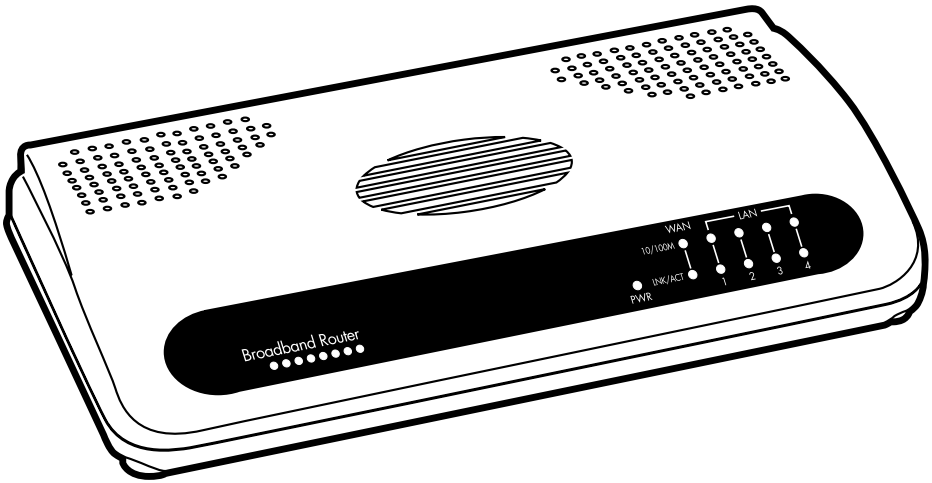
© Copyright 2004. Black Box Corporation. All rights reserved.

1000 Park Drive • Lawrence, PA 15055-1018 • 724-746-5500 • Fax 724-746-0746

BLACK BOX®
NETWORK SERVICES

JULY 2004
LR9603A

Pure Networking Broadband Router Quick Install Guide



CUSTOMER SUPPORT INFORMATION

Order **toll-free** in the U.S.: Call **877-877-BBOX** (outside U.S. call **724-746-5500**)
FREE technical support 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**
Mailing address: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: **www.blackbox.com** • E-mail: **info@blackbox.com**

FEDERAL COMMUNICATIONS COMMISSION
AND
INDUSTRY CANADA
RADIO FREQUENCY INTERFERENCE STATEMENTS

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

NORMAS OFICIALES MEXICANAS (NOM)
ELECTRICAL SAFETY STATEMENT

INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser connectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.

12. Precaución debe ser tomada de tal manera que la tierra fisica y la polarización del equipo no sea eliminada.

13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.

14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.

15. En caso de existir, una antena externa deberá ser localizada lejos de las lineas de energia.

16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.

17. Cuidado debe ser tomado de tal manera que objectos liquidos no sean derramados sobre la cubierta u orificios de ventilación.

18. Servicio por personal calificado deberá ser provisto cuando:

    A: El cable de poder o el contacto ha sido dañado; u

    B: Objectos han caído o líquido ha sido derramado dentro del aparato; o

    C: El aparato ha sido expuesto a la lluvia; o

    D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o

    E: El aparato ha sido tirado o su cubierta ha sido dañada.

TRADEMARKS USED IN THIS MANUAL

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

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

Contents

Chapter **Page**

1. Getting Started 6

2. Quick Setup Wizard 8
   - 2.1 Setup 8
   - 2.2 Time Zone 8
   - 2.3 Broadband Type 9
     - 2.3.1 Cable Modem 11
     - 2.3.2 Fixed-IP xDSL 12
     - 2.3.3 PPPoE xDSL 14
     - 2.3.4 PPTP xDSL 16

3. Print Server 19
   - 3.1 Install the Print Server Network Driver 19
   - 3.2 Add a Network Printer 25

1. Getting Started

This guide provides step-by-step instructions for how to use the Pure Networking Broadband Router and connect to the Internet.

