



Multi-Protocol On-board 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 (<http://solutions.brother.com>) is your one stop resource for all your printing needs. Download the latest drivers and utilities for your machine, read FAQs and troubleshooting tips.

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.

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

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IMPORTANT NOTE:

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

In Europe

Visit <http://www.brother.com> for contact information on your local Brother office.

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Overview

Operating Systems	10/100 BASE-TX Wired Ethernet (TCP/IP)	Printing	Scanning	PC-Fax Send* 1	PC-FAX Receive* 1	Photo Capture Center™	Remote Setup* 1	Status Monitor
Windows® 98/98SE/Me/2000/XP/XP Professional x64 Edition	✓	✓	✓	✓	✓	✓	✓	✓
Mac OS® X 10.2.4 or greater	✓	✓	✓	✓		✓	✓	✓

¹ Not available for DCP models.

Network function features

Your Brother machine has the following basic network functions.

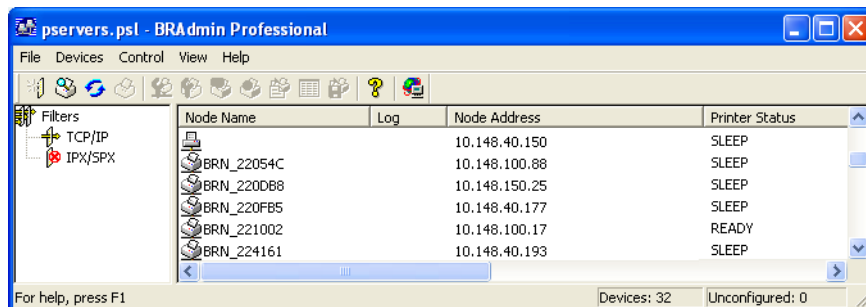
- Network printing
- Network scanning
- Network PC-FAX (Not available for DCP models)
- Network PhotoCapture Center™

Setting the IP address and subnet mask

Using the BRAdmin Professional utility and the TCP/IP protocol to configure your network printer (for Windows®)

How to configure your machine using the BRAdmin Professional utility

- 1 Start the BRAdmin Professional utility (from Windows® 98/98SE/Me/2000/XP/XP Professional x64 Edition), by clicking **Start/Programs/Brother Administrator Utilities/Brother BRAdmin Professional Utilities/BRAdmin Professional**.
- 2 Select **TCP/IP** in the left frame of the main BRAdmin window.
- 3 Select **Search Active Devices** from the **Devices** menu. BRAdmin Professional will search for new devices automatically.



- 4 Double click the unconfigured device.
- 5 Enter the **IP address**, **Subnet Mask** and **Gateway** (if needed) of your print server.
- 6 Click **OK**.
- 7 With the correctly programmed IP address, you will see the Brother print server in the device list.

Changing the print server settings

Using the Remote Setup to change the print server settings (MFC models only)

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Remote Setup for Windows®

The Remote Setup application allows you to configure network settings from a Windows® 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**, **Brother**, **MFC-XXXX**, **Remote Setup** (where XXXX is your model name).
- 2 Enter a password if you have set it.
(For MFC-5460CN and MFC-5860CN, the default password is “**access**”.)
- 3 Click **TCP/IP** or **Setup Misc.**
- 4 You can now change the print server settings.

LAN menu

The control panel LAN menu section can be used to configure network settings.

Press **Menu**, then press **▲** or **▼** to select LAN or press **Menu, 5** (For Monochrome Display models) and then proceed to the menu selection you wish to configure.

Please note that the machine is supplied with the BRAdmin Professional Windows[®] software, BRAdmin Light Macintosh[®] software and RemoteSetup which also can be used to configure network settings.

TCP/IP

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

IP Address

(For Monochrome Display models)

- 1 Press **Menu**, **5**, **1**, **2**.
- 2 Select **1** to change. Enter the IP address.
- 3 Press **OK**.
- 4 Press **Stop/Exit**.

(For Colour Display models)

- 1 Press **Menu**.
- 2 Press **▲** or **▼** to select **LAN**.
Press **OK**.
- 3 Press **▲** or **▼** to select **TCP/IP**.
Press **OK**.
- 4 Press **▲** or **▼** to select **IP Address**.
Press **OK**.
- 5 Press **▲** or **▼** to select **Change**.
Press **OK**.
- 6 Enter the IP address.
Press **OK**.



Note

For DCP models, 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**.

- 7 Press **Stop/Exit**.

