

# Wi-Fi Direct™ Guide



## Applicable models

This User's Guide applies to the following models:

HL-3140CW/3150CDW/3170CDW/3180CDW

DCP-9015CDW/9020CDW

MFC-9130CW/9330CDW/9340CDW

## Definitions of notes

We use the following icon throughout this User's Guide:

<b>NOTE</b>	Notes tell you how you should respond to a situation that may arise or give tips about how the operation works with other features.
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## IMPORTANT NOTE

- In this manual, the LCD messages of the HL-3140CW and HL-3170CDW are used unless specified otherwise.
- Please go to the Brother Solutions Center at <http://solutions.brother.com/> and click Manuals on your model page to download the other manuals.
- Not all models are available in all countries.

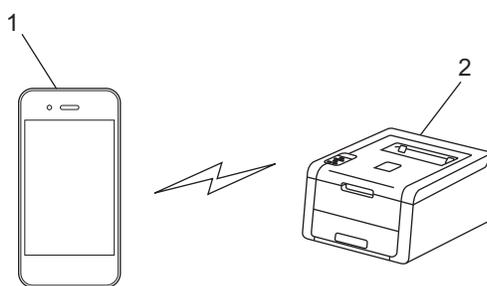
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# 1 Introduction

## Overview

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



### 1 Mobile device

### 2 Your Brother machine

## NOTE

- Although the Brother machine can be used in both a wired and wireless network, only one connection method can be used at a time. However, a wireless network connection and Wi-Fi Direct connection, or a wired network connection and Wi-Fi Direct connection can be used at the same time.
- The Wi-Fi Direct supported device can become a Group Owner (G/O). When configuring the Wi-Fi Direct network, the Group Owner (G/O) serves as an access point. See *Group Owner (G/O)* on page 20.
- When your Brother machine is the Group Owner (G/O), your Brother machine supports one to one wireless communication using Wi-Fi Direct.
- Ad-hoc mode and Wi-Fi Direct cannot be used at the same time. Disable one function to enable the other. If you want to use Wi-Fi Direct while you are using Ad-hoc mode, set Network I/F to Wired LAN or disable Ad-hoc mode and connect your Brother machine to the access point.

## Benefits

When you want to print from your mobile device or scan to your mobile device, Wi-Fi Direct helps you configure a temporary wireless network easily, by using the one push or PIN method of WPS. For information on printing from your mobile device or scanning to your mobile device, you can download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).

## Hardware requirements

### Supported operating systems

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You must have a Windows® Phone, or a device running either Android™ 1.6 or greater, or iOS 3.0 or greater.

## Downloading and installing Brother iPrint&Scan

Brother iPrint&Scan allows you to use features of your Brother machine directly from your mobile device, without using a computer. Before you start configuring a wireless network using Wi-Fi Direct, we recommend downloading Brother iPrint&Scan. Download the manual for Brother iPrint&Scan from the Brother Solutions Center (<http://solutions.brother.com/>).

### NOTE

If your machine does not have a scanner, you cannot use the scan functions of Brother iPrint&Scan.

### For Android™ Devices

You can download and install Brother iPrint&Scan from Google Play (Android™ Market). To take advantage of all the features supported by Brother iPrint&Scan, make sure you are using the latest version.

To download and install or uninstall Brother iPrint&Scan, see the user's guide for your mobile device.

### For iOS Devices

You can download and install Brother iPrint&Scan from the App Store. To take advantage of all the features supported by Brother iPrint&Scan, make sure you are using the latest version.

To download and install or uninstall Brother iPrint&Scan, see the user's guide for your mobile device. A link to your mobile device's user's guide, which can be viewed on the Apple website, is a default link in Safari's Bookmarks folder.

