

Multi-Protocol On-board Ethernet Multi-function Print Server and Wireless (IEEE 802.11b/g) Ethernet Multi-function Print Server

# NETWORK USER'S GUIDE

Please read this manual thoroughly before using this machine on your network. You can print or view this manual from the CD-ROM at any time, please keep the CD-ROM in a convenient place for quick and easy reference at all times.

The Brother Solutions Center (<u>http://solutions.brother.com</u>) is your one stop resource for all your printing needs. Download the latest drivers and utilities for your machine, read FAQs and troubleshooting tips or learn about special printing solutions.

## Definitions of warnings, cautions, and notes

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



Notes tell you how you should respond to a situation that may arise or give tips about how the operation works with other features.

## Trademarks

Brother and the Brother logo are registered trademarks and BRAdmin Professional is a trademark of Brother Industries, Ltd.

UNIX is a registered trademark of The Open Group.

Linux<sup>®</sup> is the registered trademark of Linus Torvalds in the U.S. and other countries.

Apple and Macintosh are trademarks of Apple Inc., registered in the United States and other countries.

Windows Vista is either a registered trademark or a trademark of Microsoft Corporation in the United States and other countries.

Microsoft, Windows and Windows Server are registered trademarks of Microsoft Corporation in the United States and/or other countries.

BROADCOM, SecureEasySetup and the SecureEasySetup logo are trademarks or registered trademarks of Broadcom Corporation in the United States and/or other countries.

AOSS is a trademark of Buffalo Inc.

Wi-Fi, WPA, WPA2, Wi-Fi Protected Access and Wi-Fi Protected Setup are either trademarks or registered trademarks of Wi-Fi Alliance in the United States and/or other countries.

All other trademarks are the property of their respective owners.

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

## **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.

©2009 Brother Industries, Ltd.

## **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<sup>®</sup> XP in this document represents Windows<sup>®</sup> XP Professional, Windows<sup>®</sup> XP Professional x64 Edition and Windows<sup>®</sup> XP Home Edition.
- Windows Server<sup>®</sup> 2003 in this document represents Windows Server<sup>®</sup> 2003 and Windows Server<sup>®</sup> 2003 x64 Edition.

## **Brother numbers**

## IMPORTANT

For technical and operational assistance, you must call the country where you purchased the machine. Calls must be made *from within* that country.

## For Customer Service

In USA	1-877-BROTHER (1-877-276-8437) 1-901-379-1215 (FAX)
In Canada	1-877-BROTHER 514-685-4898 (FAX)
In Europe	Visit <u>http://www.brother.com</u> for contact information on your local Brother office.

Service center locator (USA)

For the location of a Brother authorized service center, call 1-877-BROTHER (1-877-276-8437).

Service center locations (Canada)

For the location of a Brother authorized service center, call 1-877-BROTHER.

If you have any comments or suggestions, please write to us at:

In USA	Customer Support
	Brother International Corporation
	100 Somerset Corporate Boulevard Bridgewater NJ 08807-0911
In Canada	Brother International Corporation (Canada), Ltd.
	Marketing Dept. 1, rue Hôtel de Ville Dollard-des-Ormeaux, PQ, Canada H9B 3H6
In Europe	European Product & Service Support
	1 Tame Street Audenshaw Manchester, M34 5JE, UK

## Internet address

Brother Global Web Site: http://www.brother.com

For Frequently Asked Questions (FAQs), Product Support, Driver Updates and Utilities: <u>http://solutions.brother.com</u>

## Ordering accessories and supplies

In USA: 1-877-552-MALL (1-877-552-6255) 1-800-947-1445 (fax)

http://www.brothermall.com

In Canada: 1-877-BROTHER

http://www.brother.ca

## **Table of Contents**

## 1 Introduction

Overview	1
Network features	3
Network printing	
Network scanning	3
Network PC-FAX (Not available for DCP models)	
Network PhotoCapture Center™	3
Management utilities	4
Types of Network Connections	5
Wired network connection example	5
Wireless network connection examples	
Protocols	
TCP/IP protocols and functions	
Other Protocol	

# 2 Configuring your machine for a network with an Ethernet cable connection (Not available for MFC-253CW, MFC-255CW and MFC-257CW)

1	Λ
	υ

1

Overview		10
	nd gateways	
	~ ,	
	subnet mask	
	utility to configure your machine as a network printer	
	configure your machine for a network	
	nfigure your machine for a network	
	ngs	
	utility to change the print server settings	
	ssional 3 utility to change the wireless settings (Windows $^{ m (B)}$ )	
	o change the print server settings	
	ows Server <sup>®</sup> 2003/2008)	
Not available for DCP r	nodels, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN	)18
Using the control panel to	change the print server settings	18

3	Configuring your machine for a wireless network
	(Not available for DCP-365CN, DCP-395CN and MFC-295CN)

1	q
	~

Overview	19
Wireless network terms and concepts	20
SSID (Service Set Identifier) and channels	20
Authentication and encryption	20
Step by step chart for wireless network configuration	22
For Infrastructure mode	22
For Ad-hoc mode	
Confirm your network environment	24
Connected to a computer with an access point in the network (Infrastructure mode)	24
Connected to a wireless capable computer without an access point in the network	
(Ad-hoc mode)	24
Confirm your wireless network setup method	25
Configuration using the machine's control panel Setup Wizard to configure your	
wireless network machine	
Configuration using the SES/WPS/AOSS control panel menu (Infrastructure mode only)	
Configuration using the PIN Method of Wi-Fi Protected Setup™ (Infrastructure mode only)	26
Configuration using the Brother installer application on the CD-ROM to configure your	
wireless network machine	
Configuring your machine for a wireless network	
Using the Setup Wizard from the control panel	28
Using SES, WPS or AOSS from the control panel menu to configure your machine for a	
wireless network	
Using the PIN Method of Wi-Fi Protected Setup™	44
Using the Brother automatic installer application on the CD-ROM to configure your	
machine for a wireless network	47

## 4 Wireless configuration for Windows<sup>®</sup> using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW)

48

Configuration in Infrastructure mode	49
Before configuring the wireless settings	
Configure the wireless settings	
Configuration using SES, WPS or AOSS from the control panel menu (Automatic wireless m	
Before configuring the wireless settings	57
Configure the wireless settings	57
Configuration in Ad-hoc Mode	
Before configuring the wireless settings	62
Configure the wireless settings	62

## 5 Wireless Configuration for Macintosh using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW)

Configuration in Infrastructure mode	73
Before configuring the wireless settings	
Configure the wireless settings	74
Configuration using SES, WPS or AOSS from the control panel menu (Automatic wireless mode)	
Before configuring the wireless settings	81
Configure the wireless settings	81
Configuration in Ad-hoc Mode	
Before configuring the wireless settings	86
Configure the wireless settings	86

## 6 Control panel setup

#### 95

116

72

Network menu	95
TCP/IP	95
Setup Wizard (For wireless models)	107
SES/WPS/AOSS (For wireless models)	107
WPS w/PIN code (For wireless models)	107
WLAN Status (For wireless models)	107
Ethernet (Not available for MFC-253CW, MFC-255CW and MFC-257CW)	111
MAC Address	112
Network I/F	
(For wireless models, not available for MFC-253CW, MFC-255CW and MFC-257CW)	113
WLAN Enable (For MFC-253CW, MFC-255CW and MFC-257CW)	113
Restoring the network settings to factory default	114
Printing the Network Configuration List	115

## 7 Driver Deployment Wizard (Windows<sup>®</sup> only)

Overview	116
Connection methods	
Peer-to-Peer	116
Network Shared	
How to install the Driver Deployment Wizard software	118
Using the Driver Deployment Wizard software	119

8	Network printing from Windows <sup>®</sup> basic TCP/IP Peer-to-Peer printing	122
	Overview	
	Configuring the standard TCP/IP port	123
	Printer driver not yet installed	123
	Printer driver already installed	124
	Other sources of information	124

	How to choose the print server (TCP/IP)	125
	Changing the print server settings	
	Changing the configuration using the Remote Setup (Not available for DCP models,	
	MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN)	128
	Using the BRAdmin Light utility to change the print server settings	
	Other sources of information	128
10	Troubleshooting	129
	Overview	129
	General problems	129
	Network print software installation problems	131
	Printing problems	133
	Scanning and PC Fax problems	
	Wireless network troubleshooting	
	Wireless setup problems	
	Wireless connection problem	136
Α	Appendix A	137
	Using services	137
	Other ways to set the IP address (for advanced users and administrators)	
	Using DHCP to configure the IP address	137
	Using BOOTP to configure the IP address	
	Using RARP to configure the IP address	
	Using APIPA to configure the IP address	
	Using ARP to configure the IP address	
	Using the TELNET console to configure the IP address	
	Installation when using a Network Print Queue or Share (printer driver only)	
	Installation when using Web Services (Windows Vista <sup>®</sup> )	143
в	Appendix B	144
	Print server specifications	144
	Wired network (Not available for MFC-253CW, MFC-255CW and MFC-257CW)	
	Wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)	
	Function table and default factory settings	
	Entering Text	154
	For Touchscreen models	-
	For MFC models	
	For DCP models	156
С	Appendix C	157

This product includes SNMP software from WestHawk Ltd. .....157 

## Network printing from a Macintosh

9

D

Index

125

#### 157

160

viii

Introduction

## **Overview**

The Brother machine can be shared on a 10/100 MB wired or IEEE 802.11b/802.11g wireless Ethernet network using the internal network print server. The print server supports various functions and methods of connection depending on the operating system you are running on a network supporting TCP/IP. These functions include printing, scanning, PC-FAX send, PC-FAX receive, PhotoCapture Center<sup>™</sup>, Remote Setup and Status Monitor. The following chart shows what network features and connections are supported by each operating system.

Operating Systems	Windows <sup>®</sup> 2000 Windows <sup>®</sup> XP Windows <sup>®</sup> XP Professional x64 Edition Windows Vista <sup>®</sup>	Windows Server <sup>®</sup> 2003/2008 Windows Server <sup>®</sup> 2003 x64 Edition	Mac OS X 10.3.9 - 10.4.x - 10.5.x
10/100BASE-TX wired Ethernet (TCP/IP) <sup>1</sup>	V	~	V
IEEE 802.11b/g wireless Ethernet (TCP/IP) <sup>2</sup>	V	V	V
Printing	~	~	<ul> <li>✓</li> </ul>
BRAdmin Light	~	~	<ul> <li>✓</li> </ul>
BRAdmin Professional 3 <sup>3</sup>	~	~	
Web BRAdmin <sup>3</sup>	~	~	
Scanning	~		<ul> <li>✓</li> </ul>
PC Fax Send <sup>4 6</sup>	~		<ul> <li>✓</li> </ul>
PC Fax Receive <sup>56</sup>	~		
Remote Setup <sup>5</sup>	~		~
Status Monitor	~		<ul> <li>✓</li> </ul>
Driver Deployment Wizard	<b>v</b>	<b>v</b>	

<sup>1</sup> Not available for MFC-253CW, MFC-255CW and MFC-257CW.

<sup>2</sup> Not available for DCP-365CN, DCP-395CN and MFC-295CN.

<sup>3</sup> BRAdmin Professional 3 and Web BRAdmin are available as a download from <u>http://solutions.brother.com</u>.

<sup>4</sup> Not available for DCP models.

<sup>5</sup> Not available for DCP models, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN.

<sup>6</sup> Black and White only.

To use the Brother machine through a network, you need to configure the print server, and set up the computers you use.

#### For Wireless Users:

To achieve optimum results with normal every day document printing, place the Brother machine as close to the network access point (or 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 wired Ethernet for a faster data transfer (Not available for MFC-253CW, MFC-255CW and MFC-257CW), or USB for the fastest throughput speed.

## **Network features**

Your Brother machine has the following basic network functions.

## **Network printing**

The print server provides printing services for Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> and Windows Server<sup>®</sup> 2003/2008 supporting the TCP/IP protocols and Macintosh (Mac OS X 10.3.9 - 10.5.x) supporting TCP/IP.

## Network scanning

You can scan documents over the network to your computer. (See *Network Scanning* in the *Software User's Guide*.)

## Network PC-FAX (Not available for DCP models)

You can directly send a PC file as a PC-FAX over your network. (See Brother PC-FAX Software for Windows<sup>®</sup> and Sending a Fax for Macintosh in the Software User's Guide for a complete description.) Windows<sup>®</sup> users can also use PC-FAX receive <sup>1</sup>. (See PC-FAX receiving in the Software User's Guide.)

<sup>1</sup> PC-Fax Receive is not supported by the MFC-253CW, 255CW, 257CW and 295CN.

## Network PhotoCapture Center™

You can view, retrieve and save data from a USB flash memory drive or a media card inserted into the Brother machine. The software is automatically installed when you choose network connection during the software installation. For Windows<sup>®</sup>, choose the **PHOTOCAPTURE** tab of the **ControlCenter3**. For more information, see *ControlCenter3* in the *Software User's Guide*. For Macintosh, launch any web browser in which FTP is available and enter FTP://xxx.xxx.xxx (where xxx.xxx.xxx is the IP address of your Brother machine). For more information, see *Remote Setup & PhotoCapture Center* in the *Software User's Guide*.

## Management utilities

#### **BRAdmin Light**

BRAdmin Light is a utility for initial setup of network connected Brother devices. This utility can search for Brother products on your network, view the status and configure basic network settings, such as IP address. The BRAdmin Light utility is available for Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> and Windows Server<sup>®</sup> 2003/2008 and Mac OS X 10.3.9 - 10.5.x computers. For Macintosh users, BRAdmin Light will be installed automatically when you install the printer driver. If you have already installed the printer driver, you don't have to install it again.

For more information on BRAdmin Light, visit us at <u>http://solutions.brother.com</u>.

## BRAdmin Professional 3 (Windows<sup>®</sup>)

BRAdmin Professional 3 is a utility for more advanced management of network connected Brother devices. This utility can search for Brother products on your network and view the device status from an easy to read 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<sup>®</sup> computer on your LAN. BRAdmin Professional 3 can also log activity of brother devices on your network and export the log data inan HTML, CSV, TXT or SQL format.

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

## Web BRAdmin (Windows<sup>®</sup>)

Web BRAdmin is a utility for managing network connected Brother devices on your LAN and WAN. This utility can search for Brother products on your network, view its status and configure the network settings. Unlike BRAdmin Professional 3, which is designed for Windows<sup>®</sup> only, Web BRAdmin is a server based utility that can be accessed from any client PC with a web browser that supports JRE (Java Runtime Environment). By installing the Web BRAdmin server utility on a PC running IIS<sup>1</sup>, connect to the Web BRAdmin server, which then communicates with the device itself.

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

<sup>1</sup> Internet Information Server 4.0 or Internet Information Service 5.0/5.1/6.0/7.0

#### Remote Setup (Not available for DCP models)

The Remote Setup software allows you to configure network settings from a Windows<sup>®</sup> PC or Macintosh (Mac OS X 10.3.9 - 10.5.x) computer. (See *Remote Setup* in the *Software User's Guide*.)

## **Types of Network Connections**

## Wired network connection example

## Peer-to-Peer printing using TCP/IP

In a Peer-to-Peer environment, each computer directly sends and receives data to each device. There is no central server controlling file access or printer sharing.



1 Switch or Router

#### 2 Network printer (your machine)

- In a smaller network of 2 or 3 computers, we recommend the Peer-to-Peer printing method as it is easier to configure than the Network Shared Printing method. (See Network Shared Printing on page 6.)
- Each computer must use the TCP/IP Protocol.
- The Brother machine needs an appropriate IP address configuration.
- If you are using a router, the Gateway address must be configured on the computers and the Brother machine.

Introduction

## **Network Shared Printing**

In a Network Shared environment, each computer sends data via a centrally controlled computer. This type of computer is often called a "Server" or a "Print Server". Its job is to control the printing of all print jobs.



- 1 Client computer
- 2 Also known as "Server" or "Print Server"
- 3 TCP/IP or USB (where available)
- 4 Network printer (your machine)
- In a larger network, we recommend a Network Shared printing environment.
- The "Server" or the "Print Server" must use the TCP/IP Print Protocol.
- The Brother machine needs to have an appropriate IP address configuration unless the machine is connected via the USB interface at the server.

## Wireless network connection examples

#### Connected to a computer with an access point on the network (Infrastructure mode)

This type of network has a central access point at the heart of the network. The access point can also act as a bridge or a gateway to a wired network. When the Brother wireless machine (your machine) is part of this network, it receives all print jobs via an access point.



- 1 Access point
- 2 Wireless network printer (your machine)
- 3 Wireless capable computer communicating with the access point
- 4 Wired computer which is not wireless capable connected to the access point with the Ethernet cable

## Connected to a wireless capable computer without an access point on the network (Ad-hoc mode)

This type of network does not have a central access point. 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 printer (your machine)
- 2 Wireless capable computer

## Protocols

## **TCP/IP** protocols and functions

Protocols are the standardized sets of rules for transmitting data on a network. Protocols allow users to gain access to network connected resources.

The print server used on this Brother product supports the TCP/IP (Transmission Control Protocol/Internet Protocol) protocols.

TCP/IP is the most popular set of protocols used for communication such as Internet and E-mail. This protocol can be used in almost all operating systems such as Windows<sup>®</sup>, Windows Server<sup>®</sup>, Mac OS X and Linux<sup>®</sup>. The following TCP/IP protocols are available on this Brother product.

## DHCP/BOOTP/RARP

By using the DHCP/BOOTP/RARP protocols, the IP address can be automatically configured.

## 🖉 Note

To use the DHCP/BOOTP/RARP protocols, please contact your network administrator.

## APIPA

If you do not assign an IP address manually (using the control panel of the machine or the BRAdmin software) or automatically (using a DHCP/BOOTP/RARP server), the Automatic Private IP Addressing (APIPA) protocol will automatically assign an IP address from the range 169.254.10 to 169.254.254.255.

## ARP

Address Resolution Protocol performs mapping of an IP address to MAC address in a TCP/IP network.

## **DNS** client

The Brother print server supports the Domain Name System (DNS) client function. This function allows the print server to communicate with other devices by using its DNS name.

#### **NetBIOS name resolution**

Network Basic Input/Output System name resolution enables you to obtain the IP address of the other device using its NetBIOS name during the network connection.

#### WINS

Windows Internet Name Service is an information providing service for the NetBIOS name resolution by consolidating an IP address and a NetBIOS name that is in the local network.

## LPR/LPD

Commonly used printing protocols on a TCP/IP network.

Introduction

## Custom Raw Port (Default is Port 9100)

Another commonly used printing protocol on a TCP/IP network.

## mDNS

mDNS allows the Brother print server to automatically configure itself to work in a Mac OS X Simple Network Configured system. (Mac OS X 10.3.9 - 10.5.x)

## TELNET

The Brother print server supports TELNET server for command line configuration.

## SNMP

The Simple Network Management Protocol (SNMP) is used to manage network devices including computers, routers and Brother network ready machines.

## LLMNR

The Link-Local Multicast Name Resolution protocol (LLMNR) resolves the names of neighboring computers, if the network does not have a Domain Name System (DNS) server. The LLMNR Responder function works when using a computer that has the LLMNR Sender function such as Windows Vista<sup>®</sup>.

## Web Services

The Web Services protocol enables Windows Vista<sup>®</sup> users to install the Brother printer driver by right-clicking the machine icon from the **Network** folder. (See *Installation when using Web Services (Windows Vista*<sup>®</sup>) on page 143.) The Web Services also let you check the current status of the machine from your computer.

## **Other Protocol**

## LLTD

The Link Layer Topology Discovery protocol (LLTD) lets you locate the Brother machine easily on the Windows Vista<sup>®</sup> Network Map. Your Brother machine will be shown with a distinctive icon and the node name. The default setting for this protocol is Off.

You can activate LLTD using the BRAdmin Professional 3 utility software. Visit the download page for your model at <u>http://solutions.brother.com</u> to download BRAdmin Professional 3.

## Overview

Before using your Brother machine in a network environment, you must install the Brother software and also configure the appropriate TCP/IP network settings on the machine itself. In this chapter, you will learn the basic steps required to print over the network using TCP/IP protocol.

We recommend that you use the Brother installer on the Brother CD-ROM to install the Brother software as this will guide you through the software and network installation. Please follow the instructions in the supplied *Quick Setup Guide*.



If you do not wish to, or are unable to use the automatic installer or any of Brother's software tools, you can also use the machine's control panel to change network settings. For more information, see *Control panel setup* on page 95.

## IP addresses, subnet masks and gateways

To use the machine in a networked TCP/IP environment, you need to configure its IP address and subnet mask. The IP address you assign to the print server must be on the same logical network as your host computers. If it is not, you must properly configure the subnet mask and the gateway address.

## **IP address**

An IP address is a series of numbers that identifies each device connected to a network. An IP address consists of four numbers separated by dots. Each number is between 0 and 255.

