Network User's Guide

Multi-Protocol On-board Wireless Multi-function Print Server

This Network User's Guide provides useful information of wireless network settings using your Brother machine. You can also find supported protocol information and detailed troubleshooting tips.

To find basic information about network and advanced network features of your Brother machine, see the *Network Glossary*.

To download the latest manual, please visit the Brother Solutions Center at (http://solutions.brother.com/). You can also download the latest drivers and utilities for your machine, read FAQs and troubleshooting tips or learn about special printing solutions from the Brother Solutions Center.

Applicable models

This User's Guide applies to the following model.

DCP-J140W

Definitions of notes

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

	Important	Important indicates a potentially hazardous situation which, if not avoided, may result in damage to property or loss of product functionality.
	Note	Notes tell you how you should respond to a situation that may arise or give tips about how the operation works with other features.

Compilation and publication notice

Under the supervision of Brother Industries, Ltd., this manual has been compiled and published, covering the latest product's descriptions and specifications.

The contents of this manual and the specifications of this product are subject to change without notice.

Brother reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.

IMPORTANT NOTE

■ This product is approved for use in the country of purchase only. Do not use this product outside the country of purchase as it may violate the wireless telecommunication and power regulations of that country.

■ Windows$^®$ XP in this document represents Windows$^®$ XP Professional, Windows$^®$ XP Professional x64 Edition and Windows$^®$ XP Home Edition.

■ Windows Server$^®$ 2003 in this document represents Windows Server$^®$ 2003, Windows Server$^®$ 2003 x64 Edition, Windows Server$^®$ 2003 R2 and Windows Server$^®$ 2003 R2 x64 Edition.

■ Windows Server$^®$ 2008 in this document represents Windows Server$^®$ 2008 and Windows Server$^®$ 2008 R2.

Table of Contents

1 Introduction

Network features

Your Brother machine can be used in an IEEE 802.11b/g/n wireless network with the internal network print server. The print server supports various functions and connection methods, depending on the operating system you are running, when used on a network supporting TCP/IP. The following chart shows what network features and connections are supported by each operating system.

Operating Systems	Windows® XP Windows Vista® Windows® 7	Windows Server® 2003/2008	Mac OS X 10.5.8 - 10.6.x - 10.7.x
Printing	✔	✔	✔
Scanning See *Software User's Guide*.	✔		✔
BRAdmin Light See page 2.	✔	✔	✔
BRAdmin Professional 3 [1] See page 5.	✔	✔	
Status Monitor See *Software User's Guide*.	✔		✔
Driver Deployment Wizard	✔	✔	
Vertical Pairing See *Network Glossary*.	✔ [2]		

[1]   BRAdmin Professional 3 is available as a download from http://solutions.brother.com/.

[2]   Windows® 7 only.

2 Changing your machine's network settings

How to change your machine's network settings (IP address, Subnet mask and Gateway)

Using the control panel

You can configure your machine for a network using the control panel `3.Network` menu. (See *Control panel setup* ▶▶ page 22.)

Using the BRAdmin Light utility

The BRAdmin Light utility is designed for initial setup of Brother network connected devices. It can also search for Brother products in a TCP/IP environment, show the status and configure basic network settings, such as IP address.

Installing BRAdmin Light

■ Windows®

① Please make sure that your machine is ON.

② Turn on your computer. Close any running applications before installing.

③ Put the supplied CD-ROM into your CD-ROM drive. The opening screen will appear automatically. If the model name screen appears, choose your machine. If the language screen appears, choose your language.

④ The CD-ROM main menu will appear. Click **Advanced**, and then **Network Utilities**.

⑤ Click **BRAdmin Light** and follow the on-screen instructions.

■ Macintosh

You can download Brother's latest BRAdmin Light utility from http://solutions.brother.com/.

Setting the IP address, Subnet Mask and Gateway using BRAdmin Light

✐ **Note**

• You can download the latest Brother BRAdmin Light utility from http://solutions.brother.com/.

• If you require more advanced printer management, use the latest Brother BRAdmin Professional 3 utility that is available as a download from http://solutions.brother.com/. This utility is only available for Windows® users.

• If you are using a firewall function of anti-spyware or antivirus applications, temporarily disable them. Once you are sure that you can print, re-enable the application.

• Node Name: The Node Name appears in the current BRAdmin Light window. The default Node Name of the print server in the machine is "BRWxxxxxxxxxxxx". ("xxxxxxxxxxxx" is your machine's MAC Address / Ethernet Address.)

1️⃣ Start the BRAdmin Light utility.

■ Windows®

Click **Start** / **All Programs** / **Brother** / **BRAdmin Light** / **BRAdmin Light**.

■ Macintosh

When the download has completed, double click the **BRAdmin Light.jar** file to start the BRAdmin Light utility.

2️⃣ BRAdmin Light will search for new devices automatically.

3️⃣ Double-click the unconfigured device.

Windows®
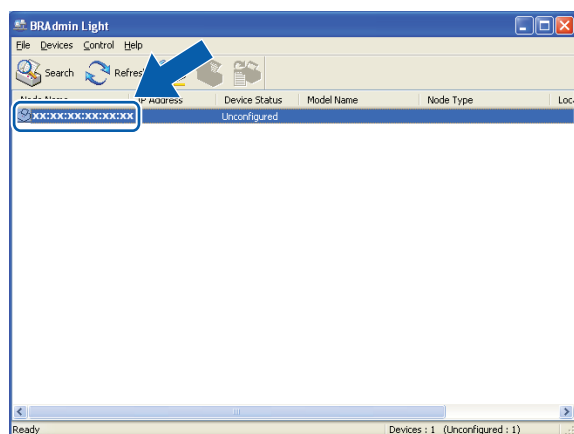
Macintosh
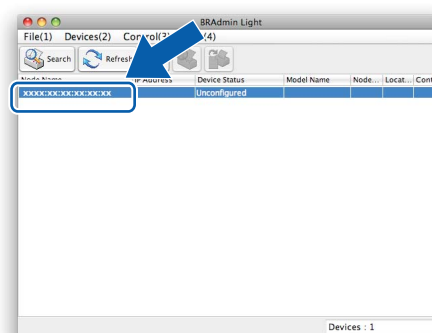
✐ **Note**

• If the print server is set to its factory default settings (if you don't use a DHCP/BOOTP/RARP server), the device will appear as **Unconfigured** in the BRAdmin Light utility screen.