### For Windows® Phone Devices

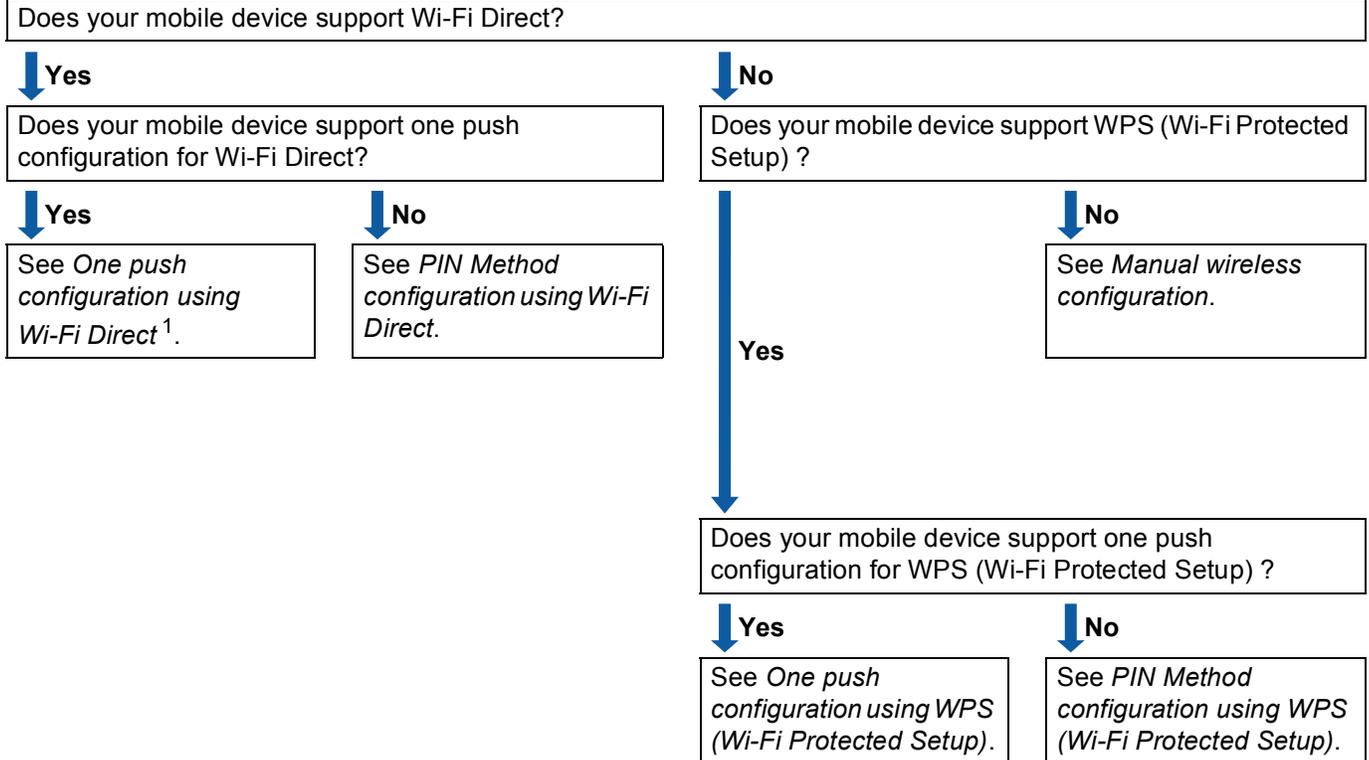
You can download and install Brother iPrint&Scan from the Windows® Phone Marketplace. To take advantage of all the features supported by Brother iPrint&Scan, make sure you are using the latest version.

To download and install or uninstall Brother iPrint&Scan, please refer to the user's guide for your mobile device.

## Step by step chart for Wi-Fi Direct network configuration

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

### Check your mobile device for configuration.



<sup>1</sup> If you cannot connect successfully when using Android™ 4.0, see *PIN Method configuration using Wi-Fi Direct*.

#### ■ One push configuration using Wi-Fi Direct

For HL-3140CW, HL-3150CDW and HL-3170CDW, see *One push configuration using Wi-Fi Direct* on page 6.

For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW, see *One push configuration using Wi-Fi Direct* on page 11.

#### ■ One push configuration using WPS (Wi-Fi Protected Setup)

For HL-3140CW, HL-3150CDW and HL-3170CDW, see *One push configuration using WPS (Wi-Fi Protected Setup)* on page 7.

For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW, see *One push configuration using WPS (Wi-Fi Protected Setup)* on page 12.

■ PIN Method configuration using Wi-Fi Direct

For HL-3140CW, HL-3150CDW and HL-3170CDW, see *Configuration using the PIN Method of Wi-Fi Direct* on page 8.

For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW, see *Configuration using the PIN Method of Wi-Fi Direct* on page 13.

■ PIN Method configuration using WPS (Wi-Fi Protected Setup)

For HL-3140CW, HL-3150CDW and HL-3170CDW, see *Configuration using the PIN Method of WPS (Wi-Fi Protected Setup)* on page 9.