1. Set up your network as shown in Figure 1-1.

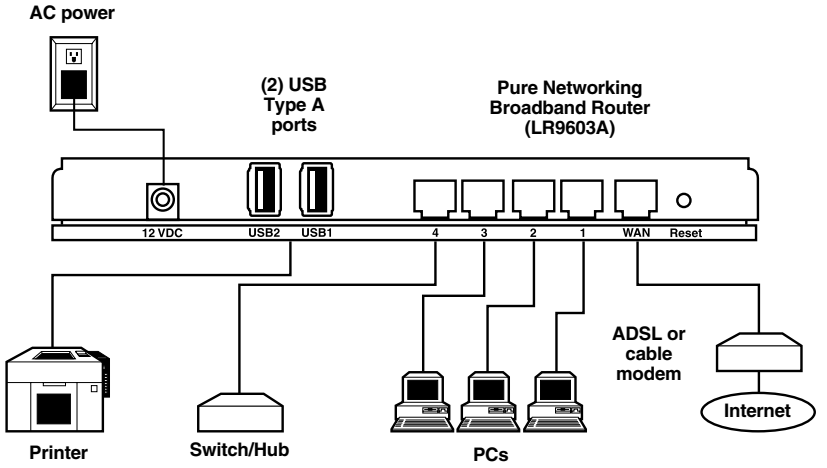


Figure 1-1. Typical LAN setup.

2. Set your LAN PC automatically. By default, the Broadband Router's DHCP server is enabled so that you can obtain an IP address automatically.

NOTE

Make sure that the Pure Networking Broadband Router's DHCP server is the only DHCP server available on your LAN. If there is another DHCP server on your network, then you'll need to switch one of the DHCP servers off.

3. Once your PC has obtained an IP address from your router, enter the default IP address `192.168.2.1` (the router's IP address) into your PC's Web browser and press **Enter**. See Figure 1-2.

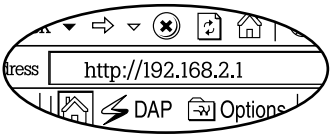


Figure 1-2. Entering the default IP address.

4. The screen shown in Figure 1-3 will appear. This site contains the router's Web-based management screens that allow you to configure your Pure Networking Broadband Router. Click on **LOGIN**.

NOTE

By default there is no password. For security reasons, we recommend that you add a password as soon as possible.

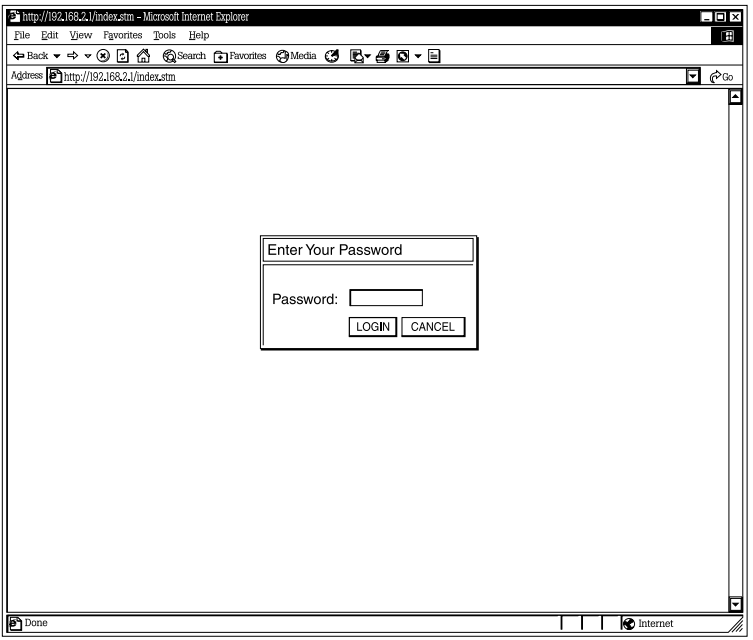


Figure 1-3. The Enter Your Password screen.

5. Follow the instructions in **Chapters 2** and **3**.

2. Quick Setup Wizard

2.1 Setup

The Quick Setup Wizard is designed to get you using the Pure Networking Broadband Router as quickly as possible. You are required to fill in only the information necessary to access the Internet. Once you click on the Quick Setup Wizard in the Home page, you should see the screen shown in Figure 2-1.