Example: In a small network, you would normally change the final number.

- 192.168.1.<u>1</u>
- 192.168.1.2
- 192.168.1.<u>3</u>

#### How the IP address is assigned to your print server:

If you have a DHCP/BOOTP/RARP server in your network (typically a UNIX<sup>®</sup>/Linux<sup>®</sup>, Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> or Windows Server<sup>®</sup> 2003/2008 network) the print server will automatically obtain its IP address from that server.



On smaller networks, the DHCP server may be the Router.

For more information on DHCP, BOOTP and RARP, see Using DHCP to configure the IP address on page 137, Using BOOTP to configure the IP address on page 138 and Using RARP to configure the IP address on page 139.

If you do not have a DHCP/BOOTP/RARP server, the Automatic Private IP Addressing (APIPA) protocol will automatically assign an IP address from the range 169.254.1.0 to 169.254.254.255. For more information on APIPA, see *Using APIPA to configure the IP address* on page 139.

## Subnet mask

Subnet masks restrict network communication.

- Example: Computer1 can talk to Computer2
  - Computer1

**IP Address**: 192.168.1.2

Subnet Mask: 255.255.255.0

Computer2

IP Address: 192.168.1.3

Subnet Mask: 255.255.255.0



0 denotes that there is no limit to communication at this part of the address.

In the above example, we can communicate with any device that has an IP address that begins with 192.168.1.X.

## Gateway (and router)

A gateway is a network point that acts as an entrance to another network and sends data transmitted via the network to an exact destination. The router knows where to direct data that arrives at the gateway. If a destination is located at an external network, the router transmits data to the external network. If your network communicates with other networks, you may need to configure the Gateway IP address. If you do not know the Gateway IP address then contact your Network Administrator.

## Step by step chart

## 1 Configure the TCP/IP settings.

- Configure the IP address → See page 13
- Configure the subnet mask → See page 13
- Configure the gateway

#### 2 Change the print server settings.

- Using the BRAdmin Light utility → See page 16
- Using the BRAdmin Professional 3 utility
- Using the control panel
- Using the Remote Setup
- Using other methods

→ See page 13

**→** 

**→** 

**→** 

**→** 

See page 17

See page 95

See page 18

See page 137

## Setting up the IP address and subnet mask

## Using the BRAdmin Light utility to configure your machine as a network printer

#### **BRAdmin Light**

The BRAdmin Light utility is designed for initial setup of the Brother network connected devices. It also can search for Brother products in a TCP/IP environment, view the status and configure basic network settings, such as IP address. The BRAdmin Light utility is available for Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup>, Windows Server<sup>®</sup> 2003/2008 and Mac OS X 10.3.9 - 10.5.x.

#### How to configure your machine using the BRAdmin Light utility

## 🖉 Note

- Please use the BRAdmin Light utility version that was supplied on the CD-ROM of your Brother product. You can also download the latest Brother BRAdmin Light utility version from <a href="http://solutions.brother.com">http://solutions.brother.com</a>.
- If you require more advanced printer management, use the latest Brother BRAdmin Professional 3 utility that is available as a download from <a href="http://solutions.brother.com">http://solutions.brother.com</a>. This utility is only available for Windows<sup>®</sup> 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 them.
- Node Name: Node Name appears in current BRAdmin Light window. The default Node Name of the print server in the machine is "BRNxxxxxxxxxx". ("xxxxxxxxxx" is your machine's MAC Address / Ethernet Address.)
- By default, no password is required. To set a password for, double-click the device you want to set a password. Click **Control** tab, and then click **Change Password**. Enter the new password.

Start the BRAdmin Light utility.

■ Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> and Windows Server<sup>®</sup> 2003/2008

Click Start / All Programs <sup>1</sup> / Brother / BRAdmin Light / BRAdmin Light.

<sup>1</sup> **Programs** for Windows<sup>®</sup> 2000 users

Mac OS X 10.3.9 - 10.5.x

Double-click Macintosh HD (Startup Disk) / Library / Printers / Brother / Utilities / BRAdmin Light.jar file.

2 BRAdmin Light will search for new devices automatically.



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) from the machine's control panel. See Node Name on page 100 and MAC Address on page 112.



nfigure	тср	/IP Address						×
letwork								
		Boot Method     AUTO     STATIC     DHCP     RARP     BOOTP						
	IP Ad	dress et Mask			168.0.5	0		
	<u>G</u> atev	way		192.1	68.0.1			
			ОК		Cano	el	Help	

#### Macintosh

🗅 🔿 🛛 Conf	figure TCP/IP Address
Boot Method	
Ο Αυτο	
STATIC	
O DHCP	
RARP	
BOOTP	
IP Address	192.168.1.10
Subnet Mask	252.255.255.0
Gateway	0.0.0.0
	OK Cancel

5 Click OK.

6) With the correctly programmed IP address, you will see the Brother print server in the device list.

## Using the control panel to configure your machine for a network

0

You can configure your machine for a network using the control panel Network menu. (See Control panel setup on page 95.)

## Using other methods to configure your machine for a network

You can configure your machine for a network using other methods. (See Other ways to set the IP address (for advanced users and administrators) on page 137.)

## Changing the print server settings

## 🖉 Note

For wireless network users, you need to configure the wireless settings to change the print server settings. (See *Configuring your machine for a wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)* on page 19.)

## Using the BRAdmin Light utility to change the print server settings

Start the BRAdmin Light utility.

■ Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> and Windows Server<sup>®</sup> 2003/2008

Click Start / All Programs <sup>1</sup> / Brother / BRAdmin Light / BRAdmin Light.

- <sup>1</sup> **Programs** for Windows<sup>®</sup> 2000 users
- Mac OS X 10.3.9 10.5.x

Double-click Macintosh HD (Startup Disk) / Library / Printers / Brother / Utilities / BRAdmin Light.jar file.

Choose the print server which you want to change the settings.

3 Choose **Network Configuration** from the **Control** menu.

- 4 Enter a password if you have set one.
- 5 You can now change the print server settings.

## 🖉 Note

If you want to change more advanced settings, use the BRAdmin Professional 3 utility that is available as a download from <u>http://solutions.brother.com</u>. For Windows<sup>®</sup> only.

# Using the BRAdmin Professional 3 utility to change the wireless settings (Windows $^{\ensuremath{\mathbb{B}}}$ )

## 🖉 Note

- Please use the latest version of the BRAdmin Professional 3 utility that is available as a download from <a href="http://solutions.brother.com">http://solutions.brother.com</a>. This utility is only available for Windows<sup>®</sup> users.
- If you are using a firewall function of anti-spyware or antivirus applications, disable all personal firewall software (other than Windows<sup>®</sup> Firewall), anti-spyware or antivirus applications for the duration of the configuration. Once you are sure that you can print, configure the software settings following the instructions again.
- Node name: The node name appears in the current BRAdmin Professional 3 window. The default Node name is "BRNxxxxxxxxxx" or "BRWxxxxxxxxx". ("xxxxxxxxxx" is your MAC Address / Ethernet Address.)
- Start the BRAdmin Professional 3 utility (from Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> and Windows Server<sup>®</sup> 2003/2008), by clicking Start / All Programs<sup>1</sup> / Brother Administrator Utilities / Brother BRAdmin Professional 3 / BRAdmin Professional3.

<u>File E</u> dit ⊻iew <u>⊂</u> ontrol <u>T</u> ools <u>H</u> elp						
<b>BRAdmin Professional</b>			Solutio	r ons Center	brot	he
8 🖇 😫 🛯 🍅 🤗 🛯 💀 🖳						
Status : All Devices	Filter :	All Devices	✓ #	Column :	Default	
Node Name Model Name		Device Status	IP Address	Log	Location	1
		Ready	XXX. XXX. XX	CX.XXX		
BRNXXXXXXX Brother MFC- XXXX		кеаду	****	X.XXX		
		Ready	***	X. XXX		

- <sup>1</sup> **Programs** for Windows<sup>®</sup> 2000 users
- 2 Choose the print server/machine which you want to configure.
- 3 Choose Configure Device from the Control menu.
- Enter a password if you have set one.

## 🖉 Note

By default, no password is required. To set a password for, double-click the device you want to set a password. Click **Control** tab, and then click **Change Password**. Enter the new password.

5 You can now change the wireless settings.

## 🖉 Note

- If the print server is set to its factory default settings without using a DHCP/BOOTP/RARP server, the device will appear as APIPA in the BRAdmin Professional 3 utility screen.
- You can find the Node Name and MAC Address (Ethernet Address) from the machine's control panel. See *Node Name* on page 100 and *MAC Address* on page 112.

# Using the Remote Setup to change the print server settings (Not available for Windows Server<sup>®</sup> 2003/2008) (Not available for DCP models, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN)

## Remote Setup for Windows<sup>®</sup>

The Remote Setup application allows you to configure network settings from a Windows<sup>®</sup> application. When you access this application, the settings on your machine will be downloaded automatically to your PC and displayed on your PC screen. If you change the settings, you can upload them directly to the machine.

- 1 Click the **Start** button, **All Programs**<sup>1</sup>, **Brother**, **MFC-XXXX LAN**, then **Remote Setup** (where XXXX is your model name).
  - <sup>1</sup> **Programs** for Windows<sup>®</sup> 2000 users
- 2 Enter a password if you have set one.
- 3 Click TCP/IP (Wired) or Setup Misc.
- 4 You can now change the print server settings.

#### **Remote Setup for Macintosh**

The Remote Setup application allows you to configure many MFC settings from a Macintosh application. When you access this application, the settings on your machine will be downloaded automatically to your Macintosh and displayed on your Macintosh screen. If you change the settings, you can upload them directly to the machine.

- 1 Double-click the Macintosh HD icon on your desktop, Library, Printers, Brother, then Utilities.
- 2 Double-click the **Remote Setup** icon.
- 3 Enter a password if you have set one.
- 4 Click TCP/IP (Wired) or Setup Misc.
- 5 You can now change the print server settings.

## Using the control panel to change the print server settings

You can configure and change the print server settings using the control panel Network menu. (See Control panel setup on page 95.)

2

# 3

# Configuring your machine for a wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)

## Overview

To connect your machine to your wireless network, you need to follow the steps in the *Quick Setup Guide*. We recommend that you use the Setup Wizard from the machine's control panel Network menu. By using this method, you can easily connect your machine to your wireless network. Please follow the instructions in the supplied *Quick Setup Guide*.

Please read this chapter for more details on how to configure the wireless network settings. For information on TCP/IP settings, see *Setting up the IP address and subnet mask* on page 13. Then, in *Network printing from Windows<sup>®</sup> basic TCP/IP Peer-to-Peer printing* on page 122 and *Network printing from a Macintosh* on page 125, you will learn how to install the network software and drivers into the operating system running on your computer.

## 🖉 Note

• To achieve optimum results with normal every day document printing, place the Brother machine as close to the network access point (or 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 wired Ethernet for a faster data transfer (Not available for MFC-253CW, MFC-255CW and MFC-257CW), or USB for the fastest throughput speed.

• Although the Brother machine can be used in both a wired and wireless network, only one connection method can be used at a time.

## Wireless network terms and concepts

If you want to use your machine in a wireless network you **must** configure the machine to match the settings of the existing wireless network. This section provides some of the main terms and concepts of these settings, which may be helpful when you configure your machine for a wireless network.

## SSID (Service Set Identifier) and channels

You need to configure the SSID and a channel to specify the wireless network you want to connect to.

SSID

Each wireless network has its own unique network name and it is technically referred to as SSID or ESSID (Extended Service Set Identifier). 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 a beacon) which has the SSID information. When your wireless network device receives a beacon, you can identify the wireless network that is close enough for the radio waves to reach your device.

Channels

Wireless networks use channels. Each wireless channel is on a different frequency. There are up to 14 different channels that can be used when using a wireless network. However, in many countries the number of channels available are restricted. For further information, see *Wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)* on page 145.

## Authentication and encryption

Most wireless networks use some kind of security settings. These security settings define the authentication (how the device identifies itself to the network) and encryption (how the data is encrypted as it is sent on the network). If you do not correctly specify these options when you are configuring your Brother wireless device, it will not be able to connect to the wireless network. Therefore care must be taken when configuring these options. Please refer to the information below to see which authentication and encryption methods your Brother wireless device supports.

#### Authentication methods

The Brother machine supports the following methods:

Open System

Wireless devices are allowed to access the network without any authentication.

Shared Key

A secret pre-determined key is shared by all devices that will access the wireless network. The Brother wireless machine uses the WEP keys as the pre-determined key.

WPA-PSK/WPA2-PSK

Enables a Wi-Fi Protected Access<sup>™</sup> 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).

## **Encryption methods**

Encryption is used to secure the data that is sent over the wireless network. The Brother wireless machine supports the following encryption methods:

None

No encryption method is used.

WEP

By using WEP (Wired Equivalent Privacy), the data is transmitted and received with a secure key.

TKIP

TKIP (Temporal Key Integrity Protocol) provides per-packet key mixing a message integrity check and re-keying mechanism.

AES

AES (Advanced Encryption Standard) is the Wi-Fi<sup>®</sup> authorized strong encryption standard.

#### **Network Key**

There are some rules for each security method:

Open System/Shared Key with WEP

This key is a 64-bit or 128-bit value that must be entered in an ASCII or hexadecimal format.

• 64 (40) bit ASCII:

Uses 5 text characters e.g. "WSLAN" (this is case sensitive).

• 64 (40) bit hexadecimal:

Uses 10 digits of hexadecimal data e.g. "71f2234aba".

• 128 (104) bit ASCII:

Uses 13 text characters e.g. "Wirelesscomms" (this is case sensitive).

• 128 (104) bit hexadecimal:

Uses 26 digits of hexadecimal data e.g. "71f2234ab56cd709e5412aa2ba".

WPA-PSK/WPA2-PSK and TKIP or AES

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

## Step by step chart for wireless network configuration

## For Infrastructure mode

OK!



Wireless configuration and installing drivers and software have been completed.



Wireless configuration and installing drivers and software have been completed.

OK!

3

## **Confirm your network environment**

# Connected to a computer with an access point in the network (Infrastructure mode)



- 1 Access point
- 2 Wireless network printer (your machine)
- 3 Wireless capable computer connected to the access point
- 4 Wired computer which is not wireless capable connected to the access point with an Ethernet cable

## Connected to a wireless capable computer without an access point in the network (Ad-hoc mode)

This type of network does not have a central access point. 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 printer (your machine)
- 2 Wireless capable computer

## 🖉 Note

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

## Confirm your wireless network setup method

There are four methods to configure your machine for a wireless network; by using the machine's control panel (recommended), using SES, WPS or AOSS from the control panel menu, using the PIN Method of Wi-Fi Protected Setup<sup>™</sup> or using the Brother installer application. The setup process will be different depending on your network environment.

# Configuration using the machine's control panel Setup Wizard to configure your wireless network machine

We recommend that you use the machine's control panel to configure your wireless network settings. By using the control panel 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. (See Using the Setup Wizard from the control panel on page 28.)

# Configuration using the SES/WPS/AOSS control panel menu (Infrastructure mode only)

If your wireless access point (A) supports either SecureEasySetup<sup>™</sup>, Wi-Fi Protected Setup<sup>™</sup> (PBC<sup>1</sup>) or AOSS<sup>™</sup>, you can configure the machine without a computer. (See *Using SES, WPS or AOSS from the control panel menu to configure your machine for a wireless network* on page 39.)



<sup>1</sup> Push Button Configuration

# Configuration using the PIN Method of Wi-Fi Protected Setup™ (Infrastructure mode only)

If your wireless access point (A) supports Wi-Fi Protected Setup<sup>™</sup>, you can also configure using the PIN Method of Wi-Fi Protected Setup<sup>™</sup>. (See Using the PIN Method of Wi-Fi Protected Setup<sup>™</sup> on page 44.)

Connection when the wireless access point (router) (A) doubles as a Registrar <sup>1</sup>.



Connection when another device (C), such as a computer is used as a Registrar <sup>1</sup>.



The Registrar is a device that manages the wireless LAN.

1

# Configuration using the Brother installer application on the CD-ROM to configure your wireless network machine

You can also use the Brother installer application on the CD-ROM we have provided with the machine. You will be guided by the on-screen instructions until you are able to use your Brother wireless network machine. You must know your wireless network settings before you proceed with this installation.

(See Wireless configuration for Windows<sup>®</sup> using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW) on page 48 or Wireless Configuration for Macintosh using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW) on page 72.)

#### Configuration temporarily using a network cable

If there is an Ethernet Hub or Router in the same network as the wireless access point (A) of your machine, you can temporarily connect the Hub or Router to the Brother machine using an Ethernet cable (B) (not provided), this is an easy way to configure your machine. You can then remotely configure the machine from a computer on the network.


## Configuring your machine for a wireless network

## 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 network LAN settings before you can configure the wireless settings again.

#### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu,  $\blacktriangle$  or  $\forall$  to choose Network, press OK. Press  $\blacktriangle$  or  $\forall$  to choose Network Reset, press OK. Press 1 or  $\blacktriangle$  to reset and then press 1 or  $\blacktriangle$  to accept the change. The machine will restart automatically.

#### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or ▼ to choose Network, press OK. Press ▲ or ▼ to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

#### (For MFC-795CW)

Press MENU, ▲ or ▼ to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically. Go to page 34.

#### Using the Setup Wizard from the control panel

You can configure your print server by using the Setup Wizard function. This is located in the Network menu on the machine's control panel. See to the steps below for further information.

#### Configuring your machine for an existing wireless network

Before configuring your machine we recommend you write down the SSID and Password (if required) for your wireless network. You will need this information before you continue with the configuration. If your wireless access point/router is set to not broadcast the SSID Name, see *Configuring your machine when the SSID is not broadcast* on page 31.

Item	Record the current wireless network settings	
Network name: (SSID/ESSID)		
Password		

#### 🖉 Note

Your Brother machine supports the use of the first WEP KEY only. If you are using a router that is using more than one WEP KEY enter the KEY used for the first WEP KEY.



Press ▲ or ▼ to choose Network. Press OK.

- For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW Press ▲ or ▼ to choose WLAN. Press OK.
- 5 Press ▲ or ▼ to choose Setup Wizard. Press OK.

 (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW) When Change to WLAN? or WLAN Enable? is displayed, press ▲ or 1 to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit. (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW) When Network I/F switched to Wireless is displayed, press OK to accept. This will start the wireless setup wizard. To cancel, press Clear/Pack

To cancel, press Clear/Back.

The machine will search for your network and display a list of available SSIDs. You should see the SSID you wrote down earlier. If the machine finds more than one network (SSID) use ▲ or ▼ key to choose your network, then press OK.

If a list of SSIDs is not displayed, make sure your access point is on. Move your machine closer to the access point and try starting from step **1** again.

If your access point is set to not broadcast the SSID, you will have to manually add the SSID name. See *Configuring your machine when the SSID is not broadcast* on page 31.

8 Enter the password and press **OK**. (For information how to enter text, see *Entering Text* on page 154.)

🖉 Note

If your Authentication method is Open system and your Encryption mode is None, skip step (3) and (9). Go to step (1).

To apply the settings, choose Yes. To cancel, choose No.
 If you chose Yes, go to step ().
 If you chose No, go back to step ().

10 The machine starts to connect to the wireless device you have chosen.

1 If your wireless device is connected successfully, the display shows Connected for 60 seconds and configuration is completed.

If the connection failed, the display shows Wrong Password or Connection Fail for 60 seconds.

#### 🖉 Note

- If the LCD displays Wrong Password, the password you entered did not match with your access point. Verify your network settings collected in step 1 on page 28, then repeat step 2 to step 3 to make sure you have entered the correct information.
- If the LCD displays Connection Fail, make sure your access point is on, and verify your network settings collected in step 1 on page 28.

Temporarily move your machine as close as possible to the access point, repeat step 2 to step 9 to make sure you have entered the correct information.

(See Wireless network troubleshooting on page 136.)

#### 🖉 Note

It may take a few minutes to connect to your wireless network.

2 Press OK.

#### ok! (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

#### Configuring your machine when the SSID is not broadcast

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.

#### Network name:(SSID, ESSID)

Communication Mode	Authentication method	Encryption mode	Network key
Infrastructure	Open system	WEP	
		NONE	—
	Shared key	WEP	
	WPA/WPA2-PSK	AES	
		TKIP <sup>1</sup>	
Ad-hoc	Open system	WEP	
		NONE	—

<sup>1</sup> TKIP is supported for WPA-PSK only.

For example:

Network name:(SSID, ESSID)	
HELLO	

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

### 🖉 Note

Your Brother machine supports the use of the first WEP KEY only. If you are using a router that is using more than one WEP KEY enter the KEY used for the first WEP KEY.

#### 2 Press Menu.

- 3 Press ▲ or ▼ to choose Network. Press OK.
- For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

Press ▲ or ▼ to choose WLAN. Press OK.