For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW, see *Configuration using the PIN Method of WPS (Wi-Fi Protected Setup)* on page 14.

■ Manual wireless configuration

For HL-3140CW, HL-3150CDW and HL-3170CDW, see *Manual configuration for a Wi-Fi Direct network* on page 10.

For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW, see *Manual configuration for a Wi-Fi Direct network* on page 15.

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**NOTE**

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

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## Configuring your network using Wi-Fi Direct (For HL-3140CW, HL-3150CDW and HL-3170CDW)

The Wi-Fi Direct network settings are configured from the control panel of the machine.

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### One push configuration using Wi-Fi Direct

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If your mobile device supports Wi-Fi Direct, you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press ▲ or ▼ to choose `Network`. Press **OK**.
- 2 Press ▲ or ▼ to choose `Wi-Fi Direct`. Press **OK**.
- 3 Press ▲ or ▼ to choose `Push Button`. Press **OK**.
- 4 When `Wi-Fi Direct On?` is displayed, press ▲ to accept. To cancel, press ▼.
- 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.` is displayed. Press **OK** on your machine. This will start the Wi-Fi Direct setup. To cancel, press **Back**.
- 6 Do one of the following:
  - When your Brother machine is the G/O (Group Owner), connect your mobile device to the machine directly.
  - When your Brother machine is not the G/O (Group Owner), it will display available device names with which to configure a Wi-Fi Direct network. Press ▲ or ▼ to choose the mobile device you want to connect to and press **OK**. You can re-search for available devices by pressing ▲ or ▼ to display `Rescan` and press **OK**.
- 7 If your mobile device connects successfully, the machine shows `Connected`. You have completed the Wi-Fi Direct network setup. For information on printing from your mobile device, you can download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>). If the connection failed, see *Troubleshooting* on page 16.

## One push configuration using WPS (Wi-Fi Protected Setup)

If your mobile device supports WPS (PBC; Push Button Configuration), you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press ▲ or ▼ to choose `Network`.  
Press **OK**.
- 2 Press ▲ or ▼ to choose `Wi-Fi Direct`.  
Press **OK**.
- 3 Press ▲ or ▼ to choose `Group Owner`.  
Press **OK**.
- 4 Press ▲ or ▼ to choose `On`.  
Press **OK**.
- 5 Press ▲ or ▼ to choose `Push Button`.  
Press **OK**.
- 6 When `Wi-Fi Direct On?` is displayed, press ▲ to accept.  
To cancel, press ▼.
- 7 When `Activate Wi-Fi Direct on other device and press OK. is displayed`, activate your mobile device's WPS one push configuration method (see your mobile device's user's guide for instructions) and then press **OK** on your machine. This will start the Wi-Fi Direct setup.  
To cancel, press **Back**.
- 8 If your mobile device connects successfully, the machine shows `Connected`.  
You have completed the Wi-Fi Direct network setup. For information on printing from your mobile device, you can download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).  
If the connection failed, see *Troubleshooting* on page 16.

## Configuration using the PIN Method of Wi-Fi Direct

If your mobile device supports the PIN Method of Wi-Fi Direct, you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press ▲ or ▼ to choose `Network`. Press **OK**.
- 2 Press ▲ or ▼ to choose `Wi-Fi Direct`. Press **OK**.
- 3 Press ▲ or ▼ to choose `PIN Code`. Press **OK**.
- 4 When `Wi-Fi Direct On?` is displayed, press ▲ to accept. To cancel, press ▼.
- 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.` is displayed. Press **OK** on your machine. This will start the Wi-Fi Direct setup. To cancel, press **Back**.
- 6 Do one of the following:
  - When your Brother machine is the G/O (Group Owner), it will wait for a connection request from your mobile device. When `Input PIN Code` appears, input the PIN displayed on your mobile device in to the machine. (See Quick Setup Guide: *Entering Text for Wireless Settings*.)  
Press **OK**. Follow the instructions and go to step 8.  
If the PIN is displayed on your Brother machine, input the PIN to your mobile device.
  - When your Brother machine is not the G/O (Group Owner), it will display available device names with which to configure a Wi-Fi Direct network. Press ▲ or ▼ to choose the mobile device you want to connect to and press **OK**. You can re-search for available devices by pressing ▲ or ▼ to display `Rescan` and press **OK**. Go to step 7.
- 7 Do one of the following:
  - Press ▲ to display the PIN on your machine and input the PIN to your mobile device. Follow the instructions and then go to step 8.
  - Press ▼ to input a PIN shown by your mobile device to the machine. (See Quick Setup Guide: *Entering Text for Wireless Settings*.)  
Press **OK**. Follow the instructions and then go to step 8.  
If your mobile device does not display a PIN, press **Cancel** on your Brother machine. Go back to step 1 and try again.
- 8 If your mobile device connects successfully, the machine shows `Connected`. You have completed the Wi-Fi Direct network setup. For information on printing from your mobile device, you can download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).  
If the connection failed, see *Troubleshooting* on page 16.