Subnet Mask

(For Monochrome Display models)

- 1 Press **Menu**, **5**, **1**, **3**.
- 2 Select **1** to change. Enter the Subnet Mask address.
- 3 Press **OK**.
- 4 Press **Stop/Exit**.

(For Colour Display models)

- 1 Press **Menu**.
- 2 Press **▲** or **▼** to select **LAN**.
Press **OK**.
- 3 Press **▲** or **▼** to select **TCP/IP**.
Press **OK**.
- 4 Press **▲** or **▼** to select **Subnet Mask**.
Press **OK**.
- 5 Press **▲** or **▼** to select **Change**.
Press **OK**.
- 6 Enter the Subnet Mask address.
Press **OK**.



Note

For DCP models, 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**.

- 7 Press **Stop/Exit**.

Gateway

(For Monochrome Display models)

- 1 Press **Menu**, **5**, **1**, **4**.
- 2 Select **1** to change. Enter the Gateway address.
- 3 Press **OK**.
- 4 Press **Stop/Exit**.

(For Colour Display models)

- 1 Press **Menu**.
- 2 Press **▲** or **▼** to select **LAN**.
Press **OK**.
- 3 Press **▲** or **▼** to select **TCP/IP**.
Press **OK**.
- 4 Press **▲** or **▼** to select **Gateway**.
Press **OK**.
- 5 Press **▲** or **▼** to select **Change**.
Press **OK**.
- 6 Enter the Gateway address.
Press **OK**.



Note

For DCP models, 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**.

- 7 Press **Stop/Exit**.

Printing the Network Configuration List



Note

Node name: Node name appears in the Network Configuration List. The default Node name is "BRN_XXXXXX" ("XXXXXX" is the last six digits of Ethernet address).

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

(For Monochrome Display models)

- 1 Press **Menu**, **6**, **6**.
- 2 Press **Mono Start** or **Colour Start**.
- 3 Press **Stop/Exit**.

(For Colour Display models)

- 1 Press **Menu**.
- 2 Press **▲** or **▼** to select `Print Reports`.
Press **OK**.
- 3 Press **▲** or **▼** to select `Network Config`.
Press **OK**.
- 4 Press **Mono Start** or **Colour Start**.

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:



Note

This function restores all network settings to the factory default.

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(For Monochrome Display models)

- 1 Make sure the machine is not operating, then disconnect all the cables from the machine (except the power cable).
- 2 Press **Menu**, **5**, **0**.
- 3 Press **1** to select `1.Reset`.
- 4 Press **1** to select `1.Yes`.
- 5 The machine will re-start. You can now reconnect the network cable and configure the network settings to work with your network.

(For Colour Display models)

- 1 Press **Menu**.
- 2 Press **▲** or **▼** to select `LAN`.
Press **OK**.
- 3 Press **▲** or **▼** to select `Factory Reset`.
Press **OK**.
- 4 Press **1** for `Factory Reset`.
- 5 Press **1** for `Reboot`.



Note

For DCP models, press **+** for `Factory Reset` and then press **+** for `Reboot`.

- 6 The machine will re-start. You can now reconnect the network cable and configure the network settings to work with your network.

For Windows[®] 98/Me/2000/XP users

Windows[®] 98/Me/2000/XP users can send print job using Brother Peer-to-Peer Print software provided on the CD-ROM which we have supplied with the machine.

If you have already installed the printer driver, jump to *Printer driver already installed* on page 11.

Configuring the standard TCP/IP port

Printer driver not yet installed

- 1 Start the CD-ROM installation menu program according to the Quick Setup Guide.
- 2 Select the model name and your language (if necessary), and then click **Install Other Drivers or Utilities**.
- 3 Click **Printer Driver (Only)**.
- 4 Click **Next** in response to the Welcome message. Follow the on-screen instructions.
- 5 Select **Standard Installation** and click **Next**.
- 6 Select **Brother Peer-to-Peer Network Printer**, and then click **Next**.
- 7 Follow the on-screen instruction, and then click **OK**.



Note

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

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

Printer driver already installed

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

(For Windows® 2000/XP users)

- 1 From the **Printers and Faxes** windows, select the printer driver you wish to configure.
- 2 Select **File** and then **Properties**.
- 3 Click the **Ports** tab and click **Add Port**.
- 4 Select 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 Close **Add Port** and **Properties** dialog box.

(For Windows® 98/Me users)

- 1 From the **Printers** windows, select the printer driver you wish to configure.
- 2 Select **File** and then **Properties**.
- 3 Click the **Details** tab and click **Add Port**.
- 4 In the **Add Port** dialog, select **Other** and then **Brother LPR Port**.
- 5 Click **OK** and enter the port name.



