4. Using PRICOM in Windows NT 4.0, Windows 2000 and Windows XP

This chapter explains how to print using TCP/IP, NetBEUI and NetBIOS over TCP/IP protocol of Windows NT 4.0, Windows 2000 and Windows XP.

Print Using TCP/IP of Windows NT 4.0, Windows 2000 and Windows XP.

Following indicates how to print using TCP/IP protocol.



-Make sure to install printer driver before you start using PRICOM.

-For the print using embedded printing client function, refer to "Print Using Embedded Printing Client Function" in this chapter.



Verify the PC Network Configuration

Windows NT 4.0

Make sure that the TCP/IP and Microsoft TCP/IP Printing are added to the Services.

- 1. Click-Start, then Settings, then Control Panel.
- 2. Double-click Network.
- 3. Verify that TCP/IP Protocol is included in Network Protocols.





-If *TCP/IP Protocol* is not in *Network Protocols*, click *Network Components*, then *TCP/IP Protocol* to add *TCP/IP protocol*.

4. Verify if the configuration is proper for your environment in "IP Address".



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5. Verify if *Microsoft TCP/IP Printing* is included in *Network Services*.





-If *TCP/IP Printing* is not in *Services*, click *Add*, then *Network Services*, then *Microsoft TCP/IP Printing* to add *Microsoft TCP/IP Printing*.

Windows 2000

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Verify if Internet Protocol [TCP/IP] is added.

- 1. Click Start, then Settings, then Control Panel, then Network and Dial-up Connections.
- 2. Right-click *Local Area Connection*, then click *Properties*.
- 3. Verify that Internet Protocol [TCP/IP] is added.





-If *Internet Protocol [TCP/IP]* is not in *Components checked are used by this connection*, click

Install, then Internet Protocol [TCP/IP] to add Internet Protocol [TCP/IP].

4. Verify if the configuration is proper for your environment in General.



Windows XP

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Verify if Internet Protocol (TCP/IP) is added.

- 1. Click start, then Control Panel, then Network and Internet Connections.
- 2. Right-click *Network Connections,* then click *Properties.*
- **3.** Verify that Internet Protocol (TCP/IP) is added.





-If Internet Protocol (TCP/IP) is not in This connection uses the following items, click Install, then Internet Protocol (TCP/IP) to add Internet Protocol (TCP/IP).



4. Verify if the configuration is proper for your environment in General.





-When you use TCP/ IP protocol in Windows XP, click *Local Area Connection Properties,* then *Advanced*, then remove the check from *Protect my computer and network by limiting or preventing access to this computer from the Internet.*

🕂 Local Area Connection Properties 🛛 🔹 💽
General Authentication Advanced
Internet Connection Firewall
Protect my computer and network by limiting or preventing access to this computer from the Internet
Leam more about Internet Connection Firewall.
If you're not sure how to set these properties, use the <u>Network Setup Wizard</u> instead.
OK Cancel

Quick Setup

1. Insert the User Software SX in the CD-ROM drive of your Windows PC. The main menu screen will be displayed.



2. The below screen will be displayed.



3. Quick Setup loads.



4. Confirm the Software License Agreement.



5. Select PRICOM to be configured.





-If PRICOM does not appear in the list, click Search.

You can search PRICOM by typing in Ethernet address directly.

6. Assign an IP address.

When you have DHCP server in your environment.

(A) Obtain an IP address from DHCP server automatically.





-If NetWare Client is installed and PRICOM is supporting NetWare (Enable), NetWare configuration screen will appear.

(B) Assign an IP address manually.



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-If NetWare Client is installed and PRICOM is supporting NetWare (Enable), NetWare configuration screen will appear.

When you do not have DHCP server in your environment.





-If NetWare Client is installed and PRICOM is supporting NetWare (Enable), NetWare configuration screen will appear.

7. Verify the configuration parameters.





8. Setup is complete.





-Proceed to install JC-Print2002. JC-Print2002 is a printing software that enables you to print directly from Windows.

-If you want to embedded priniting client function in Windows NT 4.0, Windows 2000 or Windows XP, refer to "Print Using Embedded Printing Function" in this chapter.

Install JC-Print2002

To print directly from Windows NT 4.0, Windows 2000 or Windows XP environment using TCP/IP protocol, use the JC-Print2002 bundled with PRICOM. JC-Print2002 is a printing software that enables users to use LPR (dedicated to silex products), IPP and Raw (9100) port. JC-Print2002 also records PRICOM Monitor SX. When instillation is complete, the wizard to add printer port to be started.