## Configuration using the PIN Method of WPS (Wi-Fi Protected Setup)

If your mobile device supports the PIN Method of WPS (Wi-Fi Protected Setup), you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press ▲ or ▼ to choose `Network`.  
Press **OK**.
- 2 Press ▲ or ▼ to choose `Wi-Fi Direct`.  
Press **OK**.
- 3 Press ▲ or ▼ to choose `Group Owner`.  
Press **OK**.
- 4 Press ▲ or ▼ to choose `On`.  
Press **OK**.
- 5 Press ▲ or ▼ to choose `PIN Code`.  
Press **OK**.
- 6 When `Wi-Fi Direct On?` is displayed, press ▲ to accept.  
To cancel, press ▼.
- 7 When `Activate Wi-Fi Direct on other device and press OK. is displayed`, activate your mobile device's WPS PIN configuration method (see your mobile device's user's guide for instructions) and then press **OK** on your machine. This will start the Wi-Fi Direct setup.  
To cancel, press **Back**.
- 8 The machine will wait for a connection request from your mobile device. When `Input PIN Code` appears, input the PIN displayed on your mobile device to the machine. (See Quick Setup Guide: *Entering Text for Wireless Settings*.)  
Press **OK**.
- 9 If your mobile device connects successfully, the machine shows `Connected`.  
You have completed the Wi-Fi Direct network setup. For information on printing from your mobile device, you can download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).  
If the connection failed, see *Troubleshooting* on page 16.

## Manual configuration for a Wi-Fi Direct network

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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 choose `Network`.  
Press **OK**.
- 2 Press ▲ or ▼ to choose `Wi-Fi Direct`.  
Press **OK**.
- 3 Press ▲ or ▼ to choose `Manual`.  
Press **OK**.
- 4 When `Wi-Fi Direct On?` is displayed, press ▲ to accept.  
To cancel, press ▼.
- 5 The machine will show the SSID name and Password for two minutes. Go to the wireless network settings page of your mobile device and input the SSID name and password.
- 6 If your mobile device connects successfully, the machine shows `Connected`.  
You have completed the Wi-Fi Direct network setup. For information on printing from your mobile device, you can download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).  
If the connection failed, see *Troubleshooting* on page 16.

## Configuring your network using Wi-Fi Direct (For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW)

The Wi-Fi Direct network settings are configured from the control panel of the machine.

### One push configuration using Wi-Fi Direct

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If your mobile device supports Wi-Fi Direct, you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press .
- 2 Press `Wi-Fi Direct`.
- 3 Swipe up or down, or press `▲` or `▼` to display `Push Button`. Press `Push Button`.
- 4 When `Wi-Fi Direct On?` is displayed, press `On` to accept. To cancel, press `Off`.
- 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. Then Press [OK].` is displayed. Press `OK` on your machine. This will start the Wi-Fi Direct setup. To cancel, press .
- 6 Do one of the following:
  - When your Brother machine is the G/O (Group Owner), connect your mobile device to the machine directly.
  - When your Brother machine is not the G/O (Group Owner), it will display available device names with which to configure a Wi-Fi Direct network. Choose the mobile device you want to connect to and press `OK`. You can re-search for available devices by pressing `Rescan`.
- 7 If your mobile device connects successfully, the machine shows `Connected`. You have completed the Wi-Fi Direct network setup. For details on printing from or scanning to your mobile device, download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>). If the connection fails, see *Troubleshooting* on page 16.