2.2 Time Zone

The Time Zone allows your router to base its time on the settings configured here. This will affect functions such as log entries and firewall settings.

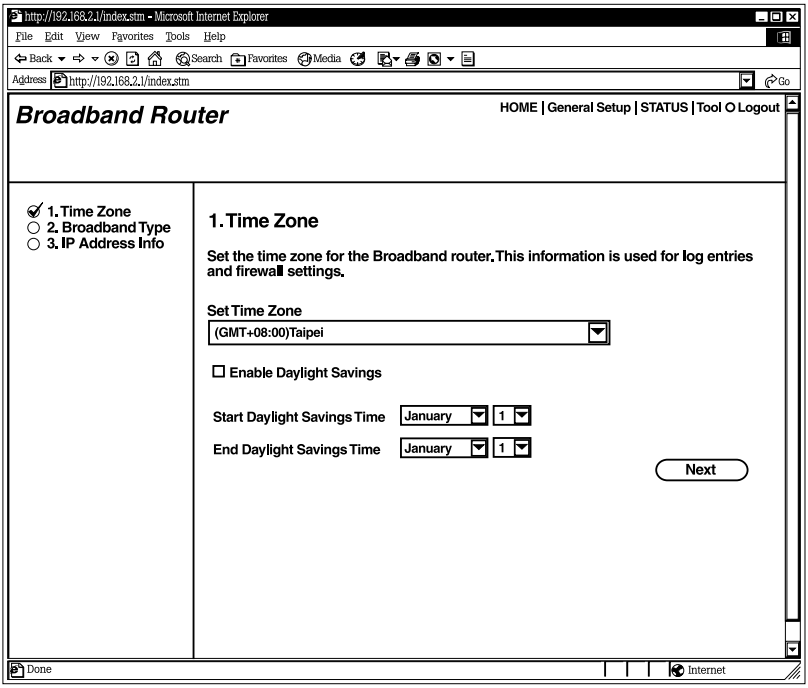


Figure 2-1. Set Time Zone screen.

Table 2-1 describes the router's time zone options.

Table 2-1. Set Time Zone screen parameters.

Parameter	Description
Set Time Zone	Use the drop-down menu to select the time zone of the country you are currently in. The router will set its time based on your selection.
Enable Daylight Savings	The router can also take Daylight Savings into account. If you want to use this function, check the Enable Function box to enable the Daylight Savings configuration.
Start Daylight Savings Time	Use the drop-down menu to select the day you want to start Daylight Savings Time.
End Daylight Savings Time	Use the drop-down menu to select the day you want to end Daylight Savings Time.
Next button	Click on this button to save your changes and go on to the next screen.

Click on **Next** to proceed to Broadband Type.

2.3 Broadband Type

In this screen, you'll select one of four types of connections that you'll use to connect your Pure Networking Broadband Router's WAN port to your ISP (see Figure 2-2).

NOTE

Different Internet Service Providers (ISPs) require different methods of connecting to the Internet. Check with your ISP for the type of connection it requires.