Note

The default port name is BLP1. If you have already used this name, you will see an error message.

- 6 **Port Properties** dialog appears.
- 7 Enter the IP address of the machine that you wish to print to and click **OK**.

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 **setup.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 9.

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®.

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

Make sure you have completed the IP address setting of the Brother print server according to Chapter 2 or 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 displays `LAN Active` for 2 seconds after being 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 8.
- 4 Verify that the print server is on your network as follows:
 - **For Windows®**
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).
- 5 If you have tried 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 9.

6 Check the following.

■ For Windows®

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 re-install the drivers.

- Windows® XP SP2 and XP Professional x64 Edition users
 - 1 Click the **Start** button, **Settings**, and then **Control Panel**.
 - 2 Double click **Windows Firewall**.
 - 3 Click the **General** tab. Verify that **Off (not recommended)** is selected.
 - 4 Click **OK**.
- Windows® XP SP1 users
 - 1 Locate the “Windows” key on your keyboard. These are the keys with the Windows logo on it.



- 2 Press the “Windows” key plus the “E” key to open **My Computer**.
- 3 On the left, right click **My Network Places**, click **Properties**, then right click **Local Area Connection** and click **Properties**.
- 4 Click the **Advanced** tab. Under **Internet Connection Firewall**, verify that the box next to **Protect my computer...** is unchecked. If the box is selected, click the box to remove the check. Then, click **OK**.
- 5 Once your firewall is disabled, try reinstalling the Brother software package. For instructions on how to install from the CD-ROM, use the Quick Setup Guide we have provided with the machine.
- 6 If the installation completed successfully, the Firewall on your computer was rejecting the necessary network connection. In this case, you will need to disable the Firewall on your computer whenever you install the network drivers.



Note

After the Brother software package is installed, enable again your Firewall. For instructions on how to re-enable your Firewall software, refer to your User’s Guide or contact the Firewall software manufacturer.

- 7 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 9.

Printing problems

Print job is not printed

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

- 1 Make sure that the machine is powered on, is on-line and ready to print. Print the Network Configuration List of the machine and check if the settings such as IP address settings are correct for your network. See *Printing the Network Configuration List* on page 8 for information on how to print the Network Configuration List on your print server.
- 2 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:
 - **For Windows®**
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).
- 4 If you have tried 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 9.

Scanning and PC-FAX problems

Firewall setting on your PC may be rejecting the necessary network connection. Follow the instructions below to disable the Firewall. If you are using a personal Firewall software, see the User's Guide for your software or contact the software manufacturer.

■ Windows® XP SP2 users

- 1 Click the **Start** button, **Control Panel** and then **Windows Firewall**. Make sure that **Windows Firewall** on the **General** tab is set to On.
- 2 Click **Advanced** tab and **Settings** button in **Network Connection Settings**.
- 3 Click **Add** button, and in the **Description of service** field, enter any name. In the **Name or IP Address** field enter "localhost". In the internal and external port numbers fields enter "54925" for Network scanning. Choose **UDP** and click **OK**. Repeat this step adding Port 54926 for Network PC-FAX receiving and Port 137 for Windows®.
- 4 Make sure the new settings are added and the box is checked, and then click **OK**.

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



Note

- You must configure the IP address on your machine before you proceed with this chapter. If you have not configured the IP address, see *Configuring your network printer* on page 2 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.
 - Before installation, if you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows[®] XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.
-

- 1 Start the CD-ROM installation menu program according to the Quick Setup Guide.
- 2 Select the model name and your language (if necessary), and then click **Install Other Drivers or Utilities**.
- 3 Click **Printer Driver (Only)**.
- 4 Click **Next** in response to the Welcome message. Follow the on-screen instructions.
- 5 Select **Standard Installation** and click **Next**.
- 6 Select **Network Shared Printer**, and then click **Next**.
- 7 Select 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 in the network.

- 8 Click **Finish**.