## One push configuration using WPS (Wi-Fi Protected Setup)

If your mobile device supports WPS (PBC; Push Button Configuration), you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press .
- 2 Press `Wi-Fi Direct`.
- 3 Swipe up or down, or press `▲` or `▼` to display `Group Owner`. Press `Group Owner` and then press `On`.
- 4 Swipe up or down, or press `▲` or `▼` to display `Push Button`. Press `Push Button`.
- 5 When `Wi-Fi Direct On?` is displayed, press `On` to accept. To cancel, press `Off`.
- 6 When `Activate Wi-Fi Direct on other device`. Then Press `[OK]` is displayed, activate your mobile device's WPS one push configuration method (see your mobile device's user's guide for instructions) and then press `OK` on your Brother machine. This will start the Wi-Fi Direct setup. To cancel, press .
- 7 If your mobile device connects successfully, the machine shows `Connected`. You have completed the Wi-Fi Direct network setup. For details on printing from or scanning to your mobile device, download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>). If the connection fails, see *Troubleshooting* on page 16.

## Configuration using the PIN Method of Wi-Fi Direct

If your mobile device supports the PIN Method of Wi-Fi Direct, you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press .
- 2 Press `Wi-Fi Direct`.
- 3 Swipe up or down, or press ▲ or ▼ to display `PIN Code`.  
Press `PIN Code`.
- 4 When `Wi-Fi Direct On?` is displayed, press `On` to accept.  
To cancel, press `Off`.
- 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`. Then Press `[OK]`. is displayed. Press `OK` on your machine. This will start the Wi-Fi Direct setup.  
To cancel, press .
- 6 Do one of the following:
  - When your Brother machine is the G/O (Group Owner), it will wait for a connection request from your mobile device. When `PIN Code` appears, type the PIN displayed on your mobile device in to the machine. Press `OK`. Follow the instructions and go to step 8.
  - If the PIN is displayed on your Brother machine, input the PIN to your mobile device.
  - When your Brother machine is not the G/O (Group Owner), it will display available device names with which to configure a Wi-Fi Direct network. Choose a mobile device you want to connect to and press `OK`. You can re-search for available devices by pressing `Rescan`. Go to step 7.
- 7 Do one of the following:
  - Press `Display PIN Code` to display the PIN on your machine and input the PIN to your mobile device. Follow the instructions and then go to step 8.
  - Press `Input PIN Code` to input a PIN shown by your mobile device to the machine and then press `OK`. Follow the instructions and then go to step 8.
  - If your mobile device does not display a PIN, press  on your Brother machine. Go back to step 1 and try again.
- 8 If your mobile device connects successfully, the machine shows `Connected`.  
You have completed the Wi-Fi Direct network setup. For details on printing from or scanning to your mobile device, download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).  
If the connection fails, see *Troubleshooting* on page 16.

## Configuration using the PIN Method of WPS (Wi-Fi Protected Setup)

If your mobile device supports the PIN Method of WPS (Wi-Fi Protected Setup), you can configure a Wi-Fi Direct network by following these instructions.

- 1 Press .
- 2 Press `Wi-Fi Direct`.
- 3 Swipe up or down, or press `▲` or `▼` to display `Group Owner`. Press `Group Owner` and then press `On`.
- 4 Swipe up or down, or press `▲` or `▼` to display `PIN Code`. Press `PIN Code`.
- 5 When `Wi-Fi Direct On?` is displayed, press `On` to accept. To cancel, press `Off`.
- 6 When `Activate Wi-Fi Direct on other device`. Then Press `[OK]` is displayed, activate your mobile device's WPS PIN configuration method (see your mobile device's user's guide for instructions) and then press `OK` on your Brother machine. This will start the Wi-Fi Direct setup. To cancel, press .
- 7 The machine will wait for a connection request from your mobile device. When `PIN Code` appears, input the PIN displayed on your mobile device to the machine. Press `OK`.
- 8 If your mobile device connects successfully, the machine shows `Connected`. You have completed the Wi-Fi Direct network setup. For details on printing from or scanning to your mobile device, download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>). If the connection fails, see *Troubleshooting* on page 16.