- You can find the Node Name and MAC Address (Ethernet Address) by printing the Network Configuration Report. (See *Printing the Network Configuration Report* ➤➤ page 27 for information on how to print the Network Configuration Report on your print server.) You can also find the Node Name and MAC Address from the control panel. (See *Control panel setup* ➤➤ page 22.)

d Choose **STATIC** from **Boot Method**. Enter the **IP Address**, **Subnet Mask** and **Gateway** (if needed) of your print server.

Windows®
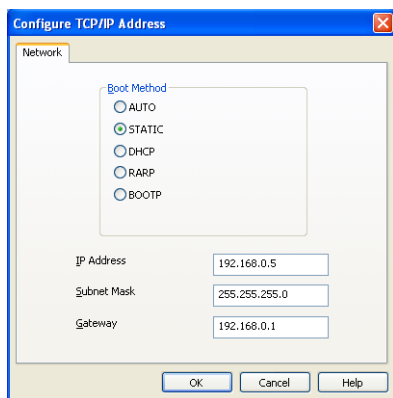
Macintosh
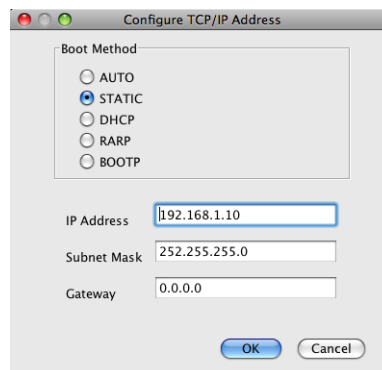
e Click **OK**.

f When the IP address has been programmed correctly, the device list will show the Brother machine.

Other Management Utilities

Your Brother machine has the following management utilities in addition to the BRAdmin Light utility. You can change your network settings using this utility.

BRAdmin Professional 3 utility (Windows®)

BRAdmin Professional 3 is a utility for a more advanced management of network connected Brother devices. This utility can search for Brother products on your network and show the device status from an easy to read Explorer style window that changes color identifying the status of each device. You can configure network and device settings along with the ability to update device firmware from a Windows® computer on your LAN. BRAdmin Professional 3 can also log activity of Brother devices on your network and export the log data in a HTML, CSV, TXT or SQL format.

For more information and downloading, visit us at http://solutions.brother.com/.

Note

- Please use the latest version of the BRAdmin Professional 3 utility that is available as a download from http://solutions.brother.com/. This utility is only available for Windows® users.

- If you are using a firewall function of anti-spyware or antivirus applications, temporarily disable them. Once you are sure that you can print, re-enable the application.

- Node name: The node name appears in the current BRAdmin Professional 3 window. The default Node name is "BRWxxxxxxxxxxxx". ("xxxxxxxxxxxx" is your MAC Address / Ethernet Address.)

3 Configuring your machine for a wireless network

Overview

To connect your machine to your wireless network, you need to follow the steps in the *Quick Setup Guide*.

Configuration using the CD-ROM installer and a USB cable is the recommended method for Windows® users. By using this method, you can easily connect your machine to your wireless network. Macintosh users should choose their preferred configuration method from the choices covered in the *Quick Setup Guide*.

For additional wireless configuration methods please read this chapter for more details on how to configure the wireless network settings. For information on TCP/IP settings, see *How to change your machine's network settings (IP address, Subnet mask and Gateway)* ▶▶ page 2.

Note

- To achieve optimum results with normal every day document printing, place the Brother machine as close to the WLAN access point/router as possible with minimal obstructions. Large objects and walls between the two devices as well as 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 choosing USB for the fastest throughput speed.

- Before configuring wireless settings, you will need to know your SSID and Network Key.

Confirm your network environment

Connected to a computer with a WLAN access point/router in the network (Infrastructure mode)
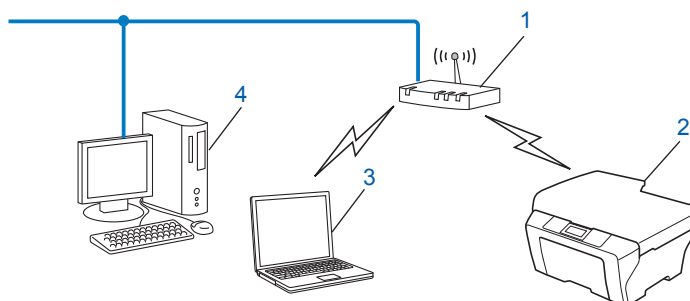
1 WLAN access point/router [1]

[1] If your computer supports Intel® My WiFi Technology (Intel® MWT), you can use your computer as a Wi-Fi Protected Setup supported access point.

2 Wireless network machine (your machine)

3 Wireless capable computer connected to the WLAN access point/router

4 Wired computer (which is not wireless capable) connected to the WLAN access point/router with an Ethernet cable

Install method

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

- *Wireless configuration temporarily using a USB cable* ▸▸ page 9. (Recommended for Windows® users)

- *One push configuration using Wi-Fi Protected Setup™ or AOSS™* ▸▸ page 12.

- *Configuration using the machine's control panel Setup Wizard* ▸▸ page 16.

Connected to a wireless capable computer without a WLAN access point/router in the network (Ad-hoc mode)

This type of network does not have a central WLAN access point/router. Each wireless client communicates directly with each other. When the Brother wireless machine (your machine) is part of this network, it receives all print jobs directly from the computer sending the print data.
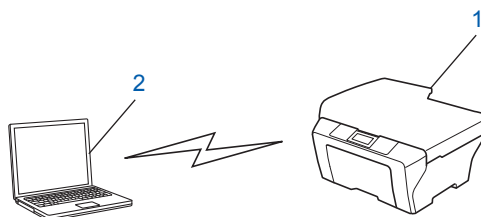
1 Wireless network machine (your machine)

2 Wireless capable computer

We do not guarantee the wireless network connection with Windows Server® products in Ad-hoc mode.

To set up your machine in Ad-hoc mode, see *Configuration in Ad-hoc Mode (For IEEE 802.11b)* ▶▶ page 20.

Wireless configuration temporarily using a USB cable

It is recommended that you use a computer wirelessly connected to your network for this method.