5 Press ▲ or ▼ to choose Setup Wizard. Press OK.

6 (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW) When Change to WLAN? or WLAN Enable? is displayed, press ▲ or 1 accept. This will start the wireless setup wizard. To cancel, press Stop/Exit. (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW) When Network I/F switched to Wireless is displayed, press OK to accept. This will start the wireless setup wizard. To cancel, press Clear/Back. 7 The machine will search for your network and display a list of available SSIDs. Choose <New SSID> using ▲ or ▼. Press OK. 8 Enter the SSID name. (For information how to enter text, see *Entering Text* on page 154.) Press OK. 9 Using ▲ or V, choose Ad-hoc or Infrastructure when instructed. Press OK. Do one of the following: If you chose Ad-hoc, go to step (). If you chose Infrastructure, go to step (). 10 Choose the Authentication method using  $\blacktriangle$  or  $\mathbf{V}$ , and press **OK**. Do one of the following: If you chose Open System, go to step (). If you chose Shared Key, go to step (2). If you chose WPA/WPA2-PSK, go to step (3). 11 Choose the Encryption type None or WEP using  $\blacktriangle$  or  $\forall$ , and press OK. Do one of the following: If you chose None, go to step (5). If you chose WEP, go to step (2). 12 Enter the WEP key you wrote down in step 1 on page 31. Press OK. Go to step 1. (For information how to enter text, see *Entering Text* on page 154.) 13 Choose the Encryption type, TKIP or AES using  $\blacktriangle$  or  $\forall$ . Press OK. Go to step (). 14 Enter the WPA key you wrote down in step 1 on page 31 and press OK. Go to step 1. (For information how to enter text, see *Entering Text* on page 154.) **15** To apply the settings, choose Yes. To cancel, choose No. Do one of the following: If you chose Yes, go to step (6. If you chose No, go back to step **(**). 16 The machine starts to connect to the wireless device you have chosen.

17 If your wireless device is connected successfully, the display shows Connected for 60 seconds and configuration is completed.

If the connection failed, the display shows Connection Fail or Wrong Password for 60 seconds.

#### 🖉 Note

- If the LCD displays Wrong Password, the password you entered did not match with your access point. Verify your network settings collected in step () on page 31, then repeat step () to step () to make sure you have entered the correct information.
- If the LCD displays Connection Fail, make sure your access point is on, and verify your network settings collected in step ) on page 31.

Temporarily move your machine as close as possible to the access point, repeat step 2 to step 1 to make sure you have entered the correct information.

(See Wireless network troubleshooting on page 136.)

18 Press OK.

### OK!

#### (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

#### For Touchscreen models

#### Configuring your machine for an existing wireless network

Before configuring your machine we recommend you write down the SSID and Password (if required) for your wireless network. You will need this information before you continue with the configuration. If your wireless access point/router is set to not broadcast the SSID Name, see *Configuring your machine when the SSID is not broadcast* on page 36.

Item	Record the current wireless network settings
Network name: (SSID/ESSID)	
Password	

#### 🖉 Note

Your Brother machine supports the use of the first WEP KEY only. If you are using a router that is using more than one WEP KEY enter the KEY used for the first WEP KEY.

- 2 Press MENU.
- **3 Press** Network.
- 4 Press WLAN.
- 5 Press Setup Wizard.

6 When Switch Network interface to wireless? is displayed, press Yes to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit.

7 The machine will search for your network and display a list of available SSIDs. You should see the SSID you wrote down earlier. If the machine finds more than one network use ▲ or ▼ key to choose your network.

If your access point is set to not broadcast the SSID, you will have to manually add the SSID name. See *Configuring your machine when the SSID is not broadcast* on page 36.

8 Enter the password and press OK. (For information how to enter text, see Entering Text on page 154.)

#### 🖉 Note

If your Authentication method is Open system and your Encryption mode is None, skip steps (3) and (9). Go to step (1).

- To apply the settings, press Yes. To cancel, press No.
   If you chose Yes, go to step ①.
   If you chose No, go back to step ⑦.
- 10 The machine starts to connect to the wireless device you have chosen.
- If your wireless device is connected successfully, the display shows Connected for 60 seconds and configuration is completed.
  If the connection failed, the display shows Connect ion, Each or Wrang, Decemend for 60 seconds.

If the connection failed, the display shows Connection Fail or Wrong Password for 60 seconds.

## 🖉 Note

- If the LCD displays Wrong Password, the password you entered did not match with your access point. Verify your network settings collected in step 1 on page 34, then repeat step 3 to step 3 to make sure you have entered the correct information.
- If the LCD displays Connection Fail, make sure your access point is on, and verify your network settings collected in step 1 on page 34. Temporarily move your machine as close as possible to the access point, repeat step 5 to step 9 to make sure you have entered the correct information.

(See Wireless network troubleshooting on page 136.)

🖉 Note

It may take few minutes to connect to your wireless network.





#### (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

#### Configuring your machine when the SSID is not broadcast

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.

#### Network name:(SSID, ESSID)

	-	

Communication Mode	Authentication method	Encryption mode	Network key
Infrastructure	Open system	WEP	
		NONE	—
	Shared key	WEP	
	WPA/WPA2-PSK	AES	
		TKIP <sup>1</sup>	
Ad-hoc	Open system	WEP	
		NONE	—

<sup>1</sup> TKIP is supported for WPA-PSK only.

For example:

Network name:(SSID, ESSID)	
HELLO	

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

#### 🖉 Note

Your Brother machine supports the use of the first WEP KEY only. If you are using a router that is using more than one WEP KEY enter the KEY used for the first WEP KEY.



**3 Press** Network.



5 Press Setup Wizard.

6 When Switch Network interface to wireless? is displayed, press Yes to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit.

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

- 8 Enter the SSID name. (For information how to enter text, see *Entering Text* on page 154.) Press OK.
- 9 Press Ad-hoc or Infrastructure when instructed. Do one of the following: If you chose Ad-hoc, go to step ①. If you chose Infrastructure, go to step ①.
- Choose and press the Authentication method. Do one of the following: If you chose Open System, go to step (). If you chose Shared Key, go to step (). If you chose WPA/WPA2-PSK, go to step ().
- Choose and press the Encryption type None or WEP. Do one of the following: If you chose None, go to step (). If you chose WEP, go to step ().
- (12) Enter the WEP key you wrote down in step on page 36. Press OK. Go to step ●. (For information how to enter text, see *Entering Text* on page 154.)
- Choose and press the Encryption type, TKIP or AES. Go to step ().

14 Enter the WPA key you wrote down in step 1 on page 36 and press OK. Go to step 1. (For information how to enter text, see Entering Text on page 154.)

- To apply the settings, press Yes. To cancel, press No. Do one of the following:
   If you chose Yes, go to step ().
   If you chose No, go back to step ().
- 16 The machine starts to connect to the wireless device you have chosen.
- If your wireless device is connected successfully, the display shows Connected for 60 seconds and configuration is completed.
   If the connection failed, the display shows Connection Fail or Wrong Password for 60 seconds.

#### Note

- If the LCD displays Wrong Password, the password you entered did not match with your access point.
  - Verify your network settings collected in step () on page 36, then repeat step () to step () to make sure you have entered the correct information.
- If the LCD displays Connection Fail, make sure your access point is on, and verify your network settings collected in step 1 on page 36.

Temporarily move your machine as close as possible to the access point, repeat step (5) to step (6) to make sure you have entered the correct information.

(See Wireless network troubleshooting on page 136.)



## OK! (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

## Using SES, WPS or AOSS from the control panel menu to configure your machine for a wireless network

If your wireless access point supports either SecureEasySetup<sup>™</sup>, Wi-Fi Protected Setup<sup>™</sup> (PBC <sup>1</sup>) or AOSS<sup>™</sup> (one-push method), you can configure the machine easily without a computer. Your Brother machine has the SES/WPS/AOSS menu available from the control panel. This feature automatically detects which mode your access point uses, SecureEasySetup<sup>™</sup>, Wi-Fi Protected Setup<sup>™</sup> or AOSS<sup>™</sup>. By pushing a button on the wireless access point/router, you can setup the wireless network and security settings. See the user's guide for your wireless access point/router for instructions on how to access one-push mode.

<sup>1</sup> Push Button Configuration

#### 🖉 Note

Routers or access points that support SecureEasySetup<sup>™</sup>, Wi-Fi Protected Setup<sup>™</sup> or AOSS<sup>™</sup> have the appropriate symbols shown below.







Press Menu.



3 For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

Press ▲ or ▼ to choose WLAN. Press **OK**.

4 Press ▲ or ▼ to choose SES/WPS/AOSS.

#### Press OK.

This feature will automatically detect which mode (SecureEasySetup<sup>™</sup>, Wi-Fi Protected Setup<sup>™</sup> or AOSS<sup>™</sup>) your access point uses to configure your machine.

#### 🖉 Note

If your wireless access point supports Wi-Fi Protected Setup<sup>™</sup> (PIN Method) and you want to configure your machine using the PIN (Personal Identification Number) Method, see *Using the PIN Method of Wi-Fi Protected Setup*<sup>™</sup> on page 44.

(For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW) When Change to WLAN? or WLAN Enable? is displayed, press ▲ or 1 to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit. (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW) When Network I/F switched to Wireless is displayed, press OK to accept. This will start the wireless setup wizard. To cancel, press Clear/Back.

- 6 The machine searches for an access point that supports SecureEasySetup™, Wi-Fi Protected Setup™ or AOSS™ for 2 minutes.
- Put your access point in the SecureEasySetup<sup>™</sup> mode, Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode, depending on what is supported by your access point. Please refer to the instruction manual that came with your access point.
- 8 If the LCD shows Connected, the machine has successfully connected to your router or access point. You can now use your machine in a wireless network. If the LCD shows Connection Error, a session overlap has been detected. The machine has detected more than one access point/router on your network with the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode or AOSS™ mode enabled. Make sure that only one access point/router has the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode, the Wi-Fi Protected Setup™ mode, the Wi-Fi Protected Setup™ mode or the AOSS™ mode enabled. Make sure that only one access point/router has the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode or the AOSS™ mode enabled and try starting from ④ again. If the LCD shows No Access Point, the machine has not detected your access point/router on your network with the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode or AOSS™ mode enabled. Move the machine closer to your access point/router and try starting from ④ again. If the LCD shows Connection Fail, the machine has not successfully connected to your access

point/router. Try starting from **(4)** again. If the same message is indicated again, reset the machine back to the default factory settings and try again. (For resetting, see *Restoring the network settings to factory default* on page 114.)

LCD shows	Connection status	Action
Setting WLAN	Searching or accessing the access point, and downloading settings from the access point.	—
Connecting SES		
Connecting WPS	Connecting to the access point.	—
Connecting AOSS		
Connected	Connection succeeded.	—
Connection Error	Session overlap has been detected.	Check that only one router or access point has the SecureEasySetup <sup>™</sup> mode, the Wi-Fi Protected Setup <sup>™</sup> mode or AOSS <sup>™</sup> mode enabled and try starting from step ④ again.
No Access Point	The access point detection failed.	Move the machine closer to your access point/router and try starting from step 4 again.
Connection Fail	The machine was not able to connect with the access point.	<ul> <li>Try starting from step  again.</li> <li>If the same message reappears, reset the machine back to the factory settings and try again.</li> </ul>

LCD messages when using the	e SES/WPS/AOSS contr	ol panel menu
-----------------------------	----------------------	---------------

#### 🖉 Note

- If you encounter a problem during setup, temporarily place your machine closer to the wireless access point, and go back to step **()**.
- You can also manually configure the wireless settings following the steps starting at step () on page 28.





#### (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

For Touchscreen models
1 Press MENU.
2 Press Network.
3 Press WLAN.
Press SES/WPS/AOSS. This feature will automatically detect which mode (SecureEasySetup™, Wi-Fi Protected Setup™ or AOSS™) your access point uses to configure your machine.
Note If your wireless access point supports Wi-Fi Protected Setup™ (PIN Method) and you want to configure your machine using the PIN (Personal Identification Number) Method, see Using the PIN Method of Wi-Fi Protected Setup™ on page 44.
When Switch Network interface to wireless? is displayed, press Yes to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit.
6 The machine searches for an access point that supports SecureEasySetup™, Wi-Fi Protected Setup™ or AOSS™ for 2 minutes.
Put your access point in the SecureEasySetup <sup>™</sup> mode, Wi-Fi Protected Setup <sup>™</sup> mode or AOSS <sup>™</sup> mode, depending on what is supported by your access point. Please refer to the instruction manual that came with your access point.
<ul> <li>8 If the LCD shows Connected, the machine has successfully connected to your router or access point. You can now use your machine in a wireless network.</li> <li>If the LCD shows Connection Error, a session overlap has been detected. The machine has detected more than one access point/router on your network with the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode or AOSS™ mode enabled. Make sure that only one access point/router has the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode, the Wi-Fi Protected Setup™ mode or the AOSS™ mode enabled and try starting from @ again.</li> <li>If the LCD shows No Access Point, the machine has not detected your access point/router on your network with the SecureEasySetup™ mode, the Wi-Fi Protected Setup™ mode or AOSS™ mode enabled. Move the machine closer to your access point/router and try starting from @ again.</li> <li>If the LCD shows Connection Fail, the machine has not successfully connected to your access point/router. Try starting from @ again. If the same message is indicated again, reset the machine back to the default factory settings and try again. (For resetting, see <i>Restoring the network settings to factory default</i> on page 114.)</li> </ul>

LCD shows	Connection status	Action
Setting WLAN	Searching or accessing the access point, and downloading settings from the access point.	_
Connecting SES		
Connecting WPS	Connecting to the access point.	—
Connecting AOSS		
Connected	Connection succeeded.	—
Connection Error	Session overlap has been detected.	Check that only one router or access point has the SecureEasySetup <sup>™</sup> mode, the Wi-Fi Protected Setup <sup>™</sup> mode or AOSS <sup>™</sup> mode enabled and try starting from step <b>④</b> again.
No Access Point	The access point detection failed.	Move the machine closer to your access point/router and try starting from step 4 again.
		Try starting from step 4 again.
Connection Fail	Connection failed.	If the same message reappears, reset the machine back to the factory settings and try again.

LCD messages when using the SES/WPS/AOSS control panel menu

#### 🖉 Note

• If you encounter a problem during setup, temporarily place your machine closer to the wireless access point, and go back to step ④.

• You can also manually configure the wireless settings following the steps starting at step () on page 34.

#### 9 Press 🗙 .

#### OK!

(Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

#### Using the PIN Method of Wi-Fi Protected Setup™

If your wireless access point supports Wi-Fi Protected Setup<sup>™</sup> (PIN Method), you can configure the machine easily. 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 wireless access point/router for instructions on how to access the Wi-Fi Protected Setup<sup>™</sup> mode.

### 🖉 Note

Routers or access points that support Wi-Fi Protected Setup<sup>™</sup> have a symbol as shown below.



```
1 Press Menu.
```

Press ▲ or ▼ to choose Network. Press OK.

Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW Press ▲ or ▼ to choose WLAN.

Press **OK**.

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

5 (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW) When Change to WLAN? or WLAN Enable? is displayed, press ▲ or 1 to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit. (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW) When Network I/F switched to Wireless is displayed, press OK to accept. This will start the wireless setup wizard. To cancel, press Clear/Back.

6 The LCD will show an 8 digit PIN and the machine starts searching for an access point for 5 minutes.

✓ 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 <sup>1</sup>.) Go to the WPS (Wi-Fi Protected Setup<sup>™</sup>) setting page and input the PIN which the LCD shows in ③ to the Registrar and follow the on-screen instructions.

<sup>1</sup> The Registrar is normally the access point/router.

#### 🖉 Note

The setting page is different, depending on the brand of access point/router. See the instruction manual that came with your access point/router.

If you are using your Windows Vista<sup>®</sup> computer as a Registrar, perform following instructions.

🖉 Note

To use a Windows Vista<sup>®</sup> computer as a Registrar, you need to register it to your network in advance. See the instruction manual that came with your access point/router.

- 1 Click 🚱 and then Network.
- 2 Click Add a wireless device.
- 3 Choose your machine and click **Next**.
- 4 Input the PIN from the printed page and then click **Next**.
- 5 Choose your network that you want to connect to, and then click **Next**.
- 6 Click Close.
- 8 If the LCD shows Connected, the machine has successfully connected to your router or access point. You can now use your machine in a wireless network.

If the LCD shows No Access Point or Connection Fail, the machine has not successfully connected to your router or access point. Try starting from **(4)** again. If the same message is indicated again, reset the machine back to the default factory settings and try again. For resetting, see *Restoring the network settings to factory default* on page 114.

#### (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

# For Touchscreen models Press MENU. Press Network. Press WLAN. Press WPS w/PIN Code, and then press WPS w/PIN Code. When Switch Network interface to wireless? is displayed, press Yes to accept. This will start the wireless setup wizard. To cancel, press Stop/Exit. The LCD will show an 8 digit PIN and the machine starts searching for an access point for 5 minutes. 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 <sup>1</sup>.) Go to the WPS (Wi-Fi Protected Setup) setting page and input the PIN which the LCD shows in ③ to the Registrar and follow the on-screen instructions.

<sup>1</sup> The Registrar is normally the access point/router.

#### 🖉 Note

The setting page is different, depending on the brand of access point/router. See the instruction manual that came with your access point/router.

If you are using your Windows Vista<sup>®</sup> computer as a Registrar, follow the next instructions.

#### 🖉 Note

To use a Windows Vista<sup>®</sup> computer as a Registrar, you need to register it to your network in advance. See the instruction manual that came with your access point/router.

- 1 Click 🌄 and then Network.
- 2 Click Add a wireless device.
- 3 Choose your machine and click Next.
- 4 Input the PIN from the printed page and then click **Next**.
- 5 Choose your network that you want to connect to, and then click **Next**.
- 6 Click Close.

8 If the LCD shows Connected, the machine has successfully connected to your router or access point. You can now use your machine in a wireless network.

If the LCD shows No Access Point or Connection Fail, the machine has not successfully connected to your router or access point. Try starting from **(4)** again. If the same message is indicated again, reset the machine back to the default factory settings and try again. For resetting, see *Restoring the network settings to factory default* on page 114.



#### (Windows<sup>®</sup>)

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Install MFL-Pro Suite or Initial Installation / 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 for operating your device, please choose Start Here OSX from the CD-ROM menu.

## Using the Brother automatic installer application on the CD-ROM to configure your machine for a wireless network

For installation, see Wireless configuration for Windows<sup>®</sup> using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW) on page 48 and Wireless Configuration for Macintosh using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW) on page 72.

## 4

Wireless configuration for Windows<sup>®</sup> using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW)

## **IMPORTANT**

- The following instructions will install your Brother machine in a network environment using the Brother installer application for Windows<sup>®</sup> found on the CD-ROM we have provided with the machine.
- You can also setup your Brother machine using the machine's control panel which we recommend. You can find instructions in the supplied *Quick Setup Guide* or see *Configuring your machine for a wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)* on page 19.
- 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.

## **Configuration in Infrastructure mode**

#### Before configuring the wireless settings

### **IMPORTANT**

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

#### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu,  $\blacktriangle$  or  $\forall$  to choose Network, press OK. Press  $\blacktriangle$  or  $\forall$  to choose Network Reset, press OK. Press 1 or  $\blacktriangle$  to reset and then press 1 or  $\blacktriangle$  to accept the change. The machine will restart automatically.

#### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

#### (For MFC-795CW)

Press MENU, ▲ or ▼ to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically.

- If you are using Windows<sup>®</sup> Firewall or a firewall function of anti-spyware or antivirus applications, disable all personal firewall software (other than Windows<sup>®</sup> Firewall), anti-spyware or antivirus applications for the duration of the configuration. Once you are sure that you can print, configure the software settings following the instructions again.
- You need to temporarily use an Ethernet cable (not included) during configuration.
- Your Brother machine supports the use of the first WEP KEY only. If you are using a router that is using more than one WEP KEY enter the KEY used for the first WEP KEY.
- Before configuring your machine we recommend you write down the SSID and Password (if required) for your wireless network. You will need this information before you continue with the configuration.

Item	Record the current wireless network settings
Network name: (SSID/ESSID)	
Password	

#### Configure the wireless settings

- Turn on your computer.
- 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.
  - The CD-ROM main menu will appear. Click Advanced.