-LPR (Line Printer Remote)

A widely used popular protocol that enables users to execute printing to printers on the network. -IPP (Internet Printing Protocol)

This protocol enables users to execute printing to network printers remote via Internet. -Raw (9100) port

This function enables users to execute printing to printers on the local area network (LAN). Information can be printed at a high speed without spool.

-PRICOM Monitor SX

You can check the printer status with this monitor. For more details, refer to " 9. PRICOM Monitor SX".

1. Verifying installing method.

(A) Install JC-Print2002 following Quick Setup.



(B) Install JC-Print2002.





2. JC-Print2002 installation wizard to be started.



3. Confirm the Software License Agreement.



4. Verify the Destination Directory.





-Click Reference to specify the destination directory.



5. Specify the group name to be registered at the start menu.



6. Installation to be started.



7. Configuration is complete.



Adding Print Port

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JC-Print2002 has three available options for printing. *"Print with LPR"*, *"Print with IPP"*, and *"Print with Raw Mode"*. Select the protocol to be used for printing, then click Next to start using the specified printing option.

(A)

1. Adding printer port following the JC-Print2002 installation.



2. JC-Print2002 port adding wizard starts.



(B)Click Start, then Programs, then JC-Print2002, then JC-Print2002 Port adding.



Adding JC-Print2002 LPR Port.

1. Select LPR (Line Printer Remote).



2. Display the list of print servers on the network by **Searching Print Server**. Select PRICOM you want to configure.



3. Type in printer port name.



4. Verify the configuration.



5. Select the printer you want to use with PRICOM.



6. Port configuration is complete.



Adding JC-Print2002 IPP Port

1. Select IPP (Internet Printing Protocol).



2. Select either *Deactivate proxy server for Internet connection* or *Configure proxy server manually.*



3. Type in URL assigned to PRICOM for *Printer URL*. PRICOM IPP printer URL is "/ipp" or "/ipp/lp".





-If you click *Next*, you can make sure if the specified URL exists.



4. Configure the port name for printing.



5. Verify the configuration.



6. Select the printer you want to use with PRICOM.



7. Configuration is complete.



Adding JC-Print2002 Raw (9100) Port

1. Select Raw mode.

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2. Display the list of print servers on the network by **Searching Print Server**. Select PRICOM you want to configure.





-To verify if the specified print server can access 9100 port, click *Reference*.

3. Type in printer port name.





4. Verify the configuration.



5. Select the printer you want to use with PRICOM.



6. Configuration is complete.



Adding USB Port

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1. Select LPR (Line Printer Remote).



2. Click the Searching Print Server button to show a list of print servers in the network, then select this product.

Select "lp_u1" as the queue name.





-When you do not use the USB port, select "lp."

3. Type in printer port name.





4. Verify the configuration.



5. Select the printer you want to use with PRICOM.



6. Port configuration is complete.



Configuring Printer Driver

This section explains how to configure printer driver.

Ex.) Windows 2000



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-If you do not configure printer driver, the following error dialog may appear. In this case, click **No** and configure printer driver by following steps.



1. Click Start, then Settings, then Printer, then open the printer property.



2. Select Ports.





3. Configure bidirectional.





-If you use Canon Laser Shot Utility [Print Buddy II] and [NetSpot JobMonitor], check in *Enable bi*directional support.

4. Configuration is complete.



Print Using NetBEUI, NetBIOS over TCP/IP of Windows NT 4.0 and Windows 2000

Print Using NetBEUI, NetBIOS over TCP/IP of Windows NT 4.0

Follow the steps shown below to print from Windows NT 4.0, Windows 2000 and Windows XP environment using NetBEUI, NetBIOS over TCP/IP protocol.



-Only PRICOM 3100 supports printing using NetBIOS over TCP/IP.



- Make sure to install printer driver before you start using PRICOM.
- For further information on NetBEUI, NetBIOS over TCP/IP configuration, refer to Chapter 8.



Verify the Network Configuration (NetBEUI)

Make sure that *Workstation, NetBIOS interface* and *NetBEUI protocol* are added to *Network* of Windows NT 4.0.

- 1. Click Start, then Settings, then Control Panel.
- 2. Double-click *Network*.
- 3. Verify that *Workstation* and *NetBIOS interface* are added to the *Services*.



-If *Workstation* is not in the *Network Service* list, click *Add*, then select *Workstation* to add Workstation.