You can remotely configure the machine from the computer on the network using a USB cable (A) [1].
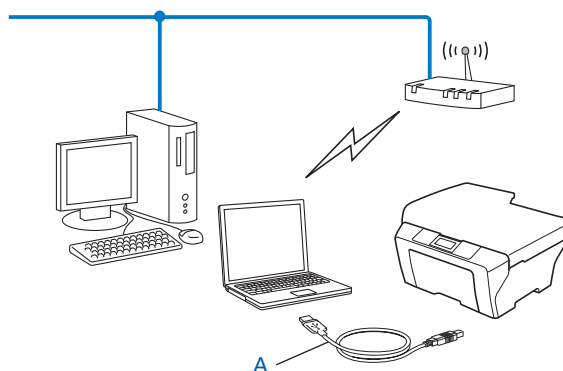
[1]   You can configure the wireless settings of the machine using a USB cable temporarily connected to a wired or wireless computer.

For Windows® users (Recommended)

> **ⓘ Important**
>
> • You need to temporarily use a USB cable during configuration (cable not included).
>
> • If you are using Windows® XP, or currently using a computer connected to an access point/router by network cable, you need to know the SSID and Network Key of your access point/router. Write them down in the area below, as they are required when configuring the machine's wireless settings.

Item	Record the current wireless network settings
SSID (Network Name):	
Network Key	

① Turn on your computer.

② Start the Brother installer application.

    1   Put the supplied CD-ROM into your CD-ROM drive. The opening screen will appear automatically. If the model name screen appears, choose your machine. If the language screen appears, choose your language.

    2   The CD-ROM main menu will appear.

> **✎ Note**
>
> • If the Brother screen does not appear automatically, go to **My Computer (Computer)**, double-click the CD-ROM icon, and then double-click **start.exe**.
>
> • The screen on your machine may vary depending on your region.

3 Click **Install MFL-Pro Suite** and click Yes if you accept the license agreements. Follow the on-screen instructions.

c Choose **Wireless Network Connection**, and then click **Next**.

d Choose
Change the Firewall port settings to enable network connection and continue with the installation. (Recommended) and click **Next**.

e Choose **Yes, I have a USB cable to use for installation** and click **Next**.

f Follow the on-screen instructions to configure the wireless settings, install drivers and software.

Note

When the **Available Wireless Networks** screen appears, if your access point is set to not broadcast the SSID you can manually add it by clicking the **Advanced** button. Follow the on-screen instructions to enter the **Name (SSID)**.

OK! **You have completed the wireless network setup, driver and software installation.**

For Macintosh users

Important

• The following instructions will install your Brother machine in a network environment using the Brother installer application found on the CD-ROM we have provided with the machine.

• If you have previously configured the wireless settings of the machine, you must reset the LAN settings before you can configure the wireless settings again.

To reset the LAN settings, see *Restoring the network settings to factory default* >> page 26.

• If you are using a firewall function of anti-spyware or antivirus applications, temporarily disable them. Once you are sure that you can print please re-enable your firewall.

• You need to temporarily use a USB cable (not included) during configuration.

• **You must know your wireless network settings before you proceed with this installation.**

If you are going to connect your Brother machine to your network, we recommend that you contact your system administrator prior to installation.

• 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.

a Before configuring your machine we recommend you write down the SSID and Network Key (if required) for your wireless network. You will need this information before you continue with the configuration.

Item	Record the current wireless network settings
SSID (Network Name):	
Network Key	

2 Turn on your computer.

3 Start the Brother installer application.

1 Put the supplied CD-ROM into your CD-ROM drive. Double-click the **BROTHER** icon on your desktop.

2 Double-click **Utilities**.

3 Double-click the **Wireless Device Setup Wizard**.

4 Choose **Yes, I have a USB cable to use for installation** and then click **Next**.

5 Read the **Important Notice**. Check the box after you confirm the SSID and Network Key, then click **Next**.

6 Follow the on-screen instructions to configure the wireless settings.

Note

When the **Available Wireless Networks** screen appears, if your access point is set to not broadcast the SSID you can manually add it by clicking the **Advanced** button. Follow the on-screen instructions for entering the **Name(SSID)**.

OK! **You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please double-click Start Here OSX on the CD-ROM.**

Note

If your wireless settings fail, the Wireless Device Setup Wizard will appear during the installation of MFL-Pro Suite. Confirm your settings by following the on-screen instructions.

One push configuration using Wi-Fi Protected Setup™ or AOSS™

You can use WPS or AOSS™ from the control panel menu to configure your wireless network settings if your WLAN access point/router (A) supports either Wi-Fi Protected Setup (PBC [1]) or AOSS™.
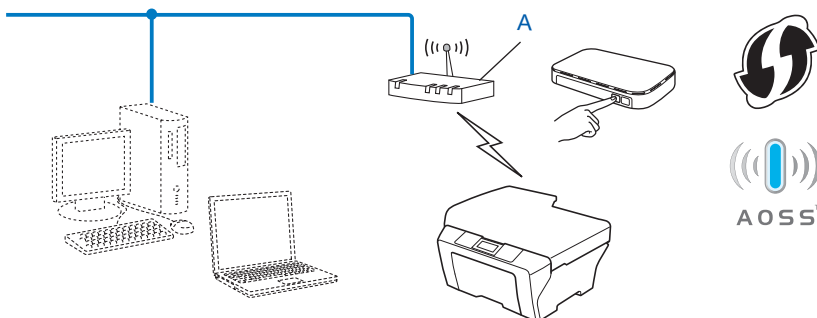
[1] Push Button Configuration

> **❶ Important**
>
> - If you are going to connect your Brother machine to your network, we recommend that you contact your system administrator prior to installation. **You must know your wireless network settings before you proceed with this installation.**
>
> - If you have previously configured the wireless settings of the machine, you must reset the LAN settings before you can configure the wireless settings again.
>
>   To reset the LAN settings, see *Restoring the network settings to factory default* ▸▸ page 26.