Multi-function Print Server specifications

Model Name	NC-130h	
Operating system support	Windows® 98/98SE/Me/2000/XP, Windows® XP Professional x64 Edition Mac OS® X 10.2.4 or greater	
Protocol support	TCP/IP	ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), WINS/NetBIOS, WINS, DNS Resolver, LPR/LPD, Custom Raw Port/Port9100, FTP Server, mDNS, TELNET, SNMP
Network type	10/100BASE-TX Ethernet network	
Network printing	Windows® 98/98SE/Me Peer-to-Peer printing Windows® 2000/XP/XP Professional x64 Edition TCP/IP printing Macintosh® printing (Mac OS® X 10.2.4 or greater supporting TCP/IP)	
Network PC-FAX	Windows® 98/98SE/Me/2000/XP/XP Professional x64 Edition Mac OS® X 10.2.4 or greater (Send only)	
Network scanning	Windows® 98/98SE/Me/2000/XP Mac OS® X 10.2.4 or greater	
Network PhotoCapture Center™	Windows® 98/98SE/Me/2000/XP/XP Professional x64 Edition Mac OS® X 10.2.4 or greater	
Computer requirements (for drivers, BRAdmin Professional, Peer-to-Peer software, etc.)	Processor Minimum Speed	Intel® Pentium® II or equivalent for Windows® 98/98SE/Me/2000 Professional/XP AMD Opteron™, AMD Athlon™ 64, Intel® Xeon™ with intel® EM64T, Intel® Pentium® 4 with intel® EM64T for Windows® XP Professional x64 Edition
	Minimum RAM	32MB for Windows® 98/98SE/Me 64MB for Windows® 2000 Professional 128MB for Windows® XP 256MB for Windows® XP Professional x64 Edition
	Recommended RAM	64MB for Windows® 98/98SE/Me 128MB for Windows® 2000 Professional 256MB for Windows® XP 512MB for Windows® XP Professional x64 Edition
Macintosh® connection	Computer	Ethernet ready Power Macintosh®
	Processor Minimum Speed	All base models meet minimum requirements
	Minimum RAM	128MB for Mac OS® X 10.2.4 or greater
	Recommended RAM	160MB for Mac OS® X 10.2.4 or greater

Management utilities	BRAdmin Professional utility	Windows® 98/98SE/Me, Windows® 2000/XP/XP Professional x64 Edition
	BRAdmin Light	Mac OS® X 10.2.4 or greater
	Web BRAdmin	Windows® 2000 Professional/Server/Advanced Server, Windows® XP Professional

Function Table and Default Factory Settings

(For Monochrome Display models)

Level1	Level2	Level3	Options
5.LAN	1.Setup TCP/IP	1.BOOT Method	Auto/Static/RARP/BOOTP/DHCP
		2.IP Address	[169].[254].[001-254].[000-255] ¹
		3.Subnet Mask	[255].[255].[000].[000] ¹
		4.Gateway	[000].[000].[000].[000]
		5.Node Name	BRN_XXXXXX= (last 6 figures of Ethernet address) (up to 15 characters)
		6.WINS Config	Auto/Static
		7.WINS Server	(Primary) [000].[000].[000].[000] (Secondary) [000].[000].[000].[000]
		8.DNS Server	(Primary) [000].[000].[000].[000] (Secondary) [000].[000].[000].[000]
		9.APIPA	On/Off
	2.Setup Misc.	1.Ethernet	Auto/100B-FD/100B-HD/10B-FD/10B-HD
0.Factory Reset			

¹ On connection to the network, if the machine's **BOOT Method** is **Auto** the machine will attempt to automatically set the IP address and Subnet Mask from a boot server such as DHCP or BOOTP. If a boot server can not be found, an APIPA IP address will be allocated, such as 169.254.[001-254].[000-255]. If the **BOOT Method** of the machine is set to **Static** you will need to manually enter an IP address from the machine's control panel.

(For Colour Display models)

Level1	Level2	Level3	Options
LAN	TCP/IP	BOOT Method	Auto/Static/RARP/BOOTP/DHCP
		IP Address	[169].[254].[001-254].[000-255] ¹
		Subnet Mask	[255].[255].[000].[000] ¹
		Gateway	[000].[000].[000].[000]
		Node Name	BRN_XXXXXX = (last 6 figures of Ethernet address) (up to 15 characters)
		WINS Config	Auto/Static
		WINS Server	(Primary) [000].[000].[000].[000] (Secondary) [000].[000].[000].[000]
		DNS Server	(Primary) [000].[000].[000].[000] (Secondary) [000].[000].[000].[000]
		APIPA	On/Off
	Setup Misc.	Ethernet	Auto/100B-FD/100B-HD/10B-FD/10B-HD
Factory Reset			

¹ On connection to the network, if the machine's *BOOT Method* is *Auto* the machine will attempt to automatically set the IP address and Subnet Mask from a boot server such as DHCP or BOOTP. If a boot server can not be found, an APIPA IP address will be allocated, such as 169.254.[001-254].[000-255]. If the *BOOT Method* of the machine is set to *Static* you will need to manually enter an IP address from the machine's control panel.

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