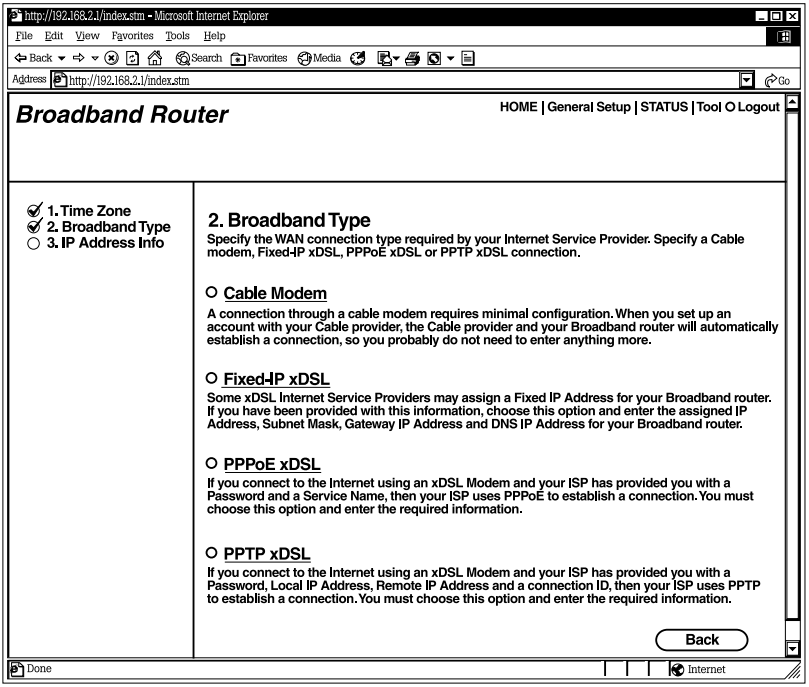


Figure 2-2. Selecting the broadband type.

Table 2-2 lists the ways that the router selects addresses and connections.

Table 2-2. Broadband type parameters.

Menu	Type of Connection
Cable Modem	Your ISP will automatically give you an IP address.
Fixed-IP xDSL	Your ISP has given you an IP address already.
PPPoE xDSL	Your ISP requires you to use a Point-to-Point Protocol over Ethernet (PPPoE) connection.
PPTP xDSL	Your ISP requires you to use a Point-to-Point Tunneling Protocol (PPTP) connection.
Back button	Click on this button to go back to the previous screen.

Click on one of the WAN types and then proceed to the manual's relevant sub-section (**2.3.1**, **2.3.2**, **2.3.3**, or **2.3.4**). Click on **Back** to return to the previous screen.

2.3.1 Cable Modem

Choose **Cable Modem** if your ISP will automatically give you an IP address. Some ISPs may also require you to fill in additional information, such as Host Name and MAC address (see Figure 2-3).

NOTE

The Host Name and MAC address section is optional. You can skip this section if your ISP does not require these settings for you to connect to the Internet.

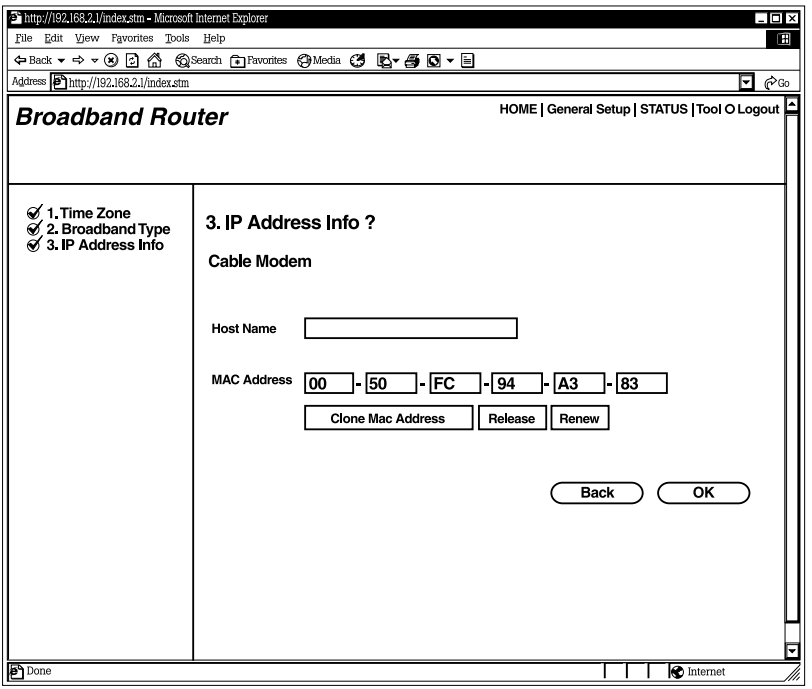


Figure 2-3. IP Address Info, Cable Modem.

Table 2-3 lists the cable modem's host name and MAC address options.

Table 2-3. Cable modem parameters.