One-push configuration using WPS (Wi-Fi Protected Setup) or AOSS™

a Press **Menu**.

b Press ▲ or ▼ to choose 3.Network.
Press **OK**.

c Press ▲ or ▼ to choose 3.WPS/AOSS.
Press **OK**.

d If WLAN Enable? is displayed, press ▲ for Yes to accept.
This will start the wireless setup wizard.
To cancel, press **Stop/Exit**.

e When the LCD shows Press Key on rtr, press the WPS or AOSS™ button on your wireless access point/router. See the user's guide for your wireless access point/router for instructions.
Next, press ▲ for Next. Your machine will now automatically detect which mode (WPS or AOSS™) your wireless access point/router uses and try to connect to your wireless network.

f A connection result message appears for 60 seconds on the LCD and a wireless LAN report will automatically be printed. If the connection failed, check the error code on the printed report.
➤➤Quick Setup Guide: *Troubleshooting*

3

OK! **(Windows®)**

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please choose Install MFL-Pro Suite from the CD-ROM menu.

(Macintosh)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please double-click Start Here OSX on the CD-ROM.

Configuration using the PIN Method of Wi-Fi Protected Setup

If your WLAN access point/router (A) supports Wi-Fi Protected Setup, you can also connect using the PIN Method of Wi-Fi Protected Setup. The PIN (Personal Identification Number) Method is one of the connection methods developed by the Wi-Fi Alliance®. By inputting a PIN which is created by an Enrollee (your machine) to the Registrar (a device that manages the wireless LAN), you can setup the wireless network and security settings. See the user's guide for your WLAN access point/router for instructions on how to access the Wi-Fi Protected Setup mode.

■ Connection when the WLAN access point/router (A) doubles as a Registrar [1].
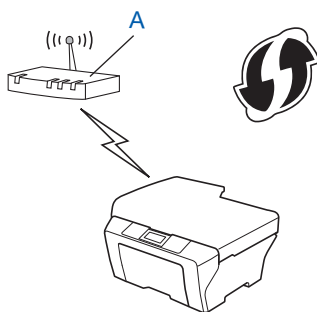
■ Connection when another device (C), such as a computer is used as a Registrar [1].
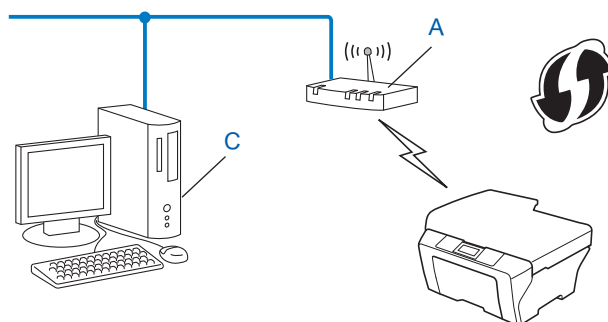
[1] The Registrar is a device that manages the wireless LAN.

Note

Routers or access points that support Wi-Fi Protected Setup have a symbol as shown below.
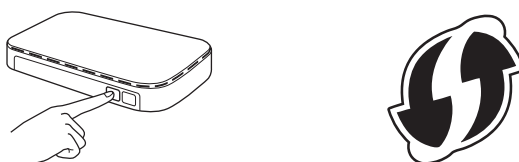
1. Press **Menu**.

2. Press ▲ or ▼ to choose 3.Network.
   Press **OK**.

3. Press ▲ or ▼ to choose 4.WPS w/PIN Code.
   Press **OK**.

4. If WLAN Enable? is displayed, press ▲ for Yes to accept.
   This will start the wireless setup wizard.
   To cancel, press **Stop/Exit**.

5. The LCD will show an 8 digit PIN and the machine begins searching for a WLAN access point/router for up to 5 minutes.

6. Using a computer that is on the network, type "http://access point's IP address/" into your browser. (Where "access point's IP address" is the IP address of the device that is used as the Registrar [1].) Go to the WPS (Wi-Fi Protected Setup) settings page and input the PIN that the LCD displayed in step 5 to the Registrar and follow the on-screen instructions.

   [1] The Registrar is normally the WLAN access point/router.

Note

The WPS settings page will be different, depending on the brand of WLAN access point/router. See the instruction manual that came with your WLAN access point/router.

If you are using your Windows Vista® or Windows® 7 computer as a Registrar, perform the following instructions.

Note

To use a Windows Vista® or Windows® 7 computer as a Registrar, you need to register it to your network in advance. See the instruction manual supplied with your WLAN access point/router.

1 (Windows Vista®)

Click [icon], **Network**, and then **Add a wireless device**.

(Windows® 7)

Click [icon], **Control Panel**, **Network and Internet**, and then **Add a wireless device to the network**.

2 Choose your machine and click **Next**.

3 Input the PIN that the LCD displayed in step ❺ and then click **Next**.

4 Choose your network that you want to connect to, and then click **Next**.

5 Click **Close**.

❼ A connection result message appears for 60 seconds on the LCD and a wireless LAN report will automatically be printed. If the connection failed, check the error code on the printed report.
▶▶Quick Setup Guide: *Troubleshooting*

OK! **(Windows®)**

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please choose Install MFL-Pro Suite from the CD-ROM menu.

(Macintosh)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please double-click Start Here OSX on the CD-ROM.

Configuration using the machine's control panel Setup Wizard

You can use the machine's control panel to configure your wireless network settings. By using the control panel `2.Setup Wizard` function, you can easily connect your Brother machine to your wireless network. **You must know your wireless network settings before you proceed with this installation.**

❗ Important

If you have previously configured the wireless settings of the machine, you must reset the LAN settings before you can configure the wireless settings again.

To reset the LAN settings, see *Restoring the network settings to factory default* ▶▶ page 26.

Manual configuration from the control panel

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

Item	Record the current wireless network settings
SSID (Network Name):	
Network Key	

❷ Press **Menu**.

❸ Press ▲ or ▼ to choose `3.Network`.
Press **OK**.

❹ Press ▲ or ▼ to choose `2.Setup Wizard`.
Press **OK**.

❺ If `WLAN Enable?` is displayed, press ▲ for `Yes` to accept.
This will start the wireless setup wizard.
To cancel, press **Stop/Exit**.

❻ The machine will search for your network and display a list of available SSIDs.
If a list of SSIDs is displayed, press ▲ or ▼ to choose the SSID you wrote down in step ❶.
Press **OK**.
If the wireless access point/router of the selected SSID supports WPS and the machine asks to use WPS, go to ❼.
If the machine asks you to enter a Network Key, go to ❽.
Otherwise, go to ❾.

📝 Note

When the SSID is not broadcast, see *Configuring your machine when the SSID is not broadcast* ▶▶ page 18.