🤌 Macromedia Flash Player 8	
Multi-Function Center ®	brother
	Top Menu
	Install MFL-Pro Suite Full Driver & Software Package (Includes Wireless & Wired Network Setup)
	Documentation
	dvanced
	Additional Applications
	Brother Support
	On-Line Registration
© 2001-2007 Brother Industries, Ltd. All rights reserved.	Back Exit

#### 🖉 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.

4 Click Wireless LAN Setup Wizard.

(54)	brothe
Multi-Function Center ®	
	Advanced
	MFL-Pro Suite without PaperPort(TM)11
	Printer Driver Only (for Network)
	Wireless LAN Setup Wizard
	Network Utilities
	Repair MFL-Pro Suite
007 Brother Industries, Ltd. All rights reserved.	Back





6 Choose With cable (Recommended) and then click Next.



7 Read the Important Notice. Check the box after you confirm the wired setting is enabled, and then click Next.





Temporarily connect the Brother wireless device to your access point using a network cable (not included) and click **Next**.





Ochoose the machine you wish to configure, and click Next. If the list is blank, check if the access point and the machine are powered on, and then click Refresh.





The default Node name is "BRNxxxxxxxxxxx.".

10

The wizard will search for wireless networks available from your machine. Choose the access point you wish to associate the machine with, and then click **Next**.

and the access noi	at or Ad bac note	vork that the Device will be	
Name (SSID)	Channel	Wireless Mode	Signal
NO SETUP	1	802.11b/g (11Mbps/54M	
DINE HELLO	8	900 11h (11Mhne)	NAMES OF TAXABLE PARTY.
1. In HELLO2	2	802.11g (54Mbps)	
		IV III Access Poin Base Statio	

#### 🖉 Note

- "SETUP" is the default SSID of the machine. Do not choose this SSID.
- If the list is blank, check that the access point has power and is broadcasting the SSID, and then see if the machine and the access point are within range for wireless communication. Then, click **Refresh**.
- If your access point is set to not broadcast the SSID you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)**.

Wireless Device Setup Wizard	
Wireless Network Name	((( @)
Configure the wireless network name that	the device will be associated with.
N <u>a</u> me(SSID)	HELLO
🗖 Ihis is an Ad-hoc network	and there is no access point.
<u>C</u> hannel	1
Help	< Back Next > Cancel

If your network is not configured for Authentication and Encryption, the following screen will appear. To continue configuration, click OK and go to step (B).





Then enter the Network Key and Confirm Network Key, and then click Next.



**(3)** Click **Next**. The settings will be sent to your machine. The Network Configuration page will be printed. The settings will remain unchanged if you click **Cancel**.

o submit following setti	nas to the device	
	ngo to the donee	
et Device =	BRN >000000000000	
ddress	Auto	Change IP Address
munication mode	Infrastructure	
ne (SSID)	WLAN	
nentication Method	Open System	
ryption Mode	WEP	
	yet Device = vddress mnunication mode ne (SSID) nentication Method ryption Mode	Auto Auto Amunication mode Infrastructure ne (SSID) WLAN nentication Method Open System

1811 <u>2</u> 11	

#### 🖉 Note

- If you want to manually enter the IP address settings of your machine, click Change IP Address and enter the necessary IP address settings for your network.
- The control panel settings will be automatically changed to WLAN when the wireless settings are sent to your machine.

(14) Check the printed Network Configuration page. Choose the status as it is shown for the Wireless Link Status on the Network Configuration page. Click Next. If your status is "Link OK.", go to step 6.

If your status is "Failed To Associate", go to step ().



#### 🖉 Note

If you are using WEP and your status is **"Link OK."** but your machine is not found, make sure you entered the WEP key correctly. The WEP key is case sensitive.

Click Finish. Wireless setup failed as it was unable to associate with a wireless network. This is probably due to incorrect security settings. Reset the print server back to its factory default settings. (See *Restoring the network settings to factory default* on page 114.) Confirm the security settings of your wireless network and try starting from step ④ again.







17 Check the box after you confirm that you have completed the wireless settings, and then click Finish.



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

#### 🖉 Note

If your wireless settings fail, an error message will appear during the installation of **MFL-Pro Suite** and the installation will be terminated. If you encounter this failure, go to step ④ on page 50 and setup the wireless connection again.

# Configuration using SES, WPS or AOSS from the control panel menu (Automatic wireless mode)

#### Before configuring the wireless settings

## **1** IMPORTANT

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

#### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or ▲ to reset and then press 1 or ▲ to accept the change. The machine will restart automatically.

#### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

#### (For MFC-795CW)

Press MENU, ▲ or ▼ to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically.

• If you are using Windows<sup>®</sup> Firewall or a firewall function of anti-spyware or antivirus applications, disable all personal firewall software (other than Windows<sup>®</sup> Firewall), anti-spyware or antivirus applications for the duration of the configuration. Once you are sure that you can print, configure the software settings following the instructions again.

#### Configure the wireless settings

Press Menu. Press ▲ or ▼ to choose Network, press OK. Press ▲ or ▼ to choose Network I/F, press OK. Choose WLAN.

#### (For Touchscreen models)

Press MENU. Press Network. Press Network I/F and then press WLAN.

2 Turn on your computer.

Close any applications running before you start configuration.

Out 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.



The CD-ROM main menu will appear. Click Advanced.



#### 🖉 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.

#### 5 Click Wireless LAN Setup Wizard.



Choose Automatic install (Advanced) and click Next.





Read the **Important Notice**. Check the box after you confirm the wireless setting is enabled, and then click **Next**.



Confirm the on-screen message and click **Next**.



9 Press Menu, ▲ or V to choose Network and press OK. Press ▲ or V to choose WLAN and then press OK. Press ▲ or V to choose SES/WPS/AOSS and press OK.

#### (For Touchscreen models)

Press MENU. Press Network. Press WLAN and then press SES/WPS/AOSS.

#### 🖉 Note

If your wireless access point supports Wi-Fi Protected Setup<sup>™</sup> (PIN Method) and you want to configure your machine using the PIN (Personal Identification Number) Method, see *Using the PIN Method of Wi-Fi Protected Setup*<sup>™</sup> on page 44.

- 10 The machine searches for an access point that supports SecureEasySetup™, Wi-Fi Protected Setup™ or AOSS™ for 2 minutes.
- Put your access point in the SecureEasySetup<sup>™</sup> mode, Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode, depending on what is supported by your access point. Please refer to the instruction manual that came with your access point.

12 If the LCD shows Connected, the machine has successfully connected to your router or access point. You can now use your machine in a wireless network.

If the LCD shows Connection Error, a session overlap has been detected. The machine has detected more than one access point/router on your network with the SecureEasySetup<sup>™</sup> mode, the Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode enabled. Make sure that only one access point/router has the SecureEasySetup<sup>™</sup> mode, the Wi-Fi Protected Setup<sup>™</sup> mode or the AOSS<sup>™</sup> mode enabled and try starting from ③ again.

If the LCD shows No Access Point, the machine has not detected your access point/router on your network with the SecureEasySetup<sup>™</sup> mode, the Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode enabled. Move the machine closer to your access point/router and try starting from ③ again. If the LCD shows Connection Fail, the machine has not successfully connected to your access point/router. Try starting from ④ again. If the same message is indicated again, reset the machine back to the default factory settings and try again. (For resetting, see *Restoring the network settings to factory default* on page 114.)

LCD shows	Connection status	Action
Setting WLAN	Searching or accessing the access point, and downloading settings from the access point.	_
Connecting SES		
Connecting WPS	Connecting to the access point.	—
Connecting AOSS		
Connected	Connection succeeded.	—
Connection Error	Session overlap has been detected.	Check that only one router or access point has the SecureEasySetup <sup>™</sup> mode, the Wi-Fi Protected Setup <sup>™</sup> mode or AOSS <sup>™</sup> mode enabled and try starting from step <b>③</b> again.
No Access Point	The access point detection failed.	Move the machine closer to your access point/router and try starting from step (9) again.
Connection Fail	The machine was not able to connect with the access point.	<ul> <li>Try starting from step ③ again.</li> <li>If the same message reappears, reset the machine back to the factory settings and try again.</li> </ul>

#### LCD messages when using the SES/WPS/AOSS control panel menu

#### 13 Click Next.



14 Check the box after you confirm that you have completed the wireless settings, and then click **Finish**.



ОК!

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

## **Configuration in Ad-hoc Mode**

#### Before configuring the wireless settings

## **IMPORTANT**

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

#### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or ▲ to reset and then press 1 or ▲ to accept the change. The machine will restart automatically.

#### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

#### (For MFC-795CW)

Press MENU, ▲ or ▼ to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically.

If you are using Windows<sup>®</sup> Firewall or a firewall function of anti-spyware or antivirus applications, disable all personal firewall software (other than Windows<sup>®</sup> Firewall), anti-spyware or antivirus applications for the duration of the configuration. Once you are sure that you can print, configure the software settings following the instructions again.

#### Configure the wireless settings

Press Menu.
 Press ▲ or ▼ to choose Network, press OK.
 Press ▲ or ▼ to choose Network I/F, press OK.
 Choose WLAN.

#### (For Touchscreen models)

Press MENU. Press Network. Press Network I/F and then press WLAN.

Turn on your computer.
 Close any applications running before configuration.

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.



The CD-ROM main menu will appear. Click Advanced.



#### 🖉 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.

#### 5 Click Wireless LAN Setup Wizard.



Choose Step by Step install (Recommended) and then click Next.






8 Read the **Important Notice**. Check the box after you confirm the wireless setting is enabled, and then click **Next**.



9 You need to temporarily change your computer's wireless settings. Follow the on-screen instructions. Make sure to take note of all the settings such as the SSID or channel of your computer (you will need them to return your computer back to its original wireless settings), and then click **Next**.



If you want to configure your machine for the wireless network you have been using, write down your wireless network settings before configuration.

Network name:(SSID, ESSID)

Communication Mode	Authentication method	Encryption mode	Network key
Ad-hoc	Open system	WEP	
		NONE	—

For example:

Network name:(SSID, ESSID)	
HELLO	

Communication Mode	Authentication method	Encryption mode	Network key
Ad-hoc	Open system	WEP	12345

10 To communicate with the un-configured wireless machine, temporarily change the wireless settings on your PC to match machine's default settings shown on this screen. Check the box after you confirm the wireless setting, and then click **Next**.



# 🖉 Note

- If a message to restart your PC appears after the wireless settings have been changed, restart your PC and then go back to step (3) and continue with the install skipping steps (3), (9) and (10).
- Windows Vista<sup>®</sup>:

You can temporarily change the wireless settings on your computer, following the steps below:

- 1 Click (S) and then Control Panel.
- 2 Click Network and Internet and then Network and Sharing Center icon.
- 3 Click Connect to a network.
- 4 You can see the SSID of the wireless Brother machine in the list. Choose **SETUP** and click **Connect**.
- 5 Click Connect Anyway and then Close.
- 6 Click View status of Wireless Network Connection (SETUP).
- 7 Click **Details...** and check the **Network Connection Details**. It may take a few minutes to change from 0.0.00 to 169.254.x.x IP address to be shown on screen (where x.x. are numbers between 1 and 254).
- Windows<sup>®</sup> XP SP2 or greater:

You can temporarily change the wireless settings on your PC, following the steps below.

- 1 Click Start and then Control Panel.
- 2 Click Network Connections icon.
- 3 Choose and right click Wireless Network Connection. Click View Available Wireless Networks.
- 4 You can see the Brother wireless machine in the list. Choose SETUP and click Connect.
- 5 Check the **Wireless Network Connection** status. It may take a few minutes to change from 0.0.0.0. to 169.254.x.x IP address to be shown on screen (where x.x. are numbers between 1 and 254).



1 Choose the machine you wish to configure, and click **Next**. If the list is blank, check if the machine is powered on, and then click Refresh.



### 🖉 Note

The default Node name is "BRWxxxxxxxxxxx" (where "xxxxxxxxxxx" is your MAC Address / Ethernet Address).

12 The wizard will search for wireless networks available from your machine. Choose the Ad-hoc network you wish to associate the machine with, and then click Next.

Wireless Device Setup \	Vizard			
Available Wirel	ess Networl	ks		ஞ
Choose the access poi	nt or Ad-hoc netw	rork that the Device will be	e associated wit	h.
Name (SSID)	Channel	Wireless Mode	Signal	
HELLO	6			ו ו
RANH HELLOZ	2	ouz. i ig (sawops)		,
Refresh Add		I∛ ♥⊐ Access Poin Base Station int or Ad-hoc network nan n to manually specify the < Back Net	n N me doesn't appe	
Refresh	Z	IVI Access Poin Base Station int or Ad-hoc network nan n to manually specify the	Albert	etwork

# 🖉 Note

- If the list is blank, check if the machine is within range for wireless communication. Then, click Refresh.
- If your target Ad-hoc network does not appear on the list, you can manually add it by clicking the Add button. Check This is an Ad-hoc network and there is no access point., and then enter the Name (SSID) and the Channel number, and then click Next.



If your network is not configured for Authentication and Encryption, the following screen will appear. To continue configuration, click OK and go to step <sup>(B)</sup>.



14 Then enter the Network Key and Confirm Network Key, and then click Next.

Wireless Device Setup Wizard	
Network Key Configuration	((( @))
Enter your Network Key and click "next".	
Name (SSID) :	HELLO2
Network Key	•••••
Confirm Network Key	•••••
Your wireless network Authentication and En only need to enter the Network Key.	cryption type will automatically be detected. You
Help	< Back Next > Cancel

(15) Click **Next**. The settings will be sent to your machine. The Network Configuration page will be printed. The settings will remain unchanged if you click Cancel.

Click "Next" to submit following set	tings to the device	
Target Device =	BRW 20000000000	
IP Address	Auto	Change IP Address
Communication mode	Ad-hoc (Channel 6)	
Name (SSID)	HELLO	
Authentication Method	Open System	
Encryption Mode	WEP	
Encryption Mode	WEP	



### Note

If you want to manually enter the IP address settings of your machine, click Change IP Address and enter the necessary IP address settings for your network.

(b) Check the printed Network Configuration page. Choose the status as it is shown for the Wireless Link Status on the Network Configuration page.

Click Next. If your status is "Link OK.", go to step (3). If your status is "Failed To Associate", go to step (7).



# 🖉 Note

If you are using WEP and your status is "Link OK." but your machine is not found, make sure you entered the WEP key correctly. The WEP key is case sensitive.

17 Click Finish. Wireless setup failed as it was unable to associate with a wireless network. This is probably due to incorrect security settings. Reset the print server back to its factory default settings. (See *Restoring the network settings to factory default* on page 114.) Confirm the security settings of your wireless network and try starting from step (5) again.



18 To communicate with the configured wireless device, you must configure your computer to use the same wireless settings. Manually change the wireless settings on your computer to match the machine's wireless settings shown on the Network Configuration page printied in step . Check the box after you confirm these settings, and then click Next.



Check the box after you confirm that you have completed the wireless settings, and then click Finish.



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

# 🖉 Note

If your wireless settings fail, an error message will appear during the installation of **MFL-Pro Suite** and the installation will be terminated. If you encounter this failure, go to step **(5)** on page 63 and setup the wireless connection again.

# **IMPORTANT**

- The following instructions will install your Brother machine in a network environment using the Brother installer application for Macintosh found on the CD-ROM we have provided with the machine.
- You can also setup your Brother machine using the machine's control panel which we recommend. You can find instructions in the supplied *Quick Setup Guide* or see *Configuring your machine for a wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)* on page 19.
- 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.

# **Configuration in Infrastructure mode**

# Before configuring the wireless settings

# **IMPORTANT**

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

### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu,  $\blacktriangle$  or  $\forall$  to choose Network, press OK. Press  $\blacktriangle$  or  $\forall$  to choose Network Reset, press OK. Press 1 or  $\blacktriangle$  to reset and then press 1 or  $\blacktriangle$  to accept the change. The machine will restart automatically.

### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

### (For MFC-795CW)

Press MENU, ▲ or V to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically.

- Your Brother machine supports the use of the first WEP KEY only. If you are using a router that is using more than one WEP KEY enter the KEY used for the first WEP KEY.
- You need to temporarily use an Ethernet cable (not included) during configuration.
- Before configuring your machine we recommend you write down the SSID and Password (if required) for your wireless network. You will need this information before you continue with the configuration.

Item	Record the current wireless network settings
Network name: (SSID/ESSID)	
Password	

# Configure the wireless settings

- Turn on your Macintosh.
- Put the supplied CD-ROM into your CD-ROM drive. Double-click the MFL-Pro Suite icon on your desktop.
- 3 Double-click Utilities.



Double-click the Wireless Device Setup Wizard.





### 5 Choose Step by Step install (Recommended) and then click Next.

6 Choose With cable (Recommended) and then click Next.



7 Read the Important Notice and click Next.



8 Temporarily connect the Brother wireless device to your access point using a network cable and click **Next**.



Ochoose the machine you wish to configure, and click Next. If the list is blank, check if the access point and the machine are powered on, and then click Refresh.

00	Wir	eless Device Setu	o Wizard	
Available Wire	less Devices	5		( ( (m)
More than one Wirele Select the device you				
Nodo Namo	ID Address	MAC Address	Printer Name	Location
BRNXXXXXXXXXXXX	192.0.0.192	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Brother MFC-XX	XX Anywhere
Refresh Important If no and c Help	levices appear an	d you're running a pe litton to re-search the < Back (	ersonal firewall. Ple wireless network. Next >	ase disable firewall

# 🖉 Note

The default Node name is "BRNxxxxxxxxxxx.".

10

The wizard will search for wireless networks available from your machine. Choose the access point you wish to associate the machine with, and then click **Next**.

00	Wireless Dev	vice Setup Wizard	
Available Wireles	s Networks		(() ()
hoose the access point	or Ad-hoc network that th	e Device will be associate	d with.
Name (SSID)	Channel	Wireless Mode	Signal
I HELLO	6	802.11b/g (11Mbps/54	Mbps)
*	-		
Refresh	14	Access Point / Dase Station	》 6디 Ad-hoc Network
Add	If the access point or A button to manually spe	d-hoc network name doesn cify the network name.	't appear, cli Add
Help	< Back	Next>	Cancel

# 🖉 Note

- "SETUP" is the default SSID of the machine. Do not choose this SSID.
- If the list is blank, check that the access point has power and is broadcasting the SSID, and then see if the machine and the access point are within range for wireless communication. Then, click **Refresh**.
- If your access point is set to not broadcast the SSID you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)**.

000	Wireless Device Se	tup Wizard	
Wireless Network	Name		(9)
Configure the wireless ne	twork name that the device will	be associated with.	
Name(SSID)	I		
This is an Ad-	hoc network and there is no ac	cess point.	
Channel		* *	
Help	< Back	Next>	Cancel

If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click OK and go to step (B).

0	0	Wireless Device	Setup Wizard	
			fion!	
ì	Name (SSID) :	SETUP		
i	This Wireless Netwo encryption.	rk is not secure. It is	s not using secure authentication and	
1	Do you want to conti	nue setup?		
		ОК	Cancel	



Then enter the Network Key and Confirm Network Key, and then click Next.

00	Wirele	ss Device Setup Wizar	d	
Network Key Co	nfiguration			ஞ
Enter your Network Key	and click "next".			
Name (SSID) :				
Network Key		•••••		
Confirm Network	Key	••••••		
Your wireless network A to enter the Network Key		Encryption type will autom	atically be detecte	ed. You only need
Help	$\Box$	<back n<="" td=""><td>ext&gt;</td><td>Cancel</td></back>	ext>	Cancel

Click Next. The settings will be sent to your machine. The Network Configuration page will be printed. The settings will remain unchanged if you click Cancel.

000	Wireless Device Setup Wizard	
Wireless Network Set	tings Confirmation	((( @))
Click "Next" to submit following	settings to the device	
Target Device =	BRNXXXXXXXXXXXXXX	
IP Address	Auto	Change IP Address
Communication mode	Infrastructure	
Name (SSID)	HELLO	
Authentication Method	Open System	
Encryption Mode	None	
After clicking "Next", the "Networ confirm the connection result.	rk Configuration" Page will be printed by	the device check it to
Help	<back next<="" td=""><td>&gt; Cancel</td></back>	> Cancel

1977 H	
100	
	The second secon

### 🖉 Note

- If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network.
- The control panel settings will be automatically changed to WLAN when the wireless settings are sent to your machine.

Check the printed Network Configuration page. Choose the status as it is shown for the Wireless Link Status on the Network Configuration page. Click Next. If your status is "Link OK.", go to step <sup>(6)</sup>. If your status is "Failed To Associate", go to step <sup>(6)</sup>.



# 🖉 Note

If you are using WEP and your status is **"Link OK."** but your machine is not found, make sure you entered the WEP key correctly. The WEP key is case sensitive.

(15) Click Finish. Wireless setup failed as it was unable to associate with a wireless network. This is probably due to incorrect security settings. Reset the print server back to its factory default settings. (See *Restoring the network settings to factory default* on page 114.) Confirm the security settings of your wireless network and try starting from step (4) again.