4. Verify NetBEUI is added to Protocol.



-If NetBEUI is not in the list, click Add, then select NetBEUI from Network protocol.

Verify the PC Network Configuration (NetBIOS over TCP/IP)

Make sure that *Workstation, TCP/IP* and *NetBIOS interface* are added to *Network* of Windows NT 4.0.

- 1. Click Start, then Settings, then Control Panel.
- 2. Double-click *Network* icon.
- 3. Verify that *Workstation* and *NetBIOS interface* are added to the *Services*.



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-If *Workstation* is not in the *Network Service* list, click *Add*, then select *Workstation* to add Workstation.

4. Verify TCP/IP is added to Protocol.



-If *TCP/IP* is not in the list, click *Add*, then select *TCP/IP* from *Network protocol*.

Print Using NetBEUI, NetBIOS over TCP/IP(When you use the EIO port)

1. Double-click *Network computer*, then open group name; *[PrintServers]* in the Whole Network.

2.	Printservers For Edit View Help	Double-click the computer (PRICOM).
<	Intervers Image: Imag	
3.	Packetig	Double-click the printer.

4. Confirmation message for printer configuration will be displayed.



5. Printer add wizard to be started. Follow the instruction given by the wizard to complete configuration. If you get the printer test page, adding printer is complete.

Print Using NetBEUI, NetBIOS over TCP/IP(When you use the USB port)

1. Double-click *Network computer*, then open group name; *[PrintServers]* in the Whole Network.



-When you do not use the USB, double-click the icon for which symbol "prn1" is marked.

4. Confirmation message for printer configuration will be displayed.



5. Printer add wizard to be started. Follow the instruction given by the wizard to complete configuration. If you get the printer test page, adding printer is complete.

Print Using NetBEUI, NetBIOS over TCP/IP of Windows 2000

Follow the steps shown below to print from Windows 2000 using NetBEUI, NetBIOS over TCP/IP protocol.



-Only PRICOM 3100 supports printing using NetBIOS over TCP/IP.



- Make sure to install printer driver before you start using PRICOM.

- For further information on NetBEUI, NetBIOS over TCP/IP configuration, refer to Chapter 8.



Build NetBEUI, NetBIOS over TCP/IP printing environment

Verify Network Configuration

Make sure that *NetBEUI protocol* and *Microsoft network shared service* are added to the *Network* of the Windows 2000.

- 1. Click Start, then Settings, then Control Panel, then Network and Internet Connection.
- 2. Open Properties of Local area connection.
- **3.** Verify NetBEUI protocol is added.



-If **NetBEUI** is not in the component list, click **Install**, then **Protocol**, then **NetBEUI protocol**.

4. Verify that *Microsoft Network Client* is added.



-If *Microsoft Network Client* is not in component list, click *Install*, then *Client*, then *Microsoft Network Client*.

Verify the PC Network Configuration (NetBIOS over TCP/IP)

Make sure that *Internet Protocol (TCP/IP)* and *Microsoft Network Sharing Service* are added to *Network* of Windows NT 4.0 and verify if *NetBIOS* is configured to *Internet Protocol (TCP/IP)*.

- 1. Click Start, then Settings, then Control Panel, then Network and Dial-up Connection.
- 2. Right-click *Local Area Connection*, then click *properties*.
- **3.** Verify Microsoft Network Sharing Services is added.



-If *Microsoft Network Sharing Services* is not in the list, click *Install,* then *Client,* then *Microsoft Network Sharing Services.*

4. Verify Internet Protocol (TCP/IP) is added.



-If Internet Protocol (TCP/IP) is not in Components checked are used by this connection, click Install, then Internet Protocol (TCP/IP) to add Internet Protocol (TCP/IP).

 Verify Enable NetBIOS over TCP/IP is selected by clicking Internet Protocol (TCP/IP), then Properties, then Details, then WINS.

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Print Using NetBEUI, NetBIOS over TCP/IP(When you use the EIO port.)

1. Double-click *My network*, then *Network*, then *Microsoft Windows Network* and open work group name, *PrintServers.*





4. Confirmation message for printer configuration will be displayed.



5. Printer add wizard to be started. Follow the instruction given by the wizard to complete configuration. If you get the printer test page, adding printer is complete.

Print Using NetBEUI, NetBIOS over TCP/IP(When you use the USB port.)