7 When the LCD shows `WPS is available`, press ▲ for `Next`, and then press ▲ for `Yes` to connect to your machine using WPS. (If you press ▼ for `No` to continue to the manual configuration, go to **8** to enter a Network Key.)
When the LCD shows `Press WPS on rtr`, press the WPS button on your wireless access point/router, and then press ▲ for `Next` to proceed.
Press ▲ for `Yes` and go to **9**.

8 Enter the Network Key you wrote down in step **1**. (For information on how to enter text, see the *Quick Setup Guide*.)
Press **OK** when you have entered all the characters, then press ▲ for `Yes` to apply your settings.

9 The machine will attempt to connect to the wireless network you have chosen.

10 A connection result message appears for 60 seconds on the LCD and a wireless LAN report will automatically be printed. If the connection failed, check the error code on the printed report.
➤➤Quick Setup Guide: *Troubleshooting*

OK! **(Windows®)**

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please choose Install MFL-Pro Suite from the CD-ROM menu.

(Macintosh)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please double-click Start Here OSX on the CD-ROM.

Configuring your machine when the SSID is not broadcast

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

   Check and record the current wireless network settings.

SSID (Network Name):

Communication Mode	Authentication method	Encryption mode	Network key
Infrastructure	Open system	WEP	
		NONE	—
	Shared key	WEP	
	WPA/WPA2-PSK	AES	
		TKIP [1]	

[1] TKIP is supported for WPA-PSK only.

For example:

SSID (Network Name):
HELLO

Communication Mode	Authentication method	Encryption mode	Network key
Infrastructure	WPA2-PSK	AES	12345678

Note

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 **Menu**.

3. Press ▲ or ▼ to choose 3.Network.
   Press **OK**.

4. Press ▲ or ▼ to choose 2.Setup Wizard.
   Press **OK**.

5. If WLAN Enable? is displayed, press ▲ for Yes to accept.
   This will start the wireless setup wizard.
   To cancel, press **Stop/Exit**.

6. The machine will search for your network and display a list of available SSIDs.
   Choose <New SSID> using ▲ or ▼.
   Press **OK**.

7 Enter the SSID name. (For information on how to enter text, see the *Quick Setup Guide*.)
Press **OK**.

8 Using ▲ or ▼, choose `Infrastructure` when instructed.
Press **OK**.

9 Choose the Authentication method using ▲ or ▼, and press **OK**.
Do one of the following:
If you chose `Open System`, go to step ❿.
If you chose `Shared Key`, go to step ⓫.
If you chose `WPA/WPA2-PSK`, go to step ⓬.

❿ Choose the Encryption type `None` or `WEP` using ▲ or ▼, and press **OK**.
Do one of the following:
If you chose `None`, go to step ⓮.
If you chose `WEP`, go to step ⓫.

⓫ Enter the WEP key you wrote down in step ❶ on page 18. Press **OK**. Go to step ⓮. (For information on how to enter text, see the *Quick Setup Guide*.)

⓬ Choose the Encryption type, `TKIP` or `AES` using ▲ or ▼. Press **OK**. Go to step ⓭.

⓭ Enter the WPA key you wrote down in step ❶ on page 18 and press **OK**. Go to step ⓮. (For information on how to enter text, see the *Quick Setup Guide*.)

⓮ To apply the settings, press ▲ for `Yes`. To cancel, press ▼ for `No`.
Do one of the following:
If you chose `Yes`, go to step ⓯.
If you chose `No`, go back to step ❻.

⓯ The machine will attempt to connect to the wireless network you have chosen.

⓰ A connection result message appears for 60 seconds on the LCD and a wireless LAN report will automatically be printed. If the connection failed, check the error code on the printed report.
➤➤Quick Setup Guide: *Troubleshooting*

OK! **(Windows®)**

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please choose Install MFL-Pro Suite from the CD-ROM menu.

(Macintosh)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please double-click Start Here OSX on the CD-ROM.

Configuration in Ad-hoc Mode (For IEEE 802.11b)

Configure the wireless settings

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

Check and record the current wireless network settings.

Note

The wireless network settings of the computer you are connecting with must be set to Ad-hoc mode with an SSID already configured. For instructions on how to configure your computer to Ad-hoc mode please see the information included with your computer or contact your network administrator.

SSID (Network Name):

Communication Mode	Encryption mode	Network key
Ad-hoc	WEP	
	NONE	—

For example:

SSID (Network Name):
HELLO

Communication Mode	Encryption mode	Network key
Ad-hoc	WEP	12345678

2 Press **Menu**.

3 Press ▲ or ▼ to choose `3.Network`.
Press **OK**.

4 Press ▲ or ▼ to choose `2.Setup Wizard`.
Press **OK**.

5 If `WLAN Enable?` is displayed, press ▲ for `Yes` to accept.
This will start the wireless setup wizard.
To cancel, press **Stop/Exit**.

6 The machine will search for your network and display a list of available SSIDs.
Choose `<New SSID>` using ▲ or ▼.
Press **OK**.

7 Enter the SSID name. (For information on how to enter text, see the *Quick Setup Guide*.)
Press **OK**.

8 Using ▲ or ▼, choose Ad-hoc when instructed.
Press **OK**.

9 Choose the Encryption type None or WEP using ▲ or ▼, and press **OK**.
Do one of the following:
If you chose None, go to step ⑪.
If you chose WEP, go to step ⑩.

⑩ Enter the WEP key you wrote down in step ❶ on page 20. Press **OK**. Go to step ⑪. (For information on how to enter text, see the *Quick Setup Guide*.)

⑪ To apply the settings, press ▲ for Yes. To cancel, press ▼ for No.
Do one of the following:
If you chose Yes, go to step ⑫.
If you chose No, go back to step ❻.

⑫ The machine will attempt to connect to the wireless network you have chosen.

⑬ A connection result message appears for 60 seconds on the LCD and a wireless LAN report will automatically be printed. If the connection failed, check the error code on the printed report.
➤➤Quick Setup Guide: *Troubleshooting*

OK! **(Windows®)**

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please choose Install MFL-Pro Suite from the CD-ROM menu.

(Macintosh)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary to operate your device, please double-click Start Here OSX on the CD-ROM.