Parameter	Description
Host Name	If your ISP requires a host name, type in the host name provided by your ISP. Leave it blank if your ISP does not require a host name.
MAC Address	Your ISP may require a particular MAC address in order for you to connect to the Internet. This MAC address is the PC's MAC address that your ISP had originally established your Internet connection to. Type in the MAC address in this section.
Clone MAC Address button	Or, use the **Clone MAC Address** button to replace the WAN MAC address with the MAC address of the PC you are currently using. To find out what the PC's MAC address is, see **Appendix A** in the users' manual.
Release button	Click on this button to release the WAN IP address.
Renew button	Click on this button to renew the WAN IP address.
Back button	Click on this button to go back to the previous screen.
OK button	Click on this button to save your changes and go on to the next screen.

Click **OK** when you have finished the configuration above. The configuration for the cable modem connection is complete. You can start using the router now. If you wish to use some of the advanced features supported by this router, see **Chapters 6**, **7**, and **8** in the users' manual on the CD-ROM that's included with your router.

2.3.2 FIXED-IP XDSL

Select Fixed-IP xDSL if your ISP has given you a specific IP address to use. Your ISP should provide all the information required in this section. See Figure 2-4.

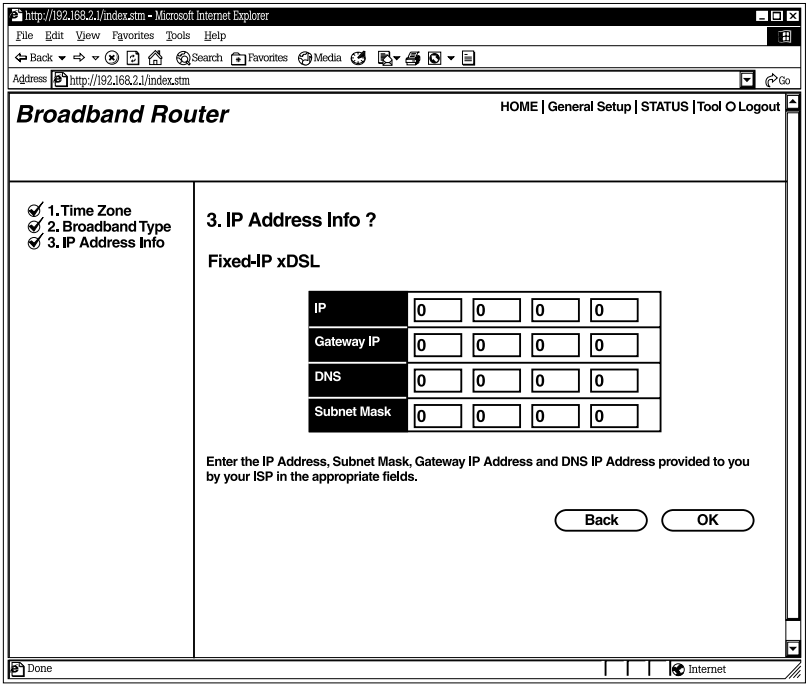


Figure 2-4. IP Address Info, Fixed-IP xDSL.

Table 2-4 describes the Fixed-IP xDSL options.

Table 2-4. The router's fixed-IP xDSL parameters.

Parameter	Description
IP	This is the IP address that your ISP has given you.
Gateway IP	This is the ISP's IP address gateway.
DNS	This is the ISP's DNS server IP address.
Subnet Mask	Enter the subnet mask provided by your ISP (for example, 255.255.255.0).
Back button	Click on this button to go back to the previous screen.

Table 2-4 (continued). The router's fixed-IP xDSL parameters.

Parameter	Description
OK button	Click on this button to save your changes and go on to the next screen.

Click **OK** when you have finished adding the information. The configuration for the Fixed-IP xDSL connection is complete. You can start using the router now. If you want to use some of the advanced features supported by this router, see **Chapters 6**, **7**, and **8** of the users' manual on the CD-ROM that's included with the router.

2.3.3 PPPoE xDSL

Select PPPoE xDSL if your ISP requires the PPPoE protocol to connect you to the Internet. Your ISP should provide all the information required in this section (see Figure 2-5).