17 Check the box after you confirm that you have completed the wireless settings, and then click **Finish**.

Wireless Device Set	tup Wizard	
Important Notice		ெரு
Please confirm below before clicking "Finish".		
If you would like to continue installing the drivers and device, please press "Finish" to close this screen and menu.		
Checked and confirmed.		
	Finish	Cancel

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Start Here OSX from the CD-ROM menu.

### 🖉 Note

OKI

If your wireless settings fail, an error message will appear during the installation of **MFL-Pro Suite** and the installation will be terminated. If you encounter this failure, go to step ④ on page 74 and setup the wireless connection again.

# Configuration using SES, WPS or AOSS from the control panel menu (Automatic wireless mode)

# Before configuring the wireless settings

# IMPORTANT

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

### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or ▲ to reset and then press 1 or ▲ to accept the change. The machine will restart automatically.

### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

### (For MFC-795CW)

Press MENU, ▲ or ▼ to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically.

# Configure the wireless settings

### Press Menu.

Press ▲ or ▼ to choose Network, press OK. Press ▲ or ▼ to choose Network I/F, press OK. Choose WLAN.

### (For Touchscreen models)

Press MENU. Press Network. Press Network I/F and then press WLAN.

### 2 Turn on your Macintosh.

3 Put the supplied CD-ROM into your CD-ROM drive. Double-click the MFL-Pro Suite icon on your desktop.



Doub	le-click	Litilit	ies
Doub		υιπ	163.



5 Double-click the Wireless Device Setup Wizard.



6 Choose Automatic install (Advanced) and click Next.







Confirm the on-screen message and click **Next**.

Wireless Device Setup V	Wizard
Setup using Automatic Wireless	((() CP)
If your access point supports SecureEasySetup™, Wi-Fi Prot please make sure the following:	tected Setup™ or AOSS™,
1. Your wireless access point supports SecureEasySetup™,	Wi-Fi Protected Setup™ or AOSS™.
<ol> <li>You have access to the documentation supplied with the access point and your device.</li> </ol>	
Help < Back	Next > Cancel

9 Press Menu, ▲ or V to choose Network and press OK. Press ▲ or V to choose WLAN and then press OK. Press ▲ or V to choose SES/WPS/AOSS and press OK.

#### (For Touchscreen models)

Press MENU. Press Network. Press WLAN and then press SES/WPS/AOSS.

### 🖉 Note

If your wireless access point supports Wi-Fi Protected Setup<sup>™</sup> (PIN Method) and you want to configure your machine using the PIN (Personal Identification Number) Method, see *Using the PIN Method of Wi-Fi Protected Setup*<sup>™</sup> on page 44.

10 The machine searches for an access point that supports SecureEasySetup™, Wi-Fi Protected Setup™ or AOSS™ for 2 minutes.

Put your access point in the SecureEasySetup<sup>™</sup> mode, Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode, depending on what is supported by your access point. Please refer to the instruction manual that came with your access point.

12 If the LCD shows Connected, the machine has successfully connected to your router or access point. You can now use your machine in a wireless network.

If the LCD shows Connection Error, a session overlap has been detected. The machine has detected more than one access point/router on your network with the SecureEasySetup<sup>™</sup> mode, the Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode enabled. Make sure that only one access point/router has the SecureEasySetup<sup>™</sup> mode, the Wi-Fi Protected Setup<sup>™</sup> mode or the AOSS<sup>™</sup> mode enabled and try starting from ③ again.

If the LCD shows No Access Point, the machine has not detected your access point/router on your network with the SecureEasySetup<sup>™</sup> mode, the Wi-Fi Protected Setup<sup>™</sup> mode or AOSS<sup>™</sup> mode enabled. Move the machine closer to your access point/router and try starting from ③ again. If the LCD shows Connection Fail, the machine has not successfully connected to your access point/router. Try starting from ④ again. If the same message is indicated again, reset the machine back to the default factory settings and try again. (For resetting, see *Restoring the network settings to factory default* on page 114.)

LCD shows	Connection status	Action
Setting WLAN	Searching or accessing the access point, and downloading settings from the access point.	—
Connecting SES		
Connecting WPS	Connecting to the access point.	—
Connecting AOSS		
Connected	Connection succeeded.	—
Connection Error	Session overlap has been detected.	Check that only one router or access point has the SecureEasySetup <sup>™</sup> mode, the Wi-Fi Protected Setup <sup>™</sup> mode or AOSS <sup>™</sup> mode enabled and try starting from step <b>③</b> again.
No Access Point	The access point detection failed.	Move the machine closer to your access point/router and try starting from step (9) again.
Connection Fail	The machine was not able to connect with the access point.	<ul> <li>Try starting from step ③ again.</li> <li>If the same message reappears, reset the machine back to the factory settings and try again.</li> </ul>

### LCD messages when using the SES/WPS/AOSS control panel menu

84

### 13 Click Next.



14 Check the box after you confirm that you have completed the wireless settings, and then click **Finish**.

V	Vireless Device Setup Wiza	ard
mportant Notice		((( G))
Please confirm below bef	ore clicking "Finish".	
Please make sure that you have o wizard.	ompleted the Automatic Wirel	ess Setup in the previous
If you would like to continue inst device, please press "Finish" to cl menu.		
☑ Checked and confirmed.		
	< Back	Finish Cancel

You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Start Here OSX from the CD-ROM menu.

# **Configuration in Ad-hoc Mode**

# Before configuring the wireless settings

# **IMPORTANT**

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

### (For DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW and MFC-257CW)

Press Menu, ▲ or V to choose Network, press OK. Press ▲ or V to choose Network Reset, press OK. Press 1 or ▲ to reset and then press 1 or ▲ to accept the change. The machine will restart automatically.

#### (For DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)

Press Menu, ▲ or ▼ to choose Network, press OK. Press ▲ or ▼ to choose Network Reset, press OK. Press 1 or + to reset and then press 1 or + to accept the change. The machine will restart automatically.

### (For MFC-795CW)

Press MENU, ▲ or ▼ to display Network, press Network. Press Network Reset, and choose Yes to reset and then press Yes for 2 seconds to confirm. The machine will restart automatically.

### Configure the wireless settings

#### 1 Press Menu.

Press ▲ or ▼ to choose Network, press OK. Press ▲ or ▼ to choose Network I/F, press OK. Choose WLAN.

#### (For Touchscreen models)

Press MENU. Press Network. Press Network I/F and then press WLAN.

2 Turn on your Macintosh.

3 Put the supplied CD-ROM into your CD-ROM drive. Double-click the MFL-Pro Suite icon on your desktop.



Double-click	Utilities
Double-click	utilities.



5 Double-click the Wireless Device Setup Wizard.



6 Choose Step by Step install (Recommended) and then click Next.







Read the Important Notice. Check the box after you confirm the wireless setting is enabled, and then click Next.



9 You need to temporarily change your computer's wireless settings. Follow the on-screen instructions. Make sure to take note of all the settings such as the SSID or channel of your computer (you will need them to return your computer back to its original wireless settings), and then click **Next**.

00	Wireless Device Setup Wizard	
Changing the C	omputer's Wireless Settings	((( @)
	re the wireless device from this computer, you mings of this computer.	ust temporarily change the
Before continuing, p	lease make a note of the current wireless netwo	rk settings.
In particular, please	note the following:	
Communication I	Node (Infrastructure / Ad-hoc)	
Channel(1-14) (if	applicable)	
Network Name (S	SSID / ESSID)	115
Authentication M	ethod (Open System / Shared Key)	15
Encryption Mode	(None / WEP / Other)	
Encryption Key		
Please contact your information.	network administrator or refer to your computer's	s user's guid 🖅 💈
Click "Next" to contin	nue.	
	< Back Next	t> Cancel

If you want to configure your machine for the wireless network you have been using, write down your wireless network settings before configuration.

Network name:(SSID, ESSID)	N	etwork	name:	(SSID,	ESSID)	)
----------------------------	---	--------	-------	--------	--------	---

Communication Mode	Authentication method	Encryption mode	Network key
Ad-hoc	Open system	WEP	
		NONE	—

For example:

Network name:(SSID, ESSID)	
HELLO	

Communication Mode	Authentication method	Encryption mode	Network key
Ad-hoc	Open system	WEP	12345

10 To communicate with the un-configured wireless machine, temporarily change the wireless settings on your computer to match the machine's default settings shown on this screen. Check the box after you confirm these settings. Check the box after you confirm the wireless setting, and then click **Next**.

00	Wireless Device Setup Wizard	
Changing the	Computer's Wireless Settings	((( ())))
To communicate w computer to the fol	vith the un-configured wireless device, please ch llowing:	ange the wireless settings on this
с	ommunication Mode : Ad-hoc	
	Channel: 11 (if applicable)	
Ne	twork Name (SSID)* : SETUP	1 second
	Encryption Mode : None	18-
* Case sensitive	e	
	ur network administrator or refer to your guide for more information.	
When you have co "Next" to continue.	onfigured the wireless network settings, click	
Checked and		xt> Cancel

# 🖉 Note

You can temporarily change the wireless settings on your computer, following the steps below:

- **1** Click the AirPort status icon in the menu bar.
- 2 Select **SETUP** from the pop-up menu.
- **3** Your wireless network is connected successfully.

5



1 Choose the machine you wish to configure, and click **Next**. If the list is blank, check if the machine is powered on, and then click Refresh.

	Wi	reless Device Setur	o Wizard	
Available W	ireless Devices	S		(( ())
	reless Device was fo you wish to configure			
Node Name	IP Addrace	MAC Address	Printer Name	Location
BRVWXXXXXXXX	XXX 192.0.0.192	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Brother MFC-XX	XX Anywhere
Refresh				
Import If	ant Notice: no devices appear ar nd click the Refresh b	nd you're running a pe utton to re-search the	ersonal firewall. Ple wireless network.	ase disab' rrewall

### **Note**

The default Node name is "BRWxxxxxxxxxx (where "xxxxxxxxxx is your MAC Address / Ethernet Address).

12 The wizard will search for wireless networks available from your machine. Choose the Ad-hoc network you wish to associate the machine with, and then click Next.

00	Wireless Device Setup Wizard		
vailable Wireless	Networks		( (o))
noose the access point or a	Ad-hoc network that th	e Device will be associated wi	th.
Name (SSID)	Channel	Wireless Mode	Signal
SETUP	1	802.11b/g (11Mbps/54Mbp	)S)
I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	2	802.11b/g (11Mbps/54Mbp	
Refresh	Įø	● Access Point / □→ ● C Base Station	Ad-hoc Network
Add If	the access point or Ad utton to manually spec	d-hoc network name doesn't ap cify the network name.	apear, cl <sup>i</sup> Add"
Help	< Back	Next>	Cancel

- Note
- If the list is blank, check if the machine is within range for wireless communication. Then, click Refresh.
- If your target Ad-hoc network does not appear on the list, you can manually add it by clicking the Add button. Check This is an Ad-hoc network and there is no access point., and then enter the Name (SSID) and the Channel number, and then click Next.

00	Wireless Device Setup Wizard
Wireless Netwo	rk Name
Configure the wireless	network name that the device will be associated with.
Name(SSID)	
🗹 This is an	d-hoc network and there is no access point.
Channel	1
Help	<back next=""> Cancel</back>

If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click OK and go to step ().

000	Wirel	ess Device Se	tup Wizard	
		ATTENTIC	DN!	
Name (SSI	D) :	SETUP		
This Wirele encryption.		ot secure. It is no	t using secure aut	nentication and
Do you wa	nt to continue se	tup?		
	ОК	$\supset$	Cancel	)

14 Then enter the Network Key and Confirm Network Key, and then click Next.

00	Wireless	Wireless Device Setup Wizard		
Network Key Co	figuration			(19)
Enter your Network Key	and click "next".			
Name (SSID) :				
Network Key		•••••		
Confirm Network Key		•••••		
Your wireless network A to enter the Network Key		cryption type will auton	natically be detect	ed. You only need
Help		Back	lext>	Cancel

15

Click **Next**. The settings will be sent to your machine. The Network Configuration page will be printed. The settings will remain unchanged if you click **Cancel**.

s Confirmation	((() CP)
gs to the device	
BRWXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Auto	Change IP Address
Ad-hoc	
HELLO	
Open System	
None	
figuration" Page will be printed	by the device check it to
	Auto Ad-Iioc HELLO Open System None



# Note

If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network.

Check the printed Network Configuration page. Choose the status as it is shown for the Wireless Link Status on the Network Configuration page. Click Next. If your status is "Link OK.", go to step 10. If your status is "Failed To Associate", go to step 10.



# 🖉 Note

If you are using WEP and your status is "Link OK." but your machine is not found, make sure you entered the WEP key correctly. The WEP key is case sensitive.

Click Finish. Wireless setup failed as it was unable to associate with a wireless network. This is probably due to incorrect security settings. Reset the print server back to its factory default settings. (See *Restoring the network settings to factory default* on page 114.) Confirm the security settings of your wireless network and try starting from step ④ again.



18 To communicate with the configured wireless device, you must configure your computer to use the same wireless settings. Manually change the wireless settings on your computer to match the machine's wireless settings shown on the Network Configuration page printied in step . Check the box after you confirm these settings, and then click Next.



Check the box after you confirm that you have completed the wireless settings, and then click **Finish**.



You have completed the wireless network setup. If you would like to continue installing drivers and software necessary for operating your device, please choose Start Here OSX from the CD-ROM menu.

# 🖉 Note

If your wireless settings fail, an error message will appear during the installation of **MFL-Pro Suite** and the installation will be terminated. If you encounter this failure, go to step **(5)** on page 87 and setup the wireless connection again.

6

# **Control panel setup**

# **Network menu**

Before using your Brother product in a network environment, you need to configure the correct TCP/IP settings.

In this chapter, you will learn how to configure the network settings using the control panel, located on the front of the machine.

The Network menu selections of the control panel allow you to set up the Brother machine for your network configuration. Press **Menu** or MENU, then press ▲ or ▼ to choose Network. Proceed to the menu selection you wish to configure. (See *Function table and default factory settings* on page 147.)

Please note that the machine is supplied with the BRAdmin Light software and Remote Setup applications

for Windows<sup>®</sup> and Macintosh, which also can be used to configure many aspects of the network. (See *Configuring your machine for a network with an Ethernet cable connection (Not available for MFC-253CW, MFC-255CW and MFC-257CW)* on page 10 for a wired connection or *Changing the print server settings* on page 16 for a wireless connection.)

# TCP/IP

If you connect the machine with the Ethernet cable to your network, use the Wired LAN menu selections. If you connect the machine to a wireless Ethernet network, use the WLAN menu selections. (Available for DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW)

This menu has 9 sections: BOOT Method, IP Address, Subnet Mask, Gateway, Node Name, WINS Config, WINS Server, DNS Server and APIPA.

### **BOOT Method**

This selection controls how the machine obtains an IP address. The default setting is Auto.

# Note

If you do not want your print server configured via DHCP, BOOTP or RARP, you must set the 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 BOOT Method, use the machine's control panel, BRAdmin Light utility or Remote Setup.

Press Menu.

Press ▲ or ▼ to choose Network. Press OK.

Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**. Control panel setup

4 Press ▲ or ▼ to choose TCP/IP. Press OK. 5 Press ▲ or V to choose BOOT Method. Press OK. (For DCP-365CN, DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN) Press ▲ or ▼ to choose Auto<sup>1</sup>, Static<sup>2</sup>, RARP<sup>3</sup>. BOOTP<sup>4</sup> or DHCP<sup>5</sup>. Press OK. (For DCP-395CN, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW) Press ◀ or ► to choose Auto <sup>1</sup>, Static <sup>2</sup>, RARP <sup>3</sup>, BOOTP <sup>4</sup> or DHCP <sup>5</sup>. Press OK. Press Stop/Exit. For Touchscreen models **Press** MENU. Press Network. 3 (For Wired) Press Wired LAN. (For Wireless) Press WLAN. 4 Press TCP/IP. Press BOOT Method. Press Auto<sup>1</sup>. Static<sup>2</sup>. RARP<sup>3</sup>. BOOTP<sup>4</sup> or DHCP<sup>5</sup>.

### 7 Press Stop/Exit.

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 also does not answer, the IP Address is set using the APIPA protocol, see *Using APIPA to configure the IP address* on page 139. After the machine is initially powered ON, it may take a few minutes for the machine to scan the network for a server.

<sup>2</sup> 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.

<sup>3</sup> RARP mode

The Brother print server IP address can be configured using the Reverse ARP (RARP) service on your host computer. For more information on RARP, see *Using RARP to configure the IP address* on page 139.

<sup>4</sup> BOOTP mode

BOOTP is an alternative to RARP that has the advantage of allowing configuration of the subnet mask and gateway. For more information on BOOTP, see *Using BOOTP to configure the IP address* on page 138.

<sup>5</sup> DHCP mode (DHCP)

Dynamic Host Configuration Protocol (DHCP) is one of several automated mechanisms for IP address allocation. If you have a DHCP server in your network (typically a UNIX<sup>®</sup>, Windows<sup>®</sup> 2000/XP, Windows Vista<sup>®</sup> network) the print server will automatically obtain its IP address from a DHCP server and register its name with any RFC 1001 and 1002 compliant dynamic name services.

96

### **IP Address**

This field displays the current IP address of the machine. If you have chosen a BOOT Method of Static, enter the IP address that you wish to assign to the machine (check with your network administrator for the 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 or BOOTP 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 an IP address for the network the unit will be connected on.

### 1 Press Menu.

- Press ▲ or ▼ to choose Network. Press OK.
- 3 For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose IP Address. Press OK.
- 6 Enter the IP address. Press **OK**.

### 🖉 Note

- For DCP-365CN, DCP-373CW, DCP-375CW and DCP-377CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the IP address. Press **OK** to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the IP address. Press **OK**.
- For DCP-395CN, DCP-593CW, DCP-595CW and DCP-597CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the IP address. Press ◀ to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the IP address. Press OK.

Press Stop/Exit.

### For Touchscreen models



PIESS OK.

Press Stop/Exit.

### 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.

- 1 Press Menu.
- 2 Press ▲ or ▼ to choose Network. Press OK.
- Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose Subnet Mask. Press OK.
- 6 Enter the Subnet Mask address. Press **OK**.

🖉 Note

- For DCP-365CN, DCP-373CW, DCP-375CW and DCP-377CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the Subnet Mask. Press **OK** to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the Subnet Mask. Press **OK**.
- For DCP-395CN, DCP-593CW, DCP-595CW and DCP-597CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the Subnet Mask. Press ◄ to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the Subnet Mask. Press OK.
- Press Stop/Exit.

6

### For Touchscreen models

- **1** Press MENU.
- 2 Press Network.
- 3 (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- 4 Press TCP/IP.
- 5 Press Subnet Mask.
- 6 Enter the Subnet Mask address. Press OK.

Press Stop/Exit.

### 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.

- 1 Press Menu.
  - Press ▲ or ▼ to choose Network. Press OK.
- Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose Gateway. Press OK.
- 6 Enter the Gateway address. Press OK.

# 🖉 Note

- For DCP-365CN, DCP-373CW, DCP-375CW and DCP-377CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the Gateway address. Press OK to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the Gateway address. Press OK.
- DCP-395CN, DCP-593CW, DCP-595CW and DCP-597CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the Gateway address. Press ◄ to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the Gateway address. Press OK.
- Press Stop/Exit.

6
- **1** Press MENU.
- 2 Press Network.
- (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- 4 Press TCP/IP.
- 5 Press Gateway.
- 6 Enter the Gateway address. Press OK.

7 Press Stop/Exit.

#### 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 BRNxxxxxxxx for a wired network or BRWxxxxxxxx for a wireless network (where xxxxxxxxxx is your machine's Ethernet address) (up to 15 characters).

- 1 Press Menu.
- 2 Press ▲ or ▼ to choose Network. Press OK.
- Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose Node Name. Press OK.
- 6 Enter the Node Name. Press **OK**.

#### 🖉 Note

DCP models cannot change the Node Name from the control panel menu. You can change the Node Name using BRAdmin Light or BRAdmin Professional 3.

7 Press Stop/Exit.

- **1** Press MENU.
- 2 Press Network.
- (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- 4 Press TCP/IP.
- 5 Press ▲ or ▼ to display Node Name and then press Node Name.
- 6 Enter the Node Name. Press OK.

7 Press Stop/Exit.

#### **WINS Config**

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

- 1 Press Menu.
- Press ▲ or ▼ to choose Network. Press OK.
- 3 For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose WINS Config. Press OK.
- (For DCP-365CN, DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN)
   Press ▲ or ▼ to choose Auto or Static.
   Press OK.
   (For DCP-395CN, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)
   Press ◀ or ▶ to choose Auto or Static.
   Press OK.
- 7 Press Stop/Exit.

- Press MENU.
   Press Network.
   (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
   Press TCP/IP.
   Press ▲ or ▼ to display WINS Config and then press WINS Config.
   Press Auto or Static.
- 7 Press Stop/Exit.