4 Control panel setup

Network menu

The `3.Network` menu selections of the control panel allow you to set up the Brother machine for your network configuration. Press **Menu**, then press ▲ or ▼ to choose `3.Network`. Proceed to the menu selection you wish to configure. (See *Function table and default factory settings* ▶▶ page 29.)

Please note that the machine is supplied with the BRAdmin Light utility which can also be used to configure many aspects of the network. (See *Using the BRAdmin Light utility* ▶▶ page 2.)

TCP/IP

BOOT Method

This selection controls how the machine obtains an IP address.

Auto mode

In this mode the machine will scan the network for a DHCP server. If it can find one, and if the DHCP server is configured to allocate an IP address to the machine, then the IP address supplied by the DHCP server will be used. If no DHCP server is available, then the machine will scan for a BOOTP server. If a BOOTP server is available, and it is configured correctly, the machine will take its IP address from the BOOTP server. If a BOOTP server is not available, the machine will scan for a RARP server. If a RARP server is also not available, the IP Address is set using the APIPA protocol. After the machine is initially powered ON, it may take a few minutes for the machine to scan the network for a server.

Static mode

In this mode the machine's IP address must be manually assigned. Once entered the IP address is locked to the assigned address.

> **Note**
>
> If you do not want your print server configured via DHCP, BOOTP or RARP, you must set the `1.BOOT Method` to `Static` so that the print server has a static IP address. This will prevent the print server from trying to obtain an IP address from any of these systems. To change the `1.BOOT Method`, use the machine's control panel or BRAdmin Light utility.

IP Address

This field displays the current IP address of the machine. If you have chosen a `1.BOOT Method` of `Static`, enter the IP address that you wish to assign to the machine (check with your network administrator for a suitable IP address to use). If you have chosen a method other than `Static`, the machine will attempt to determine its IP address using the DHCP, BOOTP or RARP protocols. The default IP address of your machine will probably be incompatible with the IP address numbering scheme of your network. We recommend that you contact your network administrator for a suitable IP address for the network the unit will be connected on.

Subnet Mask

This field displays the current subnet mask used by the machine. If you are not using DHCP or BOOTP to obtain the subnet mask, enter the desired subnet mask. Check with your network administrator for the subnet mask to use.

Gateway

This field displays the current gateway or router address used by the machine. If you are not using DHCP or BOOTP to obtain the gateway or router address, enter the address you wish to assign. If you do not have a gateway or router, leave this field blank. Check with your network administrator if you are unsure.

Node Name

You can register the machine name on the Network. This name is often referred to as a NetBIOS name; it will be the name that is registered by the WINS server on your network. Brother recommends the name BRWxxxxxxxxxxxx for a wireless network (where xxxxxxxxxxxx is your machine's Ethernet address) (up to 15 characters).

Note

DCP models cannot change the Node Name from the control panel menu.

WINS Config

This selection controls how the machine obtains the IP address of the WINS server.

Auto

Automatically uses a DHCP request to determine the IP addresses for the primary and secondary WINS servers. You must set the `1.BOOT Method` to `Auto` or `DHCP` for this feature to work.

Static

Uses a specified IP address for the primary and secondary WINS servers.

WINS Server

Primary WINS Server IP Address

This field specifies the IP address of the primary WINS (Windows® Internet Name Service) server. If set to a non-zero value, the machine will contact this server to register its name with the Windows® Internet Name Service.

Secondary WINS Server IP Address

This field specifies the IP address of the secondary WINS server. It is used as a backup to the Primary WINS server address. If the Primary server is unavailable, the machine can still register itself with a secondary server. If set to a non-zero value, the machine will contact this server to register its name with the Windows® Internet Name Service. If you have a primary WINS server, but no secondary WINS server, simply leave this field blank.

DNS Server

Primary DNS Server IP Address

This field specifies the IP address of the primary DNS (Domain Name System) server.

Secondary DNS Server IP Address

This field specifies the IP address of the secondary DNS server. It is used as a backup to the Primary DNS server address. If the Primary server is unavailable, the machine will contact the Secondary DNS server.

APIPA

The setting of `On` will cause the print server to automatically allocate a Link-Local IP address (in the range 169.254.1.0 - 169.254.254.255) when the print server cannot obtain an IP address through the `1.BOOT Method` you have set (see *BOOT Method* ▶▶ page 22). Choosing `Off` means the IP address doesn't change, when the print server cannot obtain an IP address through the `1.BOOT Method` you have set.

Setup Wizard

The `2.Setup Wizard` guides you through the wireless network configuration. For more information, see the *Quick Setup Guide* or *Configuration using the machine's control panel Setup Wizard* ▶▶ page 16.

WPS/AOSS™

If your WLAN access point/router supports either Wi-Fi Protected Setup (PBC [1]) or AOSS™, you can configure the machine easily without knowing your wireless network settings. (See the *Quick Setup Guide* or *One push configuration using Wi-Fi Protected Setup™ or AOSS™* ▶▶ page 12.)

[1]   Push Button Configuration

WPS w/PIN Code

If your WLAN access point/router supports Wi-Fi Protected Setup (PIN Method), you can configure the machine easily without a computer. (See *Configuration using the PIN Method of Wi-Fi Protected Setup* ➤➤ page 13.)

WLAN Status

Status

This field displays the current wireless network status.

Signal

This field displays the current wireless network signal strength.

SSID

This field displays the current wireless network SSID. The display shows up to 32 characters of the SSID name.

Comm.Mode

This field displays the current wireless network communication mode.

MAC Address

The MAC address is a unique number assigned to the machine's network interface. You can check your machine's MAC address from the control panel.

WLAN Enable

If you want to use the wireless network connection, set `7.WLAN Enable` to `On`. The default setting is `Off`.

Restoring the network settings to factory default

You can reset the print server back to its default factory settings (resetting all information such as the password and IP address information).

Note

- This function restores all wireless network settings to the factory default.

- You can also reset the print server back to its factory default settings using the BRAdmin applications. (For more information, see *Other Management Utilities* >> page 5.)

a Press **Menu**.

b Press ▲ or ▼ to choose 3.Network.
Press **OK**.

c Press ▲ or ▼ to choose 0.Network Reset.
Press **OK**.

d Press ▲ for Reset.

e Press ▲ for Yes.

f The machine will restart.

Printing the Network Configuration Report

📝 **Note**

Node Name: The Node Name appears in the Network Configuration Report. The default Node Name is "BRWxxxxxxxxxxxx" for a wireless network ("xxxxxxxxxxxx" is your machine's MAC Address / Ethernet Address).