1. Double-click *My network*, then *Network*, then *Microsoft Windows Network* and open work group name, *PrintServers.*



4. Confirmation message for printer configuration will be displayed.



5. Printer add wizard to be started. Follow the instruction given by the wizard to complete configuration. If you get the printer test page, adding printer is complete.

Print Using NetBIOS over TCP/IP of Windows XP

Print Using NetBIOS over TCP/IP of Windows XP

Follow the steps shown below to print from Windows XP using NetBIOS over TCP/IP protocol.



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-Only PRICOM 3100 is object of this section. Other products are not applied to this section.



- Make sure to install printer driver before you start using PRICOM.
- For further information on NetBIOS over TCP/IP configuration, refer to Chapter 8.



Build NetBIOS over TCP/IP printing environment

Verify the PC Network Configuration

Make sure that **NetBIOS** is configured in **Internet protocol (TCP/IP)** and **Microsoft Network Client** is added to **Network**.

- 1. Click *start*, then *Settings*, then *Control Panel*, then *Network and Internet Connection*, then *Network Connection*.
- 2. Open Properties of Local area connection.



3. Click *Internet protocol (TCP/IP)*, then *Property*, then *Details*, then *WINS* and verify *Default* or *Enable NetBIOS over TCP/IP* is selected for NetBIOS configuration.



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4. Verify that *Microsoft Network Client* is added.





-When you use TCP/ IP protocol in Windows XP, click *Local Area Connection Properties,* then *Advanced*, then remove the check from *Protect my computer and network by limiting or preventing access to this computer from the Internet.*

🕹 Local Area Connection Properties 🛛 🔹 💽		
General Authentication Advanced		
Internet Connection Firewall		
access to this computer from the Internet		
If you're not ours how to get these properties use		
the <u>Network Setup Wizard</u> instead.		
OK Cancel		

Print Using NetBIOS over TCP/IP(When you use the EIO port.)

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1. Double-click *My network,* then *View workgroup computers*, then *Microsoft Windows Network* and open work group name, *PrintServers.*



4. Confirmation message for printer configuration will be displayed.



5. Follow the setting instructions given by the printer add wizard until the printer test page is output that means the end of printer adding sequence.

Print Using NetBIOS over TCP/IP(When you use the USB port.)

1. Double-click *My network,* then *View workgroup computers*, then *Microsoft Windows Network* and open work group name, *PrintServers.*





-When you do not use the USB, double-click the icon for which symbol "prn1" is marked.

4. Confirmation message for printer configuration will be displayed.



5. Follow the setting instructions given by the printer add wizard until the printer test page is output that means the end of printer adding sequence.

About NetBEUI, NetBIOS over TCP/IP

Structure of NetBEUI, NetBIOS over TCP/IP work group

This section explains about structure of NetBEUI, NetBIOS over TCP/IP work group installed in PRICOM.

Ex.): PRICOM Ethernet address: 00:80:92:34:c0:19



\\Pr34c019: Computer (PRICOM) \\Pr34c019\prn1: Printer



\\Pr34c019\report\ConfigReport.txt: Settings report (read only) \\Pr34c019\report\Status.txt: Diagnostic report (read only) System status report (read only) \\Pr34c019\report\HardReport.txt: System status report (read only)



-Only PRICOM 3100 displays [HardReport. txt] in [report] folder.





\\Pr34c019\setup\Config.ini: Initial setting file (can be edited) \\Pr34c019\setup\WebSetup: Shortcut file (read only)

- Configuration report

Outputs the internal information in PRICOM when activated.

- System status report

Outputs the information on PRICOM status when activated.

- Initial configuration file

With the initialization file, *Work group name* and *IP address* can be described. Use editor like memo pad to edit and save files in the overwrite mode. In a few seconds, PRICOM automatically resets and reboots.

By editing the initialization file and saving the file in the overwrite mode, you can change work group name and IP address.

Ex.) Workgroup=UserGroup IP address=192.168.20.126

Specify work group name that already exist in the whole network. In case IP address is to be automatically assigned by using DHCP/BOOTP and RARP server, the IP address typed in [IP address] will be invalid.

- Shortcut file

Once PRICOM is given IP address, shortcut (WebSetup) is created. When double-clicking the shortcut icon, web browser to be activated and PRICOM Web page to be displayed.



-For the Web browser, refer to Chapter 8.

Print Using Embedded Printing Client Function

This section explains how to print using embedded printing client function.

Print Using LPR Port of Windows NT 4.0



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-In order to print using LPR port, LPR port must be added. Click *Start*, then *Settings*, then *Control Panel*, then *Network*, then select *Services*, then click *Add*, then select *Microsoft TCP/IP Printing*, then *OK*. Component is installed. Restart the computer.

