://support.brother.com/os).

All trademarks, brand and product names are the property of their respective companies.

### Related Information

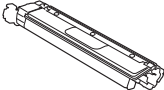
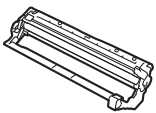
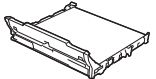
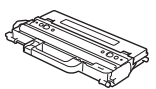
- [Appendix](#)

## Supplies

When the time comes to replace supplies, such as the toner cartridge or drum unit, an error message will appear on your machine's control panel or in the Status Monitor. For more information about the supplies for your machine, visit [www.brother.com/original](http://www.brother.com/original) or contact your local Brother dealer.



Supply product codes vary by country and region.

Supply Items	Supply Product Codes	Approximate Life (Page Yield)	Applicable Models
<b>Toner Cartridge</b> 	Standard Toner: TN289	<ul style="list-style-type: none"> <li>Black: Approximately 1,500 pages<sup>1</sup><sub>2</sub></li> <li>Cyan / Magenta / Yellow: Approximately 1,200 pages<sup>1</sup><sub>2</sub></li> </ul>	HL-L3228CDW/HL-L3288CDW
	High Yield Toner: TN289XL	<ul style="list-style-type: none"> <li>Black: Approximately 3,000 pages<sup>1</sup><sub>2</sub></li> <li>Cyan / Magenta / Yellow: Approximately 2,300 pages<sup>1</sup><sub>2</sub></li> </ul>	HL-L3228CDW/HL-L3288CDW
	Inbox Toner: (Supplied with your machine)	<ul style="list-style-type: none"> <li>Black: Approximately 1,000 pages<sup>1</sup><sub>2</sub></li> <li>Cyan / Magenta / Yellow: Approximately 1,000 pages<sup>1</sup><sub>2</sub></li> </ul>	HL-L3228CDW/HL-L3288CDW
<b>Drum Unit</b> 	DR289CL <sup>3</sup>	Approximately 20,000 pages <sup>4</sup>	HL-L3228CDW/HL-L3288CDW
<b>Belt Unit</b> 	BU229CL	Approximately 50,000 pages <sup>5</sup>	HL-L3228CDW/HL-L3288CDW
<b>Waste Toner Box</b> 	WT229CL	Approximately 50,000 pages <sup>2</sup>	HL-L3228CDW/HL-L3288CDW

<sup>1</sup> The approximate cartridge yield is declared in accordance with ISO/IEC 19798.

<sup>2</sup> A4 or Letter size single-sided pages

<sup>3</sup> Contains four drum units; one black and three colours.

<sup>4</sup> Approximately 20,000 pages based on one page per job and 30,000 pages based on three pages per job (A4/Letter single-sided pages). The number of pages may be affected due to a variety of factors including but not limited to media type and media size.

<sup>5</sup> Approximately 50,000 pages based on two pages per job and 60,000 pages based on three pages per job (A4/Letter single-sided pages). The number of pages may be affected due to a variety of factors including but not limited to media type and media size.





## Related Information

- [Appendix](#)

## Important Information About Toner Cartridge Life

### Toner Cartridge Life

This product detects the life of the toner cartridges using the following two methods:

- Detection by counting the dots of each colour that are necessary to create an image
- Detection by counting the rotations of the developer roller

The print operation will stop when either of the upper limits is reached. The upper limit is set above the number of dots or rotations that would be required for the cartridge to perform consistently with its advertised page yield. This function is intended to reduce the risk of poor print quality and damage to the machine.

There are two messages that indicate when the toner is low or needs replacing: Toner Low and Replace Toner.

Toner Low is displayed on the LCD when the number of dots or rotations of the developer roller nears its maximum count. Replace Toner is displayed on the LCD when the number of dots or rotations of the developer roller reaches its maximum count.

### Colour Correction

The number of developer roller rotations that is counted may not only be for normal operations, such as printing and copying, but also for machine adjustments, such as Colour Calibration and Colour Registration.

#### Colour Calibration (Adjustment of Colour Density)

To obtain stable print quality, the density of each toner cartridge needs to be maintained at a fixed value. If the density balance between the colours cannot be kept, the tint becomes unstable, and accurate colour reproduction becomes impossible. The toner density can change due to chemical changes to the toner that affect its electrical charge, deterioration of the developer unit, and temperature and humidity levels in the machine. During calibration, the density level adjustment test patterns are printed on the belt unit.

Calibration is mainly performed at the following times:

- When you start the Colour Correction from the control panel or the printer driver to improve the colour density.
- When you replace a used toner cartridge or drum unit with a new one.
- When the machine detects that the ambient temperature and humidity have changed.
- When a specified number of printed pages is reached.

#### Colour Registration (Correction of Colour Position)

In this machine, the drum unit and developer unit are prepared for black (K), yellow (Y), magenta (M), and cyan (C), respectively. Four colour images are combined into one image, and therefore colour registration errors (for example, how the four colour images align) may occur. When registration errors occur, registration correction test patterns are printed on the belt unit.

Registration is mainly performed at the following times:

- When you start the Colour Correction to clear the colour registration error.
- When a specified number of printed pages is reached.



### Related Information

- [Appendix](#)

## Notice

### To create a better environment

Please cooperate.

Firstly, thank you very much indeed for using our Brother products!

Brother focuses on the earth environment concerned. And make a basic policy which is to concern about the earth environment, including any workflow from product development to discard. The local citizen should be responsible for local society and its environment during these environment protection activities.

Therefore, we hope you'll take part in this environment plan, and pay attention to environment protection points as below while discarding used consumables.

1. Please deliver the used package materials to relevant waste disposal office for recycle.
2. When you discard used consumables, please follow and carry on relevant local regulations properly.
3. When the machine need replacing parts for the maintenance and repair, please discard used circuit boards, used electrical parts and products as disposed electrical materials.
4. The power consumption is 0 W after you turn off the machine and unplug it from the AC outlet.
5. Some parts in the machine can be used on the same series model machines which are produced in the same factory.

Note: If you want to replace the parts, please contact Brother Authorized Service Centers.

6. Machines with an LWAd > 63.0 dB(A) are recommended to be set up in separate rooms due to their noise emissions.
7. The machine can use recycled paper.
8. Ensure that during use the machine is used in a well ventilated area.
9. Brother will accept machines and consumables for recycling. For details of the return scheme please refer to the webpage

[www.brother.cn/company/info/declaration/20090304.html](http://www.brother.cn/company/info/declaration/20090304.html).



#### Related Information

- [Appendix](#)

## Brother Help and Customer Support

### IMPORTANT

For technical and operational assistance, call the call center in mainland China.

To search Frequently asked questions (FAQs)/ASCs/Driver/Manuals, etc, please visit our service website:

[support.brother.com](http://support.brother.com)

To search where to purchase consumables, please visit the official website of BROTHER (CHINA) LTD.:

[www.brother.cn](http://www.brother.cn)



### Related Information

- [Appendix](#)

# brother

These machines are approved for use in the country of purchase only. Local Brother companies or their dealers may only support machines purchased in their own countries.



CHN-ENG  
Version 0