The Network Configuration Report prints a report listing the current network configuration including the network print server settings.

①ㅤPress **Menu**.

②ㅤPress ▲ or ▼ to choose 4.Print Reports.
ㅤPress **OK**.

③ㅤPress ▲ or ▼ to choose 2.Network Config.
ㅤPress **OK**.

④ㅤ(For US) Press **Black Start** or **Color Start**.
ㅤ(For UK) Press **Mono Start** or **Colour Start**.

Printing the WLAN Report

The `3.WLAN Report` prints your machine's wireless status report. If the wireless connection failed, check the error code on the printed report.

▶▶Quick Setup Guide: *Troubleshooting*

a Press **Menu**.

b Press ▲ or ▼ to choose `4.Print Reports`.
Press **OK**.

c Press ▲ or ▼ to choose `3.WLAN Report`.
Press **OK**.

d (For US) Press **Black Start** or **Color Start**.
(For UK) Press **Mono Start** or **Colour Start**.

Note

If the WLAN Report does not print, try starting from step ❶ again after a while.

Function table and default factory settings

Main menu	Submenu	Menu Selections	Options
3.Network	1.TCP/IP	1.BOOT Method	**Auto**/Static/RARP/BOOTP/DHCP
		2.IP Address	[000-255].[000-255].[000-255].[000-255] **[000].[000].[000].[000]** [1]
		3.Subnet Mask	[000-255].[000-255].[000-255].[000-255] **[000].[000].[000].[000]** [1]
		4.Gateway	[000-255].[000-255].[000-255].[000-255] **[000].[000].[000].[000]**
		5.Node Name	**BRWXXXXXXXXXXXX**= (your machine's Ethernet address) (up to 15 characters)
		6.WINS Config	**Auto**/Static
		7.WINS Server	Primary/Secondary [000-255].[000-255].[000-255].[000-255] **[000].[000].[000].[000]**
		8.DNS Server	Primary/Secondary [000-255].[000-255].[000-255].[000-255] **[000].[000].[000].[000]**
		9.APIPA	**On**/Off
	2.Setup Wizard	—	(Choose SSID from list or manually add SSID)
	3.WPS/AOSS	—	
	4.WPS w/PIN Code	—	
	5.WLAN Status	1.Status	(Examples) Active(11b)/Active(11g)/Active(11n)/AOSS Active/Connection Fail
		2.Signal	Signal:Strong/Signal:Medium/Signal:Weak/Signal:None
		3.SSID	(Shows SSID with up to 32 digits)
		4.Comm. Mode	(Examples) Ad-hoc/Infrastructure
	6.MAC Address		
	7.WLAN Enable		On/**Off**
	0.Network Reset		

■ The factory settings are shown in bold.

[1] On connection to the network, the machine will automatically set the IP address and Subnet Mask to values appropriate for your network.

5 Troubleshooting

Overview

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

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

First check the following:
The power cord is connected properly and the Brother machine is turned on.
The access point (for wireless), router or hub is turned on and its link light is blinking.
All protective packaging has been removed from the machine.
The ink cartridges are installed properly.
The front and back covers are fully closed.
Paper is inserted properly in the paper tray.

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

- I cannot complete the wireless network setup configuration. (See page 30.)
- The Brother machine is not found on the network during the MFL-Pro Suite installation. (See page 31.)
- The Brother machine cannot print or scan over the network. (See page 32.)
- The Brother machine is not found on the network even after successful installation. (See page 32.)
- I'm using security software. (See page 34.)
- I want to check my network devices are working properly. (See page 35.)

I cannot complete the wireless network setup configuration.

Question	Interface	Solution
My machine does not connect during wireless setup?	wireless	Turn your wireless router Off and back On. Then try and configure the wireless settings again.
Are your security settings (SSID/Network Key) correct?	wireless	■ Reconfirm and choose the correct security settings. • The manufacturer's name or model no. of the WLAN access point/router may be used as the default security settings. • See the instructions supplied with your WLAN access point/router for information on how to find the security settings. • Ask the manufacturer of your WLAN access point/router or ask your Internet provider or network administrator. ■ For information on what the SSID and Network Key are, see SSID, Network Key and channels in the *Network Glossary*.

I cannot complete the wireless network setup configuration. (continued)

Question	Interface	Solution
Are you using MAC address filtering?	wireless	Confirm that the MAC address of the Brother machine is allowed in the filter. You can find the MAC address from the Brother machine's control panel. (See *Function table and default factory settings* ▸▸ page 29.)
Is your WLAN access point/router in stealth mode? (not broadcasting the SSID)	wireless	■ You need to type the correct SSID name or Network Key by hand. ■ Check the SSID name or the Network Key in the instructions supplied with your WLAN access point/router and configure the wireless settings again. (For more information, see *Configuring your machine when the SSID is not broadcast* ▸▸ page 18.)

The Brother machine is not found on the network during the MFL-Pro Suite installation.

Question	Interface	Solution
Are you using security software?	wireless	■ Confirm your settings on the installer dialog. ■ Allow access when the alert message of the security software appears during the MFL-Pro Suite installation. ■ For more information about security software, see *I'm using security software.* ▸▸ page 34.
Is your Brother machine placed too far from the WLAN access point/router?	wireless	Place your Brother machine within about 3.3 feet (1 meter) from the WLAN access point/router when you configure the wireless network settings.
Are there any obstructions (walls or furniture, for example) between your machine and the WLAN access point/router?	wireless	Move your Brother machine to an obstruction-free area, or closer to the WLAN access point/router.
Is there a wireless computer, Bluetooth supported device, microwave oven or digital cordless phone near the Brother machine or the WLAN access point/router?	wireless	Move all the devices away from Brother machine or WLAN access point/router.

The Brother machine cannot print or scan over the network.
The Brother machine is not found on the network even after successful installation.

Question	Interface	Solution
Are you using security software?	wireless	See *I'm using security software.* ▶▶ page 34.
Is your Brother machine assigned with an available IP address?	wireless	■ Confirming 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 on how to verify the IP address and the Subnet Mask, ask the network administrator or visit the Brother Solutions Center at http://solutions.brother.com/. ■ (Windows®) Confirming the IP address and the Subnet Mask using the Network Connection Repair Tool. Use the Network Connection Repair Tool to fix the Brother machine's network settings. It will assign the correct IP address and Subnet Mask. To use the Network Connection Repair Tool follow the steps below: ✍ **Note** • (Windows® XP/Windows Vista®/Windows® 7) Login to the network with Administrator privileges. • Make sure that the Brother machine is turned on and is connected to the same network as your computer.