#### Auto

Automatically uses a DHCP request to determine the IP addresses for the primary and secondary WINS servers. You must set the 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<sup>®</sup> Internet Name Service) server. If set to a non-zero value, the machine will contact this server to register its name with the Windows<sup>®</sup> 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 still can 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<sup>®</sup> Internet Name Service. If you have a primary WINS server, but no secondary WINS server, simply leave this field blank.

1 Press Menu.

Press▲ or ▼ to choose Network. Press OK.

Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**. Control panel setup

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose WINS Server. Press OK.
- 6 Press ▲ or ▼ to choose Primary or Secondary. Press OK.
- 7 Enter the WINS Server address. Press OK.
- 🖉 Note
- For DCP-365CN, DCP-373CW, DCP-375CW and DCP-377CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the WINS Server address. Press OK to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the WINS Server address. Press OK.
- DCP-395CN, DCP-593CW, DCP-595CW and DCP-597CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the WINS Server address. Press ◄ to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the WINS Server address. Press OK.

#### 8 Press Stop/Exit.

#### For Touchscreen models

- **1** Press MENU.
- 2 Press Network.
- 3 (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- **4 Press** TCP/IP.
- 5 Press ▲ or ▼ to display WINS Server and then press WINS Server.
- 6 **Press** Primary **or** Secondary.
- 7 Enter the WINS Server address. Press OK.
- 8 Press **Stop/Exit**.

#### **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.

Press Menu. **Press** ▲ or **V** to choose Network. Press OK. **3** For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and **MFC-495CW** (For Wired) Press ▲ or V to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press OK. 4 Press ▲ or ▼ to choose TCP/IP. Press OK 5 Press ▲ or ▼ to choose DNS Server. Press OK. 6 Press ▲ or ▼ to choose Primary or Secondary. Press OK. 7 Enter the DNS Server address. Press OK. 🖉 Note • For DCP-365CN, DCP-373CW, DCP-375CW and DCP-377CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the DNS Server address. Press OK to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the DNS Server address. Press OK. DCP-395CN, DCP-593CW, DCP-595CW and DCP-597CW, press ▲ or ▼ repeatedly to enter the first three-digit number for the DNS Server address. Press ◀ to enter the second three-digit number. Repeat this step until you have entered the fourth three-digit number to complete the DNS Server address. Press

8 Press Stop/Exit.

OK.

- Press MENU.
   Press Network.
- (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- 4 Press TCP/IP.
- 5 Press ▲ or ▼ to display DNS Server and then press DNS Server.
- 6 Press Primary or Secondary.
- 7 Enter the DNS Server address. Press OK.

8 Press Stop/Exit.

#### 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 BOOT Method you have set (see *BOOT Method* on page 95). Choosing Off means the IP address doesn't change, when the print server cannot obtain an IP address through the BOOT Method you have set.

#### 1 Press Menu.

- Press ▲ or ▼ to choose Network. Press OK.
- Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW

(For Wired) Press ▲ or ▼ to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose TCP/IP. Press OK.
- 5 Press ▲ or ▼ to choose APIPA. Press OK.
- (For DCP-365CN, DCP-373CW, DCP-375CW, DCP-377CW, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN)
   Press ▲ or ▼ to choose On or Off.
   Press OK.
   (For DCP-395CN, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW)
   Press ◀ or ▶ to choose On or Off.
   Press OK.

Press Stop/Exit.

Control panel setup

#### For Touchscreen models

- **1** Press MENU.
- 2 Press Network.
- (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- **4 Press** TCP/IP.
- 5 Press ▲ or ▼ to display APIPA and then press APIPA.
- 6 Press On or Off.
- 7 Press Stop/Exit.

6

#### Setup Wizard (For wireless models)

The Setup Wizard guides you through the wireless network configuration. For more information, see Using the Setup Wizard from the control panel on page 28.

#### SES/WPS/AOSS (For wireless models)

If your wireless access point supports either SecureEasySetup<sup>TM</sup>, Wi-Fi Protected Setup<sup>TM</sup> (PBC <sup>1</sup>) or AOSS<sup>TM</sup>, you can configure the machine easily without knowing your wireless network settings. Your Brother machine has the SES/WPS/AOSS menu on the control panel. This feature automatically detects which mode your access point uses, SecureEasySetup<sup>TM</sup>, Wi-Fi Protected Setup<sup>TM</sup> or AOSS<sup>TM</sup>. By pushing a button on the wireless access point/router and the machine, you can setup the wireless network and security settings. See the user's guide for your wireless access point/router for instructions on how to access one-push mode. (See *Using SES, WPS or AOSS from the control panel menu to configure your machine for a wireless network* on page 39.)

<sup>1</sup> Push Button Configuration

#### WPS w/PIN code (For wireless models)

If your wireless access point supports Wi-Fi Protected Setup<sup>™</sup> (PIN Method), you can configure the machine easily without a computer. 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 wireless access point/router for instructions on how to access the Wi-Fi Protected Setup<sup>™</sup> mode. (See *Using the PIN Method of Wi-Fi Protected Setup<sup>™</sup>* on page 44.)

#### WLAN Status (For wireless models)

#### Status

This field displays the current wireless network status; Active(11b), Active(11g), or Connection Fail.



- Press ▲ or ▼ to choose Network. Press OK.
- Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW Press ▲ or ▼ to choose WLAN. Press OK.
- 4 Press ▲ or ▼ to choose WLAN Status. Press OK.

Control panel setup



Press  $\blacktriangle$  or  $\checkmark$  to choose WLAN. Press **OK**.

- Press ▲ or ▼ to choose WLAN Status. Press OK.
- 5 Press ▲ or ▼ to choose Signal. Press OK.
- 6 The current wireless network signal strength will be displayed; Signal:Strong, Signal:Medium, Signal:Weak Or Signal:None.

#### Press Stop/Exit.

- **1** Press MENU.
- 2 Press Network.
- **3** Press WLAN.
- 4 Press ▲ or ▼ to display WLAN Status and then press WLAN Status.
- 5 The current wireless network signal strength will be displayed; Strong, Medium, Weak or None.
- 6 Press Stop/Exit.

#### SSID

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

- 1 Press Menu.
- Press ▲ or ▼ to choose Network. Press OK.
- Sor DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW Press ▲ or ▼ to choose WLAN.

Press **OK**.

- Press ▲ or ▼ to choose WLAN Status. Press OK.
- 5 Press ▲ or ▼ to choose SSID. Press OK.

6 The current wireless network SSID will be displayed.

7 Press Stop/Exit.

#### For Touchscreen models

- 1 Press MENU.
- 2 Press Network.
- **3** Press WLAN.
- 4 Press ▲ or ▼ to display WLAN Status and then press WLAN Status.
- 5 The current wireless network SSID will be displayed.
- 6 Press Stop/Exit.

Control panel setup

#### Comm.Mode

This field displays the current wireless network communication mode; Ad-hoc or Infrastructure.



7 Press Stop/Exit.

-

#### Ethernet (Not available for MFC-253CW, MFC-255CW and MFC-257CW)

Ethernet link mode. Auto allows the print server to operate in 100BaseTX full or half duplex, or in 10BaseT full or half duplex mode by auto negotiation.

You can fix the server link mode to 100BASE-TX Full Duplex (100B-FD) or Half Duplex (100B-HD) and 10BASE-T Full Duplex (10B-FD) or Half Duplex (10B-HD). This change is valid after the print server has been reset (default is Auto).

	Press Menu.
	Press ▲ or V to choose Network. Press OK.
	For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW Press ▲ or ▼ to choose Wired LAN. Press OK.
	Press ▲ or ▼ to choose Ethernet. Press OK.
	(For DCP-365CN, DCP-373CW, DCP-375CW, DCP-377CW and MFC-295CN) Press ▲ or ▼ to choose Auto/100B-FD/100B-HD/10B-FD/10B-HD. Press OK. (For DCP-395CN, DCP-593CW, DCP-595CW, DCP-597CW and MFC-495CW) Press ◀ or ▶ to choose Auto/100B-FD/100B-HD/10B-FD/10B-HD. Press OK.
	Press Stop/Exit.
or	Touchscreen models
	Press MENU.
	Press Network.
	Press Wired LAN.
	Press Ethernet.

#### **MAC Address**

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



- 2 Press ▲ or ▼ to choose Network. Press OK.
- **3** For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW and **MFC-495CW** (For Wired) Press ▲ or V to choose Wired LAN. (For Wireless) Press ▲ or ▼ to choose WLAN. Press OK.
- 4 Press ▲ or ▼ to choose MAC Address. Press OK.
- 5 Press Stop/Exit.

#### For Touchscreen models

- **1** Press MENU.
- 2 Press Network.
- (For Wired) Press Wired LAN. (For Wireless) Press WLAN.
- 4 Press MAC Address.
- 5 Press Stop/Exit.

## Network I/F (For wireless models, not available for MFC-253CW, MFC-255CW and MFC-257CW)

You can choose the network connection type, wired network connection or wireless network connection. If you want to use the wired network connection, choose Wired LAN, and if you want to use the wireless network connection, choose WLAN. You can only have one network connection type active at a time.

#### 1 Press Menu.

- Press ▲ or ▼ to choose Network. Press OK.
- 3 Press ▲ or ▼ to choose Network I/F. Press OK.
- Press ▲ or ▼ to choose Wired LAN or WLAN. Press OK.
- 5 Press Stop/Exit.

#### For Touchscreen models

- **1** Press MENU.
- **2** Press Network.
- 3 Press Network I/F.
- 4 Press Wired LAN or WLAN.
- 5 Press Stop/Exit.

#### WLAN Enable (For MFC-253CW, MFC-255CW and MFC-257CW)

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

- Press Menu.
   Press ▲ or ▼ to choose Network. Press OK.
   Press ▲ or ▼ to choose WLAN Enable.
- Press OK.
- Press ▲ or ▼ to choose On or Off. Press OK.
- 5 Press Stop/Exit.

### Restoring the network settings to factory default

If you wish to reset the print server back to its default factory settings (resetting all information such as the password and IP address information), please follow these steps:

	<b>Note</b>
1	Press Menu.
2	Press ▲ or ▼ to choose Network. Press OK.
3	Press ▲ or V to choose Network Reset. Press OK.
4	Press 1 for Reset.
5	Press 1 for Reboot.
F	Note For DCP models, press ▲ or + for Network Reset and then press ▲ or + for Reboot. The machine will re-start. You can now reconnect the network cable and configure the network settings to work with your network.
For	· Touchscreen models
1	Press MENU.
2	Press Network.
3	Press Network Reset.
4	Press Yes.
5	Press Yes for 2 seconds to confirm.

### **Printing the Network Configuration List**

### Note

Node Name: Node Name appears in the Network Configuration List. The default Node Name is "BRNxxxxxxxxxx" for a wired network or "BRWxxxxxxxxx" for a wireless network ("xxxxxxxxx" is your machine's MAC Address / Ethernet Address).

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



5 Press Stop/Exit.

# 7

### Driver Deployment Wizard (Windows<sup>®</sup> only)

### Overview

The Driver Deployment Wizard software can be used to ease the installation or even automate the installation of network connected printers. The Driver Deployment Wizard can also be used to create self running executable files which when run on a remote PC, completely automate the installation of a printer driver. The remote PC does not have to be connected to a network.

### **Connection methods**

The Driver Deployment Wizard supports the two connection methods.

### Peer-to-Peer

The device is connected to the network but each user prints directly to the machine WITHOUT printing through a central queue.



- 1 Client Computer
- 2 Network Printer (your machine)

#### **Network Shared**

The device is connected to a network and a central print queue is used to manage all print jobs.



- 1 Client computer
- 2 Also known as "Server" or "Print Server"
- 3 TCP/IP or USB
- 4 Printer (your machine)

### How to install the Driver Deployment Wizard software

Put the supplied CD-ROM into your CD-ROM drive. 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. Click **Network Utilities** or **Advanced**, then **Network Utilities**.
- 3 Choose the **Driver Deployment Wizard** installation program.

#### Note

For Windows Vista<sup>®</sup>, when the User Account Control screen appears, click Continue.

- Click Next in response to the Welcome message.
- 5 Read the license agreement carefully. Then follow the on-screen instructions.
- 6 Click **Finish**. Now the Driver Deployment Wizard software has been installed.

### Using the Driver Deployment Wizard software

- 1 When you run the Wizard for the first time you will see a welcome screen. Click **Next**.
- 2 Choose **MFC**, and then click **Next**.
- 3 Choose your connection type to the machine that you want to print to.
- Choose the option you require, and follow the on-screen instructions. If you choose Brother Peer-to-Peer Network Printer, the following screen is displayed.

Driver Deployment Wizard								
Select Printer			44					
Select the appropriate	network printer.							
Node Name	Node Address	Printer Name	Location 🔥					
BRN220065	192.10.20.90	Brother MFC-XXXX						
			×					
Port Driver			Configure IP					
C NetBIDS C IPP	Juc Huno		<u>R</u> efresh					
Help		< <u>B</u> ack	Next > Cancel					

#### Setting the IP Address

If the machine does not have an IP address, the Wizard will allow you to change the IP address by choosing the machine from the list and by choosing the **Configure IP** option. A dialog box then appears which allows you to specify information such as the IP address, subnet mask and also the gateway address.

Configure TCP/IP Address							
Enter the TCP/I this Print Server	Enter the TCP/IP configration for this Print Server						
		Cancel					
IP Address	0.0.0.0						
Subnet Mask	0.0.0.0						
Gateway	0.0.0.0						

5 Choose the machine you wish to install.

■ If the printer driver you wish to use is installed on your computer:

Check the box of **Currently installed drivers** and choose the machine you wish to install, and then click **Next**.

If the driver you wish to use is not installed on your computer:

Click Have Disk and then specify the path of the printer driver.

Driver Deployment Wizard		
Select the printer driver		44
Select a driver to use with this printer.		
Brother MEC-30000	(Windows 2000/XP/Vista (x86))	
Currently installed drivers		Have Disk
Help	< Back N	ext > Cancel

6 Click **Next** after you choose the correct driver.

A summary screen will appear. Confirm the settings of the driver.



#### Creating an executable file

The Driver Deployment Wizard software can also be used to create self running .EXE files. These self-running .EXE files can be saved to the network, copied to a CD-ROM, a floppy disc or even E-mailed to another user. Once run, the driver and its settings are automatically installed without any user intervention.

#### Copy the Driver files to this PC and create an installation program for other users.

Choose this option if you wish to install the driver onto your computer and also create a self-running executable file for use with another computer using the same operating system as your own.

#### Only create an Installation Program for other users.

Choose this option if the driver is already installed on your computer and you wish to create a self-running executable file without installing the driver again on your own computer.

### 🖉 Note

If you work in a "queue" based network and you create an executable file for another user who does not have access to the same printer queue that you define into the executable file, the driver when installed on the remote computer will default to LPT1 printing.

8 Click **Finish**. The driver is automatically installed to your computer.

## 8

# Network printing from Windows<sup>®</sup> basic TCP/IP Peer-to-Peer printing

### Overview

To connect your machine to your network, you need to follow the steps in the *Quick Setup Guide*. We recommend that you use the Brother installer application on the CD-ROM which we have provided with the machine. By using this application, you can easily connect your machine to your network and install the network software and printer driver which you need to complete the configuration of your machine for a network. You will be guided by the on-screen instructions until you are able to use your Brother network printer.

If you are a Windows<sup>®</sup> user and want to configure your machine without using the Brother installer application, use the TCP/IP protocol in a Peer-to-Peer environment. Please follow the instructions in this chapter. This chapter explains how to install the network software and the printer driver which you will need to be able to print using your network printer.

#### **Note**

- You must configure the IP address on your machine before you proceed with this chapter. If you need to configure the IP address, see *Setting up the IP address and subnet mask* on page 13 first.
- Verify the host computer and the machine are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- If you are connecting to a Network Print Queue or Share (printing only), see *Installation when using a Network Print Queue or Share (printer driver only)* on page 142 for installation details.

### Configuring the standard TCP/IP port

#### Printer driver not yet installed

- Put the supplied CD-ROM into your CD-ROM drive. 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. Click **Initial Installation** or **Advanced**.
- 3 Click Printer Driver Only (for Network).
- 4 Click **Next** in response to the Welcome message. Follow the on-screen instructions.
- 5 Choose Standard Installation and click Next.
- 6 Choose Brother Peer-to-Peer Network Printer, and then click Next.
- **7** Follow the on-screen instructions, and then click **OK**.
- 🖉 Note

Contact your administrator if you are not sure about the location and name of the printer on the network.

8 Continue through the Wizard clicking **Finish** when complete.

Network printing from Windows® basic TCP/IP Peer-to-Peer printing

#### Printer driver already installed

If you have already installed the printer driver and wish to configure it for network printing, follow these steps:

- (Windows Vista<sup>®</sup>)
   Click the Solution, Control Panel, Hardware and Sound, and then Printers.
   (Windows Server<sup>®</sup> 2008)
   Click the Start button, Control Panel, Hardware and Sound, and then Printers.
   (Windows<sup>®</sup> XP and Windows Server<sup>®</sup> 2003)
   Click the Start button and choose Printers and Faxes.
   (Windows<sup>®</sup> 2000)
   Click the Start button and choose Settings and then Printers.
- 2 Right click on the printer driver you wish to configure, and then choose **Properties**.
- 3 Click the **Ports** tab and click **Add Port**.
- Choose the port that you wish to use. Typically this would be Standard TCP/IP Port. Then click the New Port... button.
- 5 The Standard TCP/IP Port Wizard will start.
- 6 Enter the IP address of your network printer. Click **Next**.
- 7 Click Finish.
- 8 Close Printer Ports and Properties dialog box.

### Other sources of information

See Configuring your machine for a network with an Ethernet cable connection (Not available for MFC-253CW, MFC-255CW and MFC-257CW) on page 10 to learn how to configure the IP address of the machine.

9

### **Network printing from a Macintosh**

### Overview

This chapter explains how to print from a Macintosh on a Network using the Simple Network Configuration capabilities on Mac OS X 10.3.9 - 10.5.x.

For updated information on printing from a Macintosh, visit the Brother Solutions Center at: <u>http://solutions.brother.com</u>.

#### How to choose the print server (TCP/IP)

#### For Mac OS X 10.3.9 to 10.4.x

- 1 Turn on the machine by plugging in the power cord.
- 2 From the **Go** menu, choose **Applications**.
- 3 Open the **Utilities** folder.
- 4 Double-click the **Printer Setup Utility** Icon.
- Click Add. (Mac OS X 10.3.9) Go to step .
   (Mac OS X 10.4.x or greater) Go to step .
- 6 (Mac OS X 10.3.9) Make the following selection.



#### 7 Choose Brother MFC-XXXX (XXXX is your model name), and then click Add.

		Q,*	
fault Browser	IP Printer		Search
Printer Name			Connection
MFC-XXXXX (	BRN XXXXXXXXXXXXXX		Bonjour
	MFC-XXXXXX		
Location:	MFC-XXXXXX Brother MFC-XXXX		

8 Click the printer, then click **Make Default** to set the printer as the default printer. The printer is now ready.

#### Mac OS X 10.5.x

- 1 Turn on the machine by plugging in the power cord.
- Prom the Apple menu, choose System Preferences.
- 3 Click Print & Fax.
- 4 Click + button to add your machine.



Network printing from a Macintosh

5 Choose Brother MFC-XXXX (XXXX is your model name), and then click Add.

3			*	Ż	4	Q
	IP	Windows	Bluetooth	AppleTalk	More Printers	Search
Printer Name					Kind	
Brother MFC- ××	oox				Bonjour	
Name:	Bro	ther MFC	- x000X			
	Bro	ther MFC	- xxxx			
Location:						
				JPS		
Location:				JPS		
Location:				JPS		•

6 From the **Default Printer** pop-up menu choose your model to set as the default printer. The printer is now ready.

### Changing the print server settings

#### Changing the configuration using the Remote Setup (Not available for DCP models, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN)

From a Macintosh, you can change the machine or print server parameters using the Remote Setup application. (See *Using the Remote Setup to change the print server settings (Not available for Windows Server*<sup>®</sup> 2003/2008) (Not available for DCP models, MFC-253CW, MFC-255CW, MFC-257CW and MFC-295CN) on page 18.)

#### Using the BRAdmin Light utility to change the print server settings

Brother BRAdmin Light utility is a Java application that is designed for Mac OS X 10.3.9 - 10.5.x environment. BRAdmin Light allows you to change network settings on Brother network ready machine.