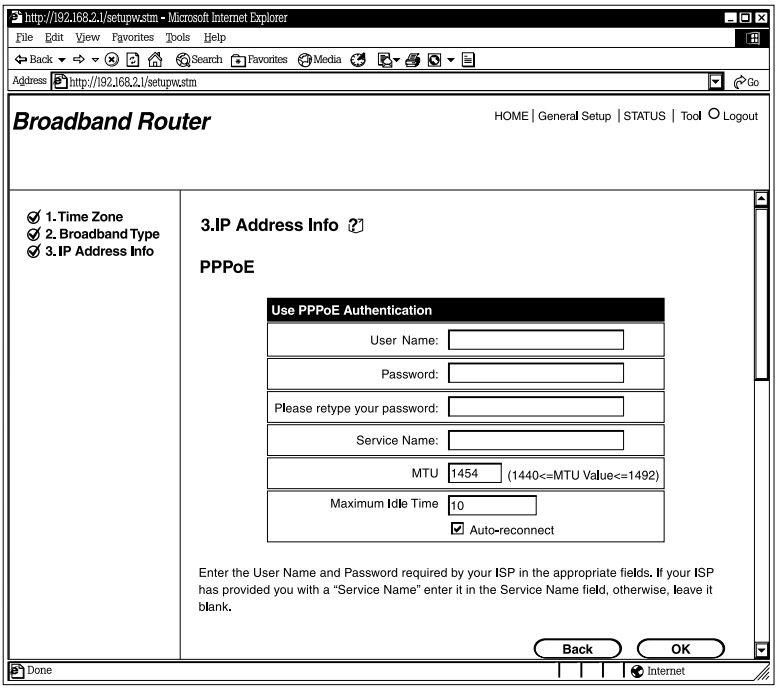


Figure 2-5. IP Address Info, PPPoE.

Table 2-5 lists the parameters you must select to activate the PPPoE protocol.

Table 2-5. PPPoE parameters.

Parameter	Description
User Name	Type in the user name provided by your ISP for the PPPoE connection.
Password	Type in the password provided by your ISP for the PPPoE connection.
Please retype your password	Type in the password again to reconfirm.
Service Name	This is optional. Type in the service name if your ISP requires it; otherwise, leave it blank.
MTU	This is optional. Type in the maximum size of your transmission packet to the Internet. Leave it as is if you do not want to set a maximum packet size.
Maximum Idle Time	Type in an idle time threshold (minutes) for the WAN port. This means that if no packets have been sent (no one using the Internet) during this specified period, the router will automatically disconnect the connection with your ISP.
Auto-reconnect	If you check the Auto-reconnect function, then when the WAN connection is disconnected, the router will automatically reconnect when a user requests access to the Internet.
Back button	Click on this button to go back to the previous screen.
OK button	Click on this button to save your changes and go on to the next screen.

NOTE

Idle time "0" means no timeout; for example, no time restriction (always On).

Click **OK** when you have finished the configuration above. The configuration for the PPPoE connection is complete. You can start using the router now. If you want to use some of the advanced features supported by this router, see **Chapters 6**, **7**, and **8** in the users' manual.

2.3.4 PPTP xDSL

Select PPTP xDSL if your ISP requires the PPTP protocol for connecting you to the Internet. Your ISP should provide all the information required in this section. See Figure 2-6.