## Manual configuration for a Wi-Fi Direct network

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

- 1 Press .
- 2 Press `Wi-Fi Direct`.
- 3 Swipe up or down, or press ▲ or ▼ to display `Manual`.  
Press `Manual`.
- 4 When `Wi-Fi Direct On?` is displayed, press `On` to accept.  
To cancel, press `Off`.
- 5 The machine will show the SSID name and Password for two minutes. Go to the wireless network settings page of your mobile device and input the SSID name and password.
- 6 If your mobile device connects successfully, the machine shows `Connected`.  
You have completed the Wi-Fi Direct network setup. For details on printing from or scanning to your mobile device, download the Mobile Print/Scan Guide for Brother iPrint&Scan or the AirPrint Guide from the Brother Solutions Center (<http://solutions.brother.com/>).  
If the connection fails, see *Troubleshooting* on page 16.

## Overview

This section explains how to resolve typical network problems you may encounter when using the Brother machine. If, after reading this chapter, you are unable to resolve your problem, visit the Brother Solutions Center at (<http://solutions.brother.com/>).

For details, go to the Brother Solutions Center at (<http://solutions.brother.com/>) and click Manuals on your model page to download other manuals.

## Identifying the problem

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Make sure that the following items are configured before reading this chapter.

<b>First check the following:</b>
The power cord is connected correctly and the Brother machine is turned on.
All protective packaging has been removed from the machine.
The toner cartridges and drum unit are installed correctly.
The top and back covers are fully closed.
Paper is inserted correctly in the paper tray.

### Go to the page for your solution from the lists below

- Error messages when using the Wi-Fi Direct control panel menu.  
See *Error messages when configuring Wi-Fi Direct from the control panel menu* on page 17
- I cannot complete the Wi-Fi Direct network setup configuration.  
See *I cannot complete the Wi-Fi Direct network setup configuration.* on page 18
- I want to check my network devices are working correctly.  
See *I want to check my network devices are working correctly.* on page 19

**Error messages when configuring Wi-Fi Direct from the control panel menu**

Error Message	Cause	Action
<p>(For HL-3140CW, HL-3150CDW and HL-3170CDW)</p> <p>Connection Fail</p> <p>(For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW)</p> <p>Connection Failed</p>	<p>The Brother machine and your mobile device cannot communicate during the configuration.</p>	<ul style="list-style-type: none"> <li>■ Move the mobile device closer to your Brother machine.</li> <li>■ Move your Brother machine and the mobile device to an obstruction-free area.</li> <li>■ If you are using the PIN Method of WPS, make sure you have input the correct PIN code.</li> </ul>
<p>(For HL-3140CW, HL-3150CDW and HL-3170CDW)</p> <p>Connection Error</p> <p>(For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW)</p> <p>Connection Error</p>	<p>Other devices are trying to connect to the Wi-Fi Direct network at the same time.</p>	<p>Make sure there are no other devices trying to connect to the Wi-Fi Direct network and then try to configure the Wi-Fi Direct settings again.</p>
<p>(For HL-3140CW, HL-3150CDW and HL-3170CDW)</p> <p>No Device</p> <p>(For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW)</p> <p>No Device</p>	<p>The Brother machine cannot find your mobile device.</p>	<ul style="list-style-type: none"> <li>■ Make sure your machine and mobile device are in the Wi-Fi Direct mode.</li> <li>■ Move the mobile device closer to your Brother machine.</li> <li>■ Move your Brother machine and the mobile device to an obstruction-free area.</li> <li>■ If you are manually configuring the Wi-Fi Direct network, make sure you have entered the correct password.</li> <li>■ If your mobile device has a configuration page for how to obtain an IP address, make sure the IP address of your mobile device has been configured via DHCP.</li> </ul>

### Error messages when configuring Wi-Fi Direct from the control panel menu (continued)

Error Message	Cause	Action
<p>(For HL-3140CW, HL-3150CDW and HL-3170CDW)</p> <p>Cannot Connect A device is already connected.</p> <p>(For HL-3180CDW, DCP-9015CDW, DCP-9020CDW, MFC-9130CW, MFC-9330CDW and MFC-9340CDW)</p> <p>A device is already connected. Press [OK].</p>	<p>Another mobile device is already connected to the Wi-Fi Direct network when the Brother machine is the G/O (Group Owner).</p>	<p>After the current connection between your Brother machine and another mobile device has shut down, try and configure the Wi-Fi Direct settings again. You can confirm the connection status by printing the Network Configuration Report &gt;&gt; Network User's Guide: <i>Printing the Network Configuration Report</i>.</p>