🖉 Note

- Please use the BRAdmin Light utility that was supplied on the CD-ROM of your Brother product. You can
  also download the latest version of the BRAdmin Light utility from <a href="http://solutions.brother.com">http://solutions.brother.com</a>.
- Node Name: Node Name appears in current BRAdmin Light. The default Node Name is BRNxxxxxxxx for a wired network or BRWxxxxxxxx for a wireless network (where xxxxxxxxx is your machine's Ethernet address).
- Start the BRAdmin Light utility, by double-clicking the Macintosh HD icon on your desk top and clicking Library / Printers / Brother / Utilities. And then, double-click the BRAdmin Light.jar file.
- Choose the print server which you want to change the settings.
- 3 Choose Configure Print Server from the Control menu.
- 4 Enter a password if you have set it. You can now change the print server settings.

### Other sources of information

- 1 Visit <u>http://solutions.brother.com</u> for more information on network printing.
- 2 See Configuring your machine for a network with an Ethernet cable connection (Not available for MFC-253CW, MFC-255CW and MFC-257CW) on page 10 to learn how to configure the IP address of the machine.

# **10** Troubleshooting

### Overview

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

This chapter is divided into the following sections:

- General problems
- Network print software installation problems
- Printing problems
- Scanning and PC-FAX problems
- Protocol-specific troubleshooting
- Wireless network specific troubleshooting

### **General problems**

#### CD-ROM is inserted, but does not start automatically

If your computer does not support Autorun, the menu will not start automatically after inserting the CD-ROM. In this case, execute **Start.exe** in the root directory of the CD-ROM.

#### How to reset the Brother print server 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). (See *Restoring the network settings to factory default* on page 114.)

#### My computer cannot find the machine/print server My machine/print server does not appear in the window of Remote Setup, BRAdmin Light or BRAdmin Professional 3

■ Windows<sup>®</sup>

The Firewall on your computer may be blocking the necessary network connection to the machine. In this case, you will need to disable the Firewall on your computer and re-install the drivers.

#### Windows<sup>®</sup> XP SP2 or greater users:

- Click the Start button, Control Panel, Network and Internet Connections.
- 2 Double-click Windows Firewall.
- 3 Click the General tab. Make sure that Off (not recommended) is selected.
- 4 Click OK.

### 🖉 Note

After the Brother software package is installed, re-enable your Firewall.

#### Windows Vista<sup>®</sup> users:

- 1 Click the Solution, Control Panel, Network and Internet, Windows Firewall and click Change settings.
- 2 When the **User Account Control** screen appears, do the following.
  - Users who have administrator rights: Click **Continue**.
  - For users who do not have administrator rights: Enter the administrator password and click **OK**.
- 3 Click the General tab. Make sure that Off (not recommended) is selected.
- 4 Click OK.

#### 🖉 Note

After the Brother software package is installed, re-enable your Firewall.

Macintosh

Re-select your machine in the Device Selector application located in **Macintosh HD/Library/Printers/Brother/Utilities/DeviceSelector** or from the model pull-down list of ControlCenter2.

### Network print software installation problems

The Brother print server is not found during setup of the network print software installation or from the printer driver of the Brother machine in Windows<sup>®</sup>.

The Brother print server is not found using the Simple Network Configuration capabilities of Mac OS X.

For a network with an Ethernet cable connection

Make sure you have completed the IP address setting of the Brother print server according to Chapter 2 of this User's Guide before installing the network print software or printer driver.

For a wireless network

Make sure you have completed the IP address setting and wireless network settings of the Brother print server according to Chapter 3 of this User's Guide before installing the network print software or printer driver.

Check the following:

- 1 Make sure that the machine is powered on, is on-line and ready to print.
- 2 Check to see if the LCD momentarily displays LAN Active after being connected to the network. The LCD displays LAN Active: The print server is connected to the network. The LCD does not display LAN Active: The print server is not connected to the network.
- 3 Print the Network Configuration List and check if the settings such as IP address settings are correct for your network. The problem may be the result of mismatched or duplicate IP address. Verify that the IP address is correctly loaded into the print server. And make sure that no other nodes on the network have this IP address. For information on how to print the Network Configuration List, see *Printing the Network Configuration List* on page 115.
- 4 Verify that the print server is on your network as follows:
  - Windows<sup>®</sup>
    - 1 Click Start, All Programs, Accessories then choose Command Prompt.
    - 2 Try pinging the print server from the host operating system command prompt with the command: ping ipaddress Where ipaddress is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).
  - Mac OS X 10.3.9 10.5.x
    - 1 From the **Go** menu, choose **Applications**.
    - 2 Open the **Utilities** folder.
    - **3** Double-click the **Terminal** icon.
    - **4** Try pinging the print server from the Terminal window: ping ipaddress

Where *ipaddress* is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).

#### Troubleshooting

5 If you have tried steps ① to ④ above and it does not work, then reset the print server back to the default factory settings and try from the initial setup again. For information how to reset to the default factory settings, see *Restoring the network settings to factory default* on page 114.

#### 6 Check the following:

If the installation failed, the Firewall on your computer may be blocking the necessary network connection to the machine. In this case, you will need to disable the Firewall on your computer and reinstall the drivers. For more information, see *General problems* on page 129. If you are using personal Firewall software, see the User's Guide for your software or contact the software manufacturer.

### **Printing problems**

#### Print job is not printed

Make sure the status and configuration of the print server. Check the following:



1 Make sure that the machine is powered on, is on-line and ready to print.

- 2 Print the Network Configuration List of the machine and check if the settings such as IP address settings are correct for your network. The problem may be the result of mismatched or duplicate IP address. Verify that the IP address is correctly loaded into the print server. And make sure that no other nodes on the network have this IP address.
- 3 Verify that the print server is on your network as follows:

#### Windows<sup>®</sup>

- 1 Try pinging the print server from the host operating system command prompt with the command: ping ipaddress Where ipaddress is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).
- Mac OS X 10.3.9 10.5.x
  - 1 From the Go menu, choose Applications.
  - 2 Open the Utilities folder.
  - 3 Double-click the Terminal icon.
  - 4 Try pinging the print server from the Terminal window:

ping ipaddress

Where ipaddress is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).

If you have tried steps 1 to 3 above and it does not work, then reset the print server back to the default factory settings and try from the initial setup again. For information how to reset to the default factory settings, see Restoring the network settings to factory default on page 114.

#### Error during printing

If you try to print while other users are printing large amounts of data (e.g. many pages or color pages with high resolution), the machine is unable to accept your print job until the ongoing printing is finished. If the waiting time of your print job exceeds a certain limit, a time out situation occurs, which causes the error message. In such situations, execute the print job again after the other jobs are completed.

### Scanning and PC Fax problems

#### The network scanning feature does not work in Windows<sup>®</sup> The network PC Fax feature does not work in Windows<sup>®</sup>

Firewall settings on your PC may reject the necessary network connection for network printing, network scanning and PC Fax. If you are using Windows<sup>®</sup> Firewall and you installed MFL-Pro Suite from the CD-ROM, the necessary Firewall settings have already been made. If you did not install from the CD-ROM follow the instructions below to configure Windows<sup>®</sup> Firewall. If you are using any other personal firewall software, see the User's Guide for your software or contact the software manufacturer.

#### UDP Port number information for Firewall configuration

UDP Port	Network Scanning	Network PC-Fax	Network Scanning and Network PC-Fax <sup>1</sup>
External Port number	54925	54926	137
Internal Port number	54925	54926	137

<sup>1</sup> Add Port number 137 if you still have trouble with your network connection after you added port 54925 and 54926. Port number 137 also supports printing, PhotoCapture Center™ and Remote Setup over the network.

#### (Windows<sup>®</sup> XP SP2 or greater):

- Click the Start button, Control Panel, Network and Internet Connections and then Windows Firewall. Make sure that Windows Firewall on the General tab is set to On.
- 2 Click the Advanced tab and Settings... button.
- 3 Click the **Add** button.
- 4 Add port **54925** for network scanning by entering the information below:
  - 1. In **Description of service**: Enter any description, for example, "Brother Scanner".

2. In **Name or IP address (for example 192.168.0.12) or the computer hosting this service on your network**: Enter "Localhost".

- 3. In External Port Number for this service: Enter "54925".
- 4. In Internal Port number for this service: Enter "54925".
- 5. Make sure **UDP** is selected.
- 6. Click **OK**.
- 5 Click the **Add** button.

6 Add port **54926** for Network PC-Fax by entering the information below:

1. In Description of service: Enter any description, for example, "Brother PC Fax".

2. In Name or IP address (for example 192.168.0.12) or the computer hosting this service on your network: Enter "Localhost".

- 3. In External Port Number for this service: Enter "54926".
- 4. In Internal Port number for this service: Enter "54926".
- 5. Make sure **UDP** is selected.
- 6. Click **OK**.
- 7 If you still have trouble with your network connection, click the **Add** button.

- 8 Add port **137** for both Network scanning and Network PC-Fax receiving by entering the information below:
  - 1. In **Description of service**: Enter any description, for example, "Brother PC Fax receiving".

2. In **Name or IP address (for example 192.168.0.12) or the computer hosting this service on your network**: Enter "Localhost".

- 3. In External Port Number for this service: Enter "137".
- 4. In Internal Port number for this service: Enter "137".
- 5. Make sure **UDP** is selected.
- 6. Click **OK**.

9 Make sure that the new setting is added and is checked, and then click **OK**.

(Windows Vista<sup>®</sup>):

1 Click the 🚱 button, Control Panel, Network and Internet, Windows Firewall and click Change settings.

When the User Account Control screen appears, do the following.

- Users who have administrator rights: Click Continue.
- For users who do not have administrator rights: Enter the administrator password and click **OK**.
- 3 Make sure that **Windows Firewall** on the **General** tab is set to On.
- 4 Click the **Exceptions** tab.
- 5 Click the Add port... button.
- 6 To add port **54925** for network scanning, enter the information below:
  - 1. In Name: Enter any description, for example, "Brother Scanner".
  - 2. In Port number: Enter "54925".
  - 3. Make sure **UDP** is selected.
  - 4. Click **OK**.
- Click the Add port... button.
- 8 To add port **54926** for network PC Fax, enter the information below:
  - 1. In Name: Enter any description, for example, "Brother PC Fax".
  - 2. In Port number: Enter "54926".
  - 3. Make sure **UDP** is selected.
  - 4. Click **OK**.

9 Make sure that the new setting is added and is checked, and then click **OK**.

If you still have trouble with your network connection such as network scanning or printing, check File and Printer Sharing box in the Exceptions tab and then click OK.
# Wireless network troubleshooting

### Wireless setup problems

### The Brother print server is not found during setup by the Wireless Device Setup Wizard.

- 1 Make sure that the machine is powered on, is on-line and ready to print.
- 2 Move your computer closer to the Brother machine and try again.
- 3 Reset the print server back to its default factory settings and try again. For the information how to reset to the factory default settings, see *Restoring the network settings to factory default* on page 114.

# Why do I have to change my machine's network setting to "Wired LAN" during setup although I am trying to setup Wireless LAN?

If you are using Windows<sup>®</sup> 2000, Mac OS X 10.3.9 - 10.5.x or your computer is connected to the wireless network using a network cable, it is recommended you temporarily connect the machine to your access point, hub or router using a network cable. You will also need to change your machine's network setting to wired LAN temporarily. Your machine's network setting will be changed to wireless LAN during the course of the setup.

■ Windows<sup>®</sup>:

Wireless configuration for Windows<sup>®</sup> using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-377CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW) on page 48.

Using the Setup Wizard from the control panel on page 28.

Macintosh:

Wireless Configuration for Macintosh using the Brother installer application (For DCP-373CW, DCP-375CW, DCP-375CW, DCP-593CW, DCP-595CW, DCP-597CW, MFC-495CW and MFC-795CW) on page 72.

Using the Setup Wizard from the control panel on page 28.

### Wireless connection problem

### The wireless network connection is sometimes disabled.

The wireless network connection status is affected by the environment where the Brother machine and other wireless devices are located. The following conditions may cause connection problems:

- A concrete or metal framed wall is located between the Brother machine and the access point.
- Electric appliances such as televisions, computer appliances, microwave ovens, intercoms, mobile/cellular phone, battery chargers or AC power adaptors are installed close to your network.
- A broadcast station or high-tension wire is located close to your network.
- A nearby fluorescent light is being switched on or off.

Appendix A

# **Using services**

A service is a resource that can be accessed by computers that wish to print to the Brother print server. The Brother print server provides the following predefined services (do a SHOW SERVICE command in the Brother print server remote console to see a list of available services): Enter HELP at the command prompt for a list of supported commands.

Service (Example)	Definition
BINARY_P1	TCP/IP binary, NetBIOS service
TEXT_P1	TCP/IP text service (adds carriage return after each line feed)
BRNxxxxxxxxxx	TCP/IP binary

Where xxxxxxxxx is your machine's MAC Address / Ethernet Address.

# Other ways to set the IP address (for advanced users and administrators)

For information on how to configure your machine for a network using the BRAdmin Light utility, see *Setting up the IP address and subnet mask* on page 13.

### Using DHCP to configure the IP address

The Dynamic Host Configuration Protocol (DHCP) is one of several automated mechanisms for IP address allocation. If you have a DHCP server in your network, the print server will automatically obtain its IP address from DHCP server and register its name with any RFC 1001 and 1002-compliant dynamic name services.

### 🖉 Note

If you do not want your print server configured via DHCP, BOOTP or RARP, you must set the 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 BOOT METHOD, use the BRAdmin Light utility.

### Using BOOTP to configure the IP address

BOOTP is an alternative to rarp that has the advantage of allowing configuration of the subnet mask and gateway. In order to use BOOTP to configure the IP address make sure that BOOTP is installed and running on your host computer (it should appear in the /etc/services file on your host as a real service; type man bootpd or refer to your system documentation for information). BOOTP is usually started up via the /etc/inetd.conf file, so you may need to enable it by removing the "#" in front of the bootp entry in that file. For example, a typical bootp entry in the /etc/inetd.conf file would be:

#bootp dgram udp wait /usr/etc/bootpd bootpd -i

Depending on the system, this entry might be called "bootps" instead of "bootp".

### 🖉 Note

In order to enable BOOTP, simply use an editor to delete the "#" (if there is no "#", then BOOTP is already enabled). Then edit the BOOTP configuration file (usually /etc/bootptab) and enter the name, network type (1 for Ethernet), MAC Address (Ethernet Address) and the IP address, subnet mask and gateway of the print server. Unfortunately, the exact format for doing this is not standardized, so you will need to refer to your system documentation to determine how to enter this information (many UNIX<sup>®</sup> systems also have template examples in the bootptab file that you can use for reference). Some examples of typical /etc/bootptab entries include: ("BRN" below is "BRW" for a wireless network.)

BRN008077310107 1 00:80:77:31:01:07 192.189.207.3

and:

BRN008077310107:ht=ethernet:ha=008077310107:\ip=192.189.207.3:

Certain BOOTP host software implementations will not respond to BOOTP requests if you have not included a download filename in the configuration file; if this is the case, simply create a null file on the host and specify the name of this file and its path in the configuration file.

As with rarp, the print server will load its IP address from the BOOTP server when the machine is powered on.

### Using RARP to configure the IP address

The Brother print server's IP address can be configured using the Reverse ARP (RARP) facility on your host computer. This is done by editing the /etc/ethers file (if this file does not exist, you can create it) with an entry similar to the following:

00:80:77:31:01:07 BRN008077310107 (or BRW008077310107 for a wireless network)

Where the first entry is the MAC Address (Ethernet Address) of the print server and the second entry is the name of the print server (the name must be the same as the one you put in the /etc/hosts file).

If the rarp daemon is not already running, start it (depending on the system the command can be rarpd, rarpd -a, in.rarpd -a or something else; type man rarpd or refer to your system documentation for additional information). To verify that the rarp daemon is running on a Berkeley UNIX<sup>®</sup> based system, type the following command:

ps -ax | grep -v grep | grep rarpd

For AT&T UNIX<sup>®</sup>-based systems, type:

ps -ef | grep -v grep | grep rarpd

The Brother print server will get the IP address from the rarp daemon when the machine is powered on.

### Using APIPA to configure the IP address

The Brother print server supports the Automatic Private IP Addressing (APIPA) protocol. With APIPA, DHCP clients automatically configure an IP address and subnet mask when a DHCP server is not available. The device chooses it's own IP address in the range 169.254.1.0 through to 169.254.254.255. The subnet mask is automatically set to 255.255.0.0 and the gateway address is set to 0.0.0.0.

By default, the APIPA protocol is enabled. If you want to disable the APIPA protocol, you can disable it using control panel of the machine. For more information, see *APIPA* on page 105.

### Using ARP to configure the IP address

If you are unable to use the BRAdmin application and your network does not use a DHCP server, you can also use the ARP command. The ARP command is available on Windows<sup>®</sup> systems that have TCP/IP installed as well as UNIX<sup>®</sup> systems. To use arp enter the following command at the command prompt:

arp -s ipaddress ethernetaddress

Where ethernetaddress is the Ethernet address (MAC address) of the print server and ipaddress is the IP address of the print server. For example:

### ■ Windows<sup>®</sup>

Windows<sup>®</sup> systems require the dash "-" character between each digit of the MAC Address (Ethernet Address).

arp -s 192.168.1.2 00-80-77-31-01-07

### ■ UNIX<sup>®</sup>/Linux<sup>®</sup>

Typically, UNIX<sup>®</sup> and Linux<sup>®</sup> systems require the colon ":" character between each digit of the MAC Address (Ethernet Address).

arp -s 192.168.1.2 00:80:77:31:01:07

### 🖉 Note

You must be on the same Ethernet segment (that is, there cannot be a router between the print server and operating system) to use the arp -s command.

If there is a router, you may use BOOTP or other methods described in this chapter to enter the IP address. If your Administrator has configured the system to deliver IP addresses using BOOTP, DHCP or RARP your Brother print server can receive an IP address from any one of these IP address allocation systems. In which case, you will not need to use the ARP command. The ARP command only works once. For security reasons, once you have successfully configured the IP address of a Brother print server using the ARP command, you cannot use the ARP command again to change the address. The print server will ignore any attempts to do this. If you wish to change the IP address again, use TELNET (using the SET IP ADDRESS command) or factory reset the print server (which will then allow you to use the ARP command again).

To configure the print server and to verify the connection, enter the following command ping ipaddress where ipaddress is the IP address of the print server. For example, ping 192.189.207.2.

### Using the TELNET console to configure the IP address

You can also use the TELNET command to change the IP address.

TELNET is an effective method to change the machine's IP address. But a valid IP address must already be programmed into the print server.

Type TELNET ipaddress at the command prompt, where ipaddress is the IP address of the print server. When you are connected, press the Return or Enter key to get the "#" prompt. Enter a password if you have set it.

You will be prompted for a user name. Enter anything in response to this prompt.

You will then get the Local> prompt. Type SET IP ADDRESS ipaddress, where ipaddress is the desired IP address you wish to assign to the print server (check with your network administrator for the IP address to use). For example:

Local> SET IP ADDRESS 192.168.1.3

You will now need to set the subnet mask by typing SET IP SUBNET subnet mask, where subnet mask is the desired subnet mask you wish to assign to the print server (check with your network administrator for the subnet mask to use). For example:

Local> SET IP SUBNET 255.255.255.0

If you do not have any subnets, use one of the following default subnet masks:

255.0.0.0 for class A networks

255.255.0.0 for class B networks

255.255.255.0 for class C networks

The leftmost group of digits in your IP address can identify the type of network you have. The value of this group ranges from 1 through 127 for Class A networks (e.g., 13.27.7.1), 128 through 191 for Class B networks (e.g., 128.10.1.30), and 192 through 255 for Class C networks (e.g., 192.168.1.4).

If you have a gateway (router), enter its address with the command SET IP ROUTER routeraddress, where routeraddress is the desired IP address of the gateway you wish to assign to the print server. For example:

Local> SET IP ROUTER 192.168.1.4

Type SET IP METHOD STATIC to set the method of IP access configuration to static.

To verify that you have entered the IP information correctly, type SHOW IP.

Type EXIT or Ctrl-D (i.e., hold down the control key and type "D") to end the remote console session.

# Installation when using a Network Print Queue or Share (printer driver only)

# Note If you are going to connect to a shared printer on your network, we recommend that you ask your system administrator about the queue or share name for the printer prior to installation. Start the CD-ROM installation menu program according to the *Quick Setup Guide*. Choose the model name and your language (if necessary), and then click Initial Installation or Advanced. Click Printer Driver Only (for Network). Click Next in response to the Welcome message. Follow the on-screen instructions. Choose Standard Installation and click Next. Choose Network Shared Printer, and then click Next. Choose your printer's queue, and then click OK. Note

Contact your administrator if you are not sure about the location and name of the printer on the network.

8 Click Finish.

# Installation when using Web Services (Windows Vista<sup>®</sup>)

### 🖉 Note

- You must configure the IP address on your machine before you proceed with this section. If you have not configured the IP address, see *Configuring your machine for a network with an Ethernet cable connection (Not available for MFC-253CW, MFC-255CW and MFC-257CW)* on page 10 first.
- Verify the host computer and print server are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- Only printer support is installed with Web Services.