5

The Brother machine cannot print or scan over the network.
The Brother machine is not found on the network even after successful installation. (continued)

Question	Interface	Solution
Is your Brother machine assigned with an available IP address? (Continued)	wireless	1 (Windows® XP, Windows Server® 2003) Click the **Start** button, **All Programs**, **Accessories** and **Windows Explorer**, and then **My Computer**. (Windows Server® 2008) Click the **Start** button and **Computer**. (Windows Vista®/Windows® 7) Click the ⊕ button and **Computer**. 2 Double-click **Local Disk (C:)**, **Program Files** or **Program Files (x86)**, **Browny02**, **Brother**, **BrotherNetTool.exe** to run the program. 📝 **Note** If the **User Account Control** screen appears, (Windows Vista®) Click **Continue**. (Windows® 7) Click **Yes**. 3 Follow the on screen instructions. 4 Check the diagnosis by printing the Network Configuration Report. 📝 **Note** The Network Connection Repair Tool will start automatically if you check the **Enable Connection Repair Tool** box using the Status Monitor. Right-click on the Status Monitor screen, click **Options**, **Details** and then click the **Diagnostic** tab. 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 Subnet mask are still not assigned even after using the Network Connection Repair Tool, ask the network administrator for this information, or visit the Brother Solutions Center at http://solutions.brother.com/.

The Brother machine cannot print or scan over the network.
The Brother machine is not found on the network even after successful installation. (continued)

Question	Interface	Solution
Did your previous printing job fail?	wireless	■ If the failed printing job is still in your computer's print queue, delete it. ■ Double-click the printer icon in the following folder and then choose the **Cancel All Documents** in the **Printer** menu: (Windows® XP) **Start** and then **Printers and Faxes**. (Windows Vista®) (logo), **Control Panel**, **Hardware and Sound** and then **Printers**. (Windows® 7) (logo), **Control Panel**, **Hardware and Sound**, **Devices and Printers** and then **Printers and Faxes**. Then click the printer icon and click **See what's printing**, then select **Cancel All Documents** in the **Printer** menu.
I have checked and tried the above, however the Brother machine does not print/scan. Is there anything else I can do?	wireless	Uninstall the MFL-Pro Suite and then reinstall it. ■ Print the WLAN Report to confirm the state of a wireless connection. (For how to print, see *Printing the WLAN Report* ▶▶ page 28.) If the printed WLAN report shows the connection failed, check the error code on the printed report. ▶▶Quick Setup Guide: *Troubleshooting* ■ See *The Brother machine is not found on the network during the MFL-Pro Suite installation.* ▶▶ page 31.

I'm using security software.

Question	Interface	Solution
Did you choose to accept the security alert dialog during MFL-Pro Suite or BRAdmin Light installation, or when using the printing/scanning features?	wireless	If you did not choose to accept the security alert dialog, the firewall function of your security software may be rejecting access. Some security software might block access without showing a security alert dialog. To allow access, see the instructions of your security software or ask the manufacturer.
What are the port numbers required for the security software settings?	wireless	The following port numbers are used for Brother network features: ■ Network scanning → Port number 54925 / Protocol UDP ■ Network scanning/printing [1] → Port number 137 and 161 / Protocol UDP ■ BRAdmin Light [1] → Port number 161 / Protocol UDP [1] Windows® only. For details on how to open the port, see the instructions of the security software or ask the manufacturer.

I want to check my network devices are working properly.

Question	Interface	Solution
Is your Brother machine, access point/router or network hub turned on?	wireless	Make sure you have confirmed all instructions in *Make sure that the following items are configured before reading this chapter.* ▸▸ page 30.
Where can I find the Brother machine's network settings, such as IP address?	wireless	Print the Network Configuration Report. See *Printing the Network Configuration Report* ▸▸ page 27.
Check the Link Status in the Network Configuration Report.	wireless	Print the Network Configuration Report and check that **Wireless Link Status** is showing **Link OK**. If the Link Status shows **Failed To Associate**, start again from the *Make sure that the following items are configured before reading this chapter.* ▸▸ page 30.
Can you "ping" the Brother machine from your computer?	wireless	Ping the Brother machine from your computer using the IP address or the node name. ■ Successful → Your Brother machine is working correctly and connected to the same network as your computer. ■ Unsuccessful → Your Brother machine is not connected to the same network as your computer or is not configured correctly. (Windows®) Ask the network administrator or use the Network Connection Repair Tool to fix the IP address and the subnet mask automatically. For details on the Network Connection Repair Tool, see *(Windows®) Confirming the IP address and the Subnet Mask using the Network Connection Repair Tool.* ▸▸ page 32. (Macintosh) Confirm the IP address and the Subnet Mask are set correctly. See *Confirming the IP address and the Subnet Mask.* ▸▸ page 32.
Is the Brother machine connected to the wireless network?	wireless	Print the WLAN Report to confirm the state of the wireless connection. (For how to print, see *Printing the WLAN Report* ▸▸ page 28.) If the printed WLAN report shows the connection failed, check the error code on the printed report. ▸▸Quick Setup Guide: *Troubleshooting*
I have checked and tried all the above, however I'm still having problems. Is there anything else I can do?	wireless	See the instructions supplied with your WLAN access point/router to find the SSID and the Network Key information and set them correctly. For details of the SSID and the Network Key, see *Are your security settings (SSID/Network Key) correct?* ▸▸ page 30.

5

A

Appendix A

Supported protocols and security features

Interface	Wireless	IEEE 802.11b/g/n (Infrastructure mode)
		IEEE 802.11b (Ad-hoc mode)
Network (common)	Protocol (IPv4)	ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), WINS/NetBIOS name resolution, DNS Resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, FTP Server, TFTP server, SNMPv1/v2c, ICMP, Web Services (Print/Scan)
Network (Security)	Wireless	SSID (32 chr), WEP 64/128 bit, WPA-PSK (TKIP/AES), WPA2-PSK (AES)

B Index