### I cannot complete the Wi-Fi Direct network setup configuration.

Question	Solution
<p>Are your security settings (SSID/password) correct?</p>	<ul style="list-style-type: none"> <li>■ Reconfirm the SSID and password.</li> </ul> <p>If you are using your machine as a G/O (Group Owner) in manual configuration, the SSID and password are displayed on the machine's control panel during the configuration procedure.</p> <p>If you are using your mobile device as a G/O (Group Owner) in manual configuration, the SSID and password are displayed on the mobile device's screen during the configuration procedure.</p> <ul style="list-style-type: none"> <li>■ For information on what the SSID name is, see <i>SSID</i> on page 21.</li> </ul>
<p>Is your Brother machine placed too far from your mobile device?</p>	<p>Move your Brother machine within about 3.3 feet (1 meter) from the mobile device when you configure the Wi-Fi Direct network settings.</p>
<p>Are there any obstructions (walls or furniture, for example) between your machine and the mobile device?</p>	<p>Move your Brother machine to an obstruction-free area.</p>
<p>Is there a wireless computer, Bluetooth supported device, microwave oven or digital cordless phone near the Brother machine or the mobile device?</p>	<p>Move other devices away from the Brother machine or the mobile device.</p>

### I cannot complete the Wi-Fi Direct network setup configuration. (continued)

Question	Solution
I have checked and tried all of the above, but still cannot complete the Wi-Fi Direct configuration. Is there anything else I can do?	<ul style="list-style-type: none"> <li>■ Turn your Brother machine Off and back On. Then try and configure the Wi-Fi Direct settings again.</li> <li>■ If you are using your Brother machine as a client, confirm how many devices are allowed in the current Wi-Fi Direct network and then check how many devices are connected.</li> </ul>

### I want to check my network devices are working correctly.

Question	Solution
Are your Brother machine and mobile device turned on?	Make sure you have confirmed all instructions in <i>First check the following:</i> on page 16.
Where can I find my Brother machine's network settings, such as IP address?	Print the Network Configuration Report ►► Network User's Guide: <i>Printing the Network Configuration Report.</i>

## Wi-Fi Direct network terms

### Group Owner (G/O)

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If you set Group Owner to `On`, your Brother machine serves as an access point when you configure a Wi-Fi Direct network. The G/O assigns an SSID name, password and IP address for the Wi-Fi Direct network. The default setting is `Off`.

### Device Information

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#### Device Name

You can check the device name of the machine in the Wi-Fi Direct network environment. The device name will be shown as `**HL-xxxx`, `**MFC-xxxx` or `**DCP-xxxx` (where `xxxx` is your model name and `**` is the character string assigned by your Brother machine).

#### SSID

This field displays the current Wi-Fi Direct network SSID name. The display shows up to 32 characters of the SSID name.

#### IP Address

This field displays the current IP address of the machine assigned by the G/O.

### Status Information

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#### Status

This field displays the current Wi-Fi Direct network status. When your machine is a G/O, it displays the message `G/O Active (**)` (where `**` is the number of devices). When your machine is a client, the machine displays the message `Client Active`. If you see `Off`, your machine's Wi-Fi Direct interface is disabled.

#### Signal

This field displays the current Wi-Fi Direct network signal strength.

#### Channel

This field displays the current Wi-Fi Direct network channel.

#### Speed

This field displays the current Wi-Fi Direct network speed.

## I/F Enable

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If you want to use the Wi-Fi Direct network connection, set `I/F Enable` to On.

# Network terms and concepts

## Network terms

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### ■ WPA2-PSK

Enables a Wi-Fi Protected Access™ Pre-shared key (WPA-PSK/WPA2-PSK), which enables the Brother wireless machine to associate with access points using TKIP for WPA-PSK or AES for WPA-PSK and WPA2-PSK (WPA-Personal).

### ■ AES

Advanced Encryption Standard (AES) provides stronger data protection by using a symmetric-key encryption.

### ■ WPA2 with AES

Uses a Pre-Shared Key (PSK) that is 8 or more characters in length, up to a maximum of 63 characters.

### ■ SSID

Each wireless network has its own unique network name and it is technically referred to as the Service Set Identification (SSID). The SSID is a 32-byte or less value and is assigned to the access point. The wireless network devices you want to associate to the wireless network should match the access point. The access point and wireless network devices regularly send wireless packets (referred to as beacons) which have the SSID information. When your wireless network device receives a beacon, you can identify wireless networks that are close enough to connect to.

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