2 The machine's Web Services Name will be shown with the printer icon. Right click the machine you want to install.

### 🖉 Note

The Web Services Name for the Brother machine is your model name and the MAC Address (Ethernet Address) of your machine (e.g. Brother MFC-XXXX [XXXXXXXXXXXX]).

- **3** From the pull down menu, click **Install**.
- 4 When the User Account Control screen appears, do the following.
  - Users who have administrator rights: Click **Continue**.
  - For users who do not have administrator rights: Enter the administrator password and click **OK**.
- 5 Choose Locate and install driver software.
- 6 Insert Brother CD-ROM.
- 7 Choose **Don't search online** and then **Browse my computer for driver software** on your computer.
- 8 Choose your CD-ROM drive then choose the **driver**, and then **win2kxpvista** folder.
- 9 Choose your language and then click **OK** to begin installation.

B

# **Print server specifications**

### Wired network (Not available for MFC-253CW, MFC-255CW and MFC-257CW)

Network Board Model name	NC-190h				
LAN	You can connect your machine to a network for Network Printing, Network Scanning, and PC Fax Send <sup>1</sup> , PC Fax Receive <sup>2</sup> (Windows <sup>®</sup> only) and Remote Setup <sup>2</sup> . Also included is Brother BRAdmin Light <sup>3</sup> Network Management software.				
Support for	Windows <sup>®</sup> 2000 Professiona	al, Windows <sup>®</sup> XP,			
		x64 Edition, Windows Vista <sup>®</sup> , 8 and Windows Server <sup>®</sup> 2003 x64 Edition <sup>4</sup>			
	Mac OS X 10.3.9 - 10.4.x - 7	10.5.x <sup>5</sup>			
Protocols	IPv4:	ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), NetBIOS/WINS, LPR/LPD, Custom Raw Port/Port9100, DNS Resolver, mDNS, LLMNR responder, FTP Server, TELNET, SNMPv1, TFTP, Scanner Port, Web Services (Printing), LLTD responder			
Network Type	Ethernet 10/100 BASE-TX A	Auto Negotiation			
Management utilities <sup>6</sup>	BRAdmin Light for Windows <sup>®</sup> 2000 Professional, Windows <sup>®</sup> XP, Windows <sup>®</sup> XP Professional x64 Edition, Windows Vista <sup>®</sup> and Mac OS X 10.3.9 - 10.4.x - 10.5.x				
	BRAdmin Professional 3 for Windows <sup>®</sup> 2000 Professional, Windows <sup>®</sup> XP, Windows <sup>®</sup> XP Professional x64 Edition and Windows Vista <sup>®</sup>				
	Web BRAdmin <sup>6</sup> for Windows <sup>®</sup> 2000 Professional, Windows <sup>®</sup> XP, Windows <sup>®</sup> XP Professional x64 Edition and Windows Vista <sup>®</sup>				
	Client computers with a web	browser supporting Java™.			

<sup>1</sup> Not available for DCP models.

<sup>2</sup> Not available for DCP models and MFC-295CN

<sup>3</sup> If you require more advanced printer management, use the latest Brother BRAdmin Professional 3 utility version that is available as a download from <a href="http://solutions.brother.com">http://solutions.brother.com</a>.

<sup>4</sup> Printing only for Windows Server<sup>®</sup> 2003/2008

<sup>5</sup> For the latest driver updates for the Mac OS X you are using, visit us at <u>http://solutions.brother.com</u>.

<sup>6</sup> Web BRAdmin and BRAdmin Professional 3 are available as a download from http://solutions.brother.com.

### Wireless network (Not available for DCP-365CN, DCP-395CN and MFC-295CN)

Network Board Model name	NC-200w				
LAN	You can connect your machine to a network for Network Printing, Network Scanning, and PC Fax Send <sup>1</sup> , PC Fax Receive <sup>2</sup> (Windows <sup>®</sup> only) and Remote Setup <sup>2</sup> . Also included is Brother BRAdmin Light <sup>3</sup> Network Management software.				
Support for	Windows <sup>®</sup> 2000 Pr	ofessional, Windows <sup>®</sup> XP,			
		essional x64 Edition, Windows Vista <sup>®</sup> , Windows Server <sup>®</sup> ndows Server <sup>®</sup> 2003 x64 Edition <sup>4</sup>			
	Mac OS X 10.3.9 -	10.4.x - 10.5.x <sup>5</sup>			
Protocols	IPv4:	ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), NetBIOS/WINS, LPR/LPD, Custom Raw Port/Port9100, DNS Resolver, mDNS, LLMNR responder, FTP Server, TELNET, SNMPv1, TFTP, Scanner Port, Web Services (Printing), LLTD responder			
Network Type	IEEE 802.11 b/g (Wireless LAN)				
Management utilities <sup>6</sup>	-	Windows <sup>®</sup> 2000 Professional, Windows <sup>®</sup> XP, ressional x64 Edition, Windows Vista <sup>®</sup> and 10.4.x - 10.5.x			
	BRAdmin Professional 3 for Windows <sup>®</sup> 2000 Professional, Windows <sup>®</sup> XP, Windows <sup>®</sup> XP Professional x64 Edition and Windows Vista <sup>®</sup>				
	Web BRAdmin <sup>6</sup> for Windows <sup>®</sup> 2000 Professional, Windows <sup>®</sup> XP, Windows <sup>®</sup> XP Professional x64 Edition and Windows Vista <sup>®</sup>				
	Client computers w	vith a web browser supporting Java™.			
Frequency	2412-2472 MHz				
RF channels	USA/Canada	1-11			
	Others	1-13			
Communication mode	Infrastructure, Ad-h	noc (802.11b only)			
Data rates	802.11b 11/5.5/2/1 Mbps				
	802.11g 54/48/36/24/18/12/11/9/6/5.5/2/1 Mbps				
Link distance	70m (233 ft.) at lowest data rate (The distance rate will vary upon environment and other equipment location.)				
Network Security	SSID/ESSID, 128 (104) / 64 (40) bit WEP, WPA2-PSK (AES), WPA-PSK (TKIP/AES)				
Setup Support Utility (One-Push method)	SecureEasySetup	™, Wi-Fi Protected Setup™, AOSS™			

- <sup>1</sup> Not available for DCP models.
- <sup>2</sup> Not available for DCP models, MFC-253CW, MFC-255CW and MFC-257CW
- <sup>3</sup> If you require more advanced printer management, use the latest Brother BRAdmin Professional 3 utility version that is available as a download from <a href="http://solutions.brother.com">http://solutions.brother.com</a>.
- <sup>4</sup> Printing only for Windows Server<sup>®</sup> 2003/2008
- <sup>5</sup> For the latest driver updates for the Mac OS X you are using, visit us at <u>http://solutions.brother.com</u>.
- <sup>6</sup> Web BRAdmin and BRAdmin Professional 3 are available as a download from <u>http://solutions.brother.com</u>.

# Function table and default factory settings

### For DCP-365CN and MFC-295CN

Level1	Level2	Level3	Options
5.Network	1.TCP/IP	1.BOOT Method	Auto/Static/RARP/BOOTP/DHCP
		2.IP Address	[000-255].[000-255].[000-255].
			[000].[000].[000]. <sup>1</sup>
		3.Subnet Mask	[000-255].[000-255].[000-255].
			[000].[000].[000]. <sup>1</sup>
		4.Gateway	[000-255].[000-255].[000-255].
			[000].[000].[000].
		5.Node Name	<b>BRNXXXXXXXXXXXXXXXXXXX</b>
			(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].
		8.DNS Server	Primary/Secondary
			[000-255].[000-255].[000-255].[000-255].
			[000].[000].[000].
		9.APIPA	<b>On/</b> Off
	2.Ethernet		Auto/100B-FD/100B-HD/10B-FD/10B-HD
	3.MAC Address		
	0.Network Reset		

### For DCP-395CN

Level1	Level2	Level3	Options1
Network	TCP/IP	BOOT Method	Auto/Static/RARP/BOOTP/DHCP
		IP Address	[000-255].[000-255].
			[000-255].[000-255].
			[000].[000].[000].[000] <sup>1</sup>
		Subnet Mask	[000-255].[000-255].
			[000-255].[000-255].
			[000].[000].[000].[000] <sup>1</sup>
		Gateway	[000-255].[000-255].
			[000-255].[000-255].
			[000].[000].[000].
		Node Name	BRNXXXXXXXXXXXXXXX = (your Ethernet address)
			(up to 15 characters)
			BRNXXXXXXXXXXX*
		WINS Config	Auto/Static
		WINS Server	Primary/Secondary
			[000-255].[000-255]. [000-255].[000-255].
			[000].[000].[000].[000]
		DNS Server	Primary/Secondary
			[000-255].[000-255].
			[000-255].[000-255].
			[000].[000].[000].[000]
		APIPA	<b>On</b> /Off
	Ethernet		Auto/100B-FD/100B-HD/10B-FD/10B-HD
	MAC Address		
	Network Reset		

### For MFC-253CW, MFC-255CW and MFC-257CW

Level1	Level2	Level3	Options
5.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]. <sup>1</sup>
		3.Subnet Mask	[000-255].[000-255].[000-255].[000-255].
			[000].[000].[000]. <sup>1</sup>
		4.Gateway	[000-255].[000-255].[000-255].[000-255].
			[000].[000].[000].
		5.Node Name	BRWxxxxxxxxxxx= (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].
		8.DNS Server	Primary/Secondary
			[000-255].[000-255].[000-255].[000-255].
			[000].[000].[000].
		9.APIPA	<b>On</b> /Off
	2.Setup Wizard	—	(Choose SSID from list or manually add SSID)
	3.SES/WPS/AOSS	—	
	4.WPS w/PIN Code	—	
	5.WLAN Status	1.Status	Active(11b)/Active(11g)/ Connection Fail
		2.Signal	Signal:Strong/Signal:Medium/Signal:Weak/ Signal:None
		3.SSID	(Shows SSID with up to 32 digits)
		4.Comm. Mode	Ad-hoc/Infrastructure
	6.MAC Address		
	7.WLAN Enable		On/ <b>Off</b>
	0.Network Reset		

### For DCP-373CW, DCP-375CW and DCP-377CW

Level1	Level2	Level3	Level4	Options1
3.Network	1.Wired LAN	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] <sup>1</sup>
			3.Subnet Mask	[000-255].[000-255].
				[000-255].[000-255].
				[000].[000].[000].[000] <sup>1</sup>
			4.Gateway	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]
			5.Node Name	BRNXXXXXXXXXXXXXX = (your Ethernet address)
				(up to 15 characters)
				BRNXXXXXXXXXXXX*
			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	<b>On</b> /Off
		2.Ethernet		Auto/100B-FD/100B-HD/10B-FD/ 10B-HD
		3.MAC Address		
	2.WLAN	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] <sup>1</sup>
			3.Subnet Mask	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000] <sup>1</sup>
			4.Gateway	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]

Level1	Level2	Level3	Level4	Options1
3.Network	2.WLAN	1.TCP/IP	5.Node Name	BRWXXXXXXXXXXX
(Continued)	(Continued)	(Continued)		= (your Ethernet address)
				(up to 15 characters)
				BRWXXXXXXXXXXXXX
			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.SES/WPS/AOSS	—	
		4.WPS w/PIN Code	—	
		5.WLAN Status	1.Status	Active(11b)/Active(11g)/ Connection Fail
			2.Signal	Signal:Strong/Signal:Medium/ Signal:Weak/Signal:None
			3.SSID	(Shows SSID with up to 32 digits)
			4.Comm. Mode	Ad-hoc/Infrastructure
		6.MAC Address		
	3.Network I/F			Wired LAN/WLAN
	0.Network Reset			

### For other machines

Level1	Level2	Level3	Options1	Options2
Network	Wired LAN	TCP/IP	BOOT Method	Auto/Static/RARP/BOOTP/DHCP
			IP Address	[000-255].[000-255].
				[000-255].[000-255].
				[000].[000].[000].[000] <sup>1</sup>
			Subnet Mask	[000-255].[000-255].
				[000-255].[000-255].
				[000].[000].[000].[000] <sup>1</sup>
			Gateway	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]
			Node Name	BRNXXXXXXXXXXX = (your Ethernet address)
				(up to 15 characters)
				BRNXXXXXXXXXXX*
			WINS Config	Auto/Static
			WINS Server	Primary/Secondary
				[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]
			DNS Server	Primary/Secondary
				[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]
			APIPA	<b>On</b> /Off
		Ethernet		Auto/1008-FD/1008-HD/108-FD/108-HD
		MAC Address		
	WLAN	TCP/IP	BOOT Method	Auto/Static/RARP/BOOTP/DHCP
			IP Address	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000] <sup>1</sup>
			Subnet Mask	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000] <sup>1</sup>
			Gateway	[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]

Level1	Level2	Level3	Options1	Options2
Network (Continued)	WLAN (Continued)	TCP/IP (Continued)	Node Name	BRWXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
(Continued)	(Continued)	(Continued)		(up to 15 characters)
				BRWXXXXXXXXXXX*
			WINS Config	Auto/Static
			WINS Server	Primary/Secondary
				[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]
			DNS Server	Primary/Secondary
				[000-255].[000-255]. [000-255].[000-255].
				[000].[000].[000].[000]
			APIPA	<b>On</b> /Off
		Setup Wizard	—	(Choose SSID from list or manually add SSID)
		SES/WPS/AOSS	—	
		WPS w/PIN Code	—	
		WLAN Status	Status	Active(11b)/Active(11g)/ Connection Failed
			Signal	Signal:Strong/Signal:Medium/ Signal:Weak/Signal:None
			SSID	(Shows SSID with up to 32 digits)
			Comm. Mode	Ad-hoc/Infrastructure
		MAC Address		
	Network I/F			Wired LAN/WLAN
	Network Reset			

■ The factory settings are shown in bold.

<sup>1</sup> On connection to the network, the machine will automatically set the IP address and Subnet Mask to value appropriate for your network.

# **Entering Text**

### For Touchscreen models

When you are setting certain menu selections, you may need to enter text into the machine. Press Me to choose numbers, characters or special characters. Up to four letters are assigned to each button on the Touchscreen.

By pressing the correct button repeatedly, you can access the character you want.



### **Inserting spaces**

To enter a space, press 🜆 to choose special characters, then press the space button 🗔 or 🗔.



The characters available may differ depending on your country.

### **Making corrections**

If you entered an incorrect letter and want to change it, use the arrow buttons to move the cursor under the incorrect character. Then press ⓐ. Re-enter the correct character. You can also insert letters by moving the cursor and entering a character.

### **Repeating letters**

If you need to enter a letter that is on the same button as the letter before, press b to move the cursor to the right before you press the button again.

### For MFC models

When you are setting certain menu selections, you may need to enter text into the machine. Most number keys have three or four letters printed on keys. The keys for 0, # and \* do not have printed letters because they are used for special characters.

By pressing the correct number key repeatedly, you can access the character you want.

### For setting wireless network options

Press Key	one time	two times	three times	four times	five times	six times	seven times	eight times
2	а	b	С	А	В	С	2	а
3	d	е	f	D	Е	F	3	d
4	g	h	i	G	Н	I	4	g
5	j	k	I	J	K	L	5	j
6	m	n	0	М	Ν	0	6	m
7	р	q	r	S	Р	Q	R	S
8	t	u	v	Т	U	V	8	t
9	W	х	У	Z	W	Х	Y	Z

### For setting other menu selections

Press Key	one time	two times	three times	four times
2	А	В	С	2
3	D	Е	F	3
4	G	Н	I	4
5	J	К	L	5
6	М	Ν	0	6
7	Р	Q	R	S
8	Т	U	V	8
9	W	Х	Y	Z

### **Putting spaces**

To enter a space in a fax number, press ► once between numbers. To enter a space in a name, press ► twice between characters.

### **Making corrections**

If you entered a letter incorrectly and want to change it, press ◀ to move the cursor under the incorrect character, press **Clear/Back**. Re-enter the correct character. You can also back up and insert letters.

### **Repeating letters**

If you need to enter a letter that is on the same key as the letter before, press ▶ to move the cursor to the right before you press the key again.

### Special characters and symbols

Press \*, **#** or **0**, and then press  $\triangleleft$  or  $\triangleright$  to move the cursor under the special character or symbol you want. Then press **OK** to choose it. The symbols and characters below will appear depending on your menu selection.

Press * for	(space) ! " # \$ % & ' ( ) * + , /
Press # for	:;<=>?@[]^_
Press 0 for	0 \ {   } ~

### For DCP models

Press ▲ or ▼ repeatedly to enter the text and press **OK**.

### For DCP-373CW, DCP-375CW and DCP-377CW

Press Enlarge/Reduce to move the cursor to the left.

Press Number of Copies to move the cursor to the right.

### For other models

Press ◀ or ▶ repeatedly to move the cursor.

Press ▲ or ▼ for characters below abcdefghijkImnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789 (space)!"#\$%&'()\*+,-./:;<=>?@[\]^ `{]}~

### Making corrections

### For DCP-373CW, DCP-375CW and DCP-377CW

If you entered an incorrect letter and want to change it, press **Enlarge/Reduce** or **Number of Copies** to position the cursor under the incorrect letter. Use the ▲ and ▼ keys to change to the correct letter, then press **Number of Copies** repeatedly to move the cursor back to the end of the text.

Press Stop/Exit. All letters above and to the right of the cursor will be deleted. Re-enter the correct letter.

### For other models

If you entered an incorrect letter and want to change it, press  $\triangleleft$  or  $\triangleright$  to position the cursor under the incorrect letter. Use the  $\blacktriangle$  and  $\forall$  keys to change to the correct letter, then press  $\triangleright$  repeatedly to move the cursor back to the end of the text.

Press **Stop/Exit**. All letters above and to the right of the cursor will be deleted. Re-enter the correct letter.

Appendix C

# **Open Source Licensing Remarks**

### Part of the software embedded in this product is gSOAP software.

Portions created by gSOAP are Copyright (C) 2001 2004 Robert A. van Engelen, Genivia inc. All Rights Reserved.

THE SOFTWARE IN THIS PRODUCT WAS IN PART PROVIDED BY GENIVIA INC AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANYWAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Permission to use, copy, modify, and distribute this software for any purpose and without fee is hereby granted, provided that the above copyright notices appear in all copies and that both the copyright notice and this permission notice appear in supporting documentation. This software is provided "as is" without express or implied warranty.

### This product includes SNMP software from WestHawk Ltd.

Copyright (C) 2000, 2001, 2002 by Westhawk Ltd

Permission to use, copy, modify, and distribute this software for any purpose and without fee is hereby granted, provided that the above copyright notices appear in all copies and that both the copyright notice and this permission notice appear in supporting documentation. This software is provided "as is" without express or implied warranty.

### **OpenSSL statements**

### **OpenSSL** License

Copyright © 1998-2005 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

### Original SSLeay License

Copyright © 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, Ihash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

### D Index

### Α

	iv 21
	25, 39, 57, 81, 107 
ARP	

### Β

BINARY_P1 BOOTP BRAdmin Light BRAdmin Professional 3	8, 138 1, 4, 13, 16
Brother accessories and supplies Brother installer application Brother Solutions Center	25, 27

### C

Channels	20
Control Panel	95
Custom Raw Port	9

### D

DHCP	
DNS Client	
DNS Server	
Driver Deployment Wizard	

# E \_\_\_\_\_

Encryption	21
F	
Factory Default Firewall	114 129, 132, 134
Gateway	
IP Address	10, 97

L	
LLMNR	9
LPR/LPD	8

### Μ

MAC Address	
Macintosh Printing	125
mDNS	9

N	
NetBIOS name resolution	8
Network Configuration List	
Network Key	21
Network Printing	122
Network Shared Printing	6
Node Name	

# 0

Open Source Licensing Remarks	
Open system	
Operating systems	1

# Р\_\_\_\_\_

PBC Peer-to-Peer	• •
PIN Method	
Ping	
Print server setting	
Protocol	

# R

RARP	8, 139
Remote Setup	1, 18
Restoring the network settings	114
RFC 1001	137

### Index

# S

SecureEasySetup™ Service	
Shared key	
Simple Network Configuration	
SNMP	9
Specifications	
SSID	
Status Monitor	
Subnet Mask	

# <u>T</u>\_\_\_\_\_

TCP/IP TCP/IP Printing	•
TELNET	
Text	
entering	154
special characters	156
TEXT_P1	137
TKIP	21
Trademarks	i

## W

Web BRAdmin	
Web Services9,	, 143
WEP	21
Wi-Fi Protected Setup™25, 26, 39, 44, 57, 81,	, 107
WINS	8
WINS Config	
WINS Server	. 102
Wireless network	19
WPA-PSK/WPA2-PSK	20