1. Click Start, then Settings, then Printers, then double-click Add Printer.



4. Add LPR compatible printer.

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Type in the IP address configured to PRICOM and type in Ip.

Click OK.

5. Verify the Printer Port.



6. Select the printer driver.



7. Verify the printer driver.



NOTE



8. Register the Printer name.



Select if use the printer as the default printer or not.

If you do not specify the printer name, use the printer name already set.

Click Next.

9. Select if the printer to be shared or not .



-If the printer is shared with other computers in the same network, select Shared.

10. Select if you want test print.

NOTE



11. If the test page is printed properly, configuration is complete.

Print Using Standard TCP/IP Port of Windows 2000 and Windows XP

Screens displayed below are for Windows XP. If you use Windows 2000, the screen may vary.

1. Click *start*, then *Settings*, then *Control Panel*, then *Printers and Other Hadware,* then *Add a printer.*.



-If you use Windows 2000, click *Start*, then *Settings,* then *Control Panel,* then *Printers,* then *Add Printer.*

2. Select the printer to be configured.



Select *Local printer attached to this computer* and remove the check from *Aotomatically detect and install....*



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NOTE

-If you use Windows 2000, select *Local Printer* and remove the check from *Automatically detect and...*

3. Select the printer port.



4. Add Standard TCP/IP Printer Port Wizard will be started.



5. Add TCP/IP Printer Port .

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6. Identify the device type.





- 7. Type in the port information.
- (A) Raw Mode



(B) LPR Mode





-If click **OK**, the screen 6. will be displayed, then click **Next**.

8. Verify the configuration.



9. Select the printer driver.



10. Verify the printer driver.





-If installed the latest driver, select *Replace existing driver*.

11. Register the Printer name.



 If you do not specify the printer name, use the printer name already set.

Select if use the printer as the default printer or not.

Click Next.



12. Select if the printer to be shared or not.



-If the printer is shared with other computers in the same network, select **Shared**.

13. Select if you want test print.



14. Verify the configuration.



15. If the test page is printed properly, configuration is complete.

Print Using LPR Port of Windows 2000 and Windows XP



-In order to print using LPR port, LPR port must be added. Click *Start*, then *Control Panel*, then *Add or Remove Prpgrams* (For Windows 2000, click *start*, then *Settings*, then *Control Panel*, then *Add or Remove Programs*), then *Add/Remove Windows Components. Windows Components Wizard* will be displayed, then click *Components,* then *Other Network File and Printing Services*, then *Details*, then *Print Services for Unix*, then *OK. Windows Components Wizard* will be displayed. Click *Finish*.

-Screens displayed below are for Windows XP. If you use Windows 2000, the screens may vary.

1. Click start, then Control Panel, then Printers and Other Hardware, then Add a printer.



-If you use Windows 2000, click **Start,** then **Settings**, then **Printers**, then double-click **Add Printer.**

2. Select the printer to be configured.



NOTE

NOTE

-If you use Windows 2000, select *Local printer* and remove the check from *Automatically detect and* ...



3. Select the printer port.



4. Add LPR compatible printer.



Type in the IP address configured to PRICOM and type in Ip.

Click OK.

5. Select the printer driver.





6. Verify the printer driver.



7. Register the printer name.



8. Select if the printer to be shared or not .

NOTE





9. Select if you want test print.



10. Verify the configuration.



11. If the test page is printed properly, configuration is complete.

Print Using IPP Port of Windows 2000 and Wiondows XP



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-Screens displayed below are for Windows 2000. If you use Windows 2000, the screens may vary.

1. Click start, then Control Panel, then Printers and Other Hardware, then Add a printer.





-If you use Windows 2000, click Start, then Settings, then Printers, then double-click Add Printer.

2. Select the printer to be configured.





-If you use Windows 2000, select Network Printer.



3. Type in PRICOM IP address.



Select Connect to a printer on the Internet or on the home/office network. Specify URL or PRICOM IP address.

Click Next.

<Windows 2000>



Ex.): When URL is "abc.co.jp",
http://abc.co.jp/ipp/lp or http://abc.co.jp/ipp
 Ex.): When IP address is "192.168.20.185",
http://192.168.20.185/ipp/lp or http://192.168.20.185/ipp

4. Select the printer driver.





5. Configure the default printer.



6. Configuration is complete.