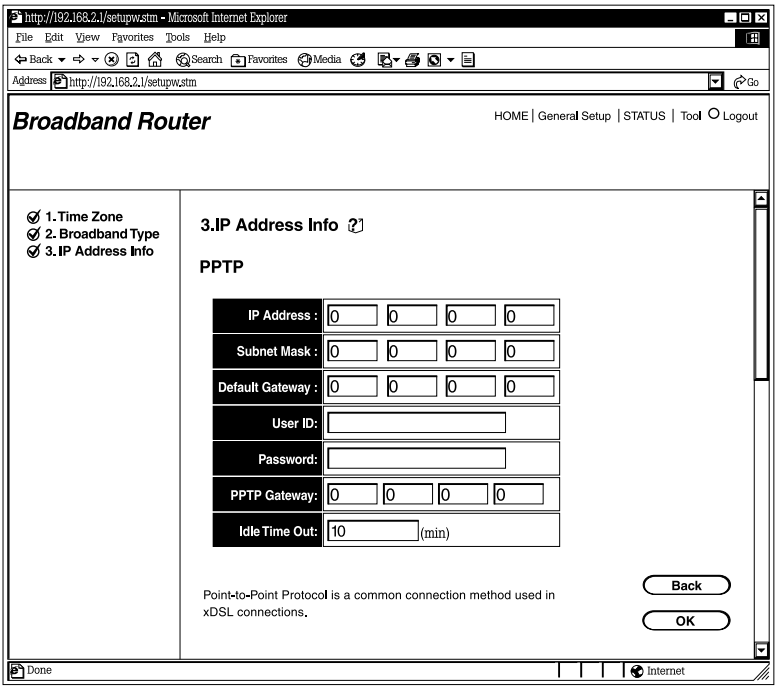


Figure 2-6. IP Address Info, PPTP.

Table 2-6 lists the options you must select to enable the PPTP protocol.

Table 2-6. PPTP parameters.

Parameter	Description
IP Address	Type in the IP address that your ISP has given you to establish a PPTP connection.
Subnet Mask	Type in the subnet mask provided by your ISP (for example, 255.255.255.0).
Default Gateway	Type in the ISP gateway's IP address.
User ID	Type in the user name provided by your ISP for the PPTP connection. This is sometimes called a connection ID.
Password	Type in the password provided by your ISP for the PPTP connection.
PPTP Gateway	If your LAN has a PPTP gateway, then type in that PPTP gateway IP address here. If you do not have a PPTP gateway, then enter the ISP's Gateway IP address.
Idle Time Out	You can type in an idle time threshold (minutes) for the WAN port. This means that if no packets have been sent (no one is using the Internet) throughout this specified period, then the router will automatically disconnect the connection with your ISP.
Back button	Click on this button to go back to the previous screen.
OK button	Click on this button to save your changes and go on to the next screen.

NOTE

Idle time "0" means no time out; for example, no time restriction (always On).

Click **OK** when you have finished the configuration above. The configuration for the PPTP connection is complete. You can start using the router now. If you want to use some of the advanced features supported by this router, see **Chapters 6**, **7**, and **8** in the users' manual.

3. Print Server

3.1 Install the Print Server Network Driver

1. In Windows®, open the Command Prompt program.

2. Type `WEClient.exe` at the prompt, and the **PrintServer Network Driver Setup Program** window will appear. See Figure 3-1.

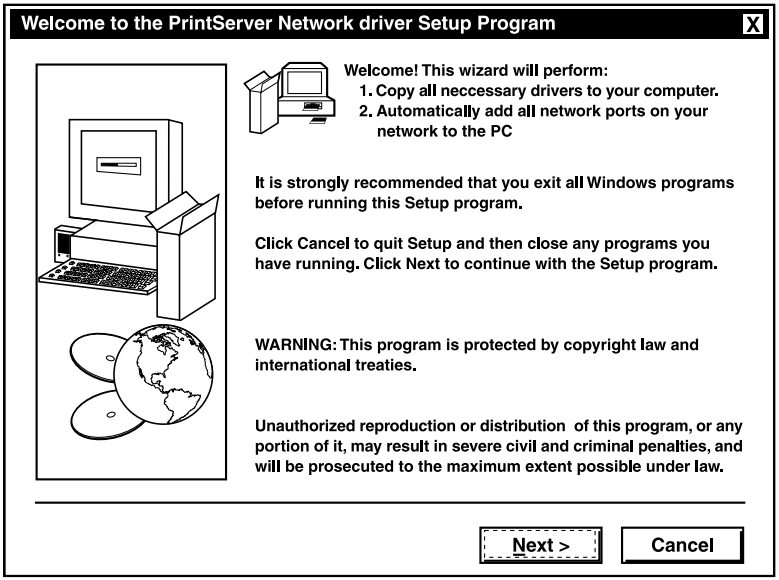


Figure 3-1. PrintServer Network Driver Setup Program window.

3. Click on the **Next** button and specify the destination folder where the utility will be installed. See Figure 3-2. Or, click on the **Cancel** button to cancel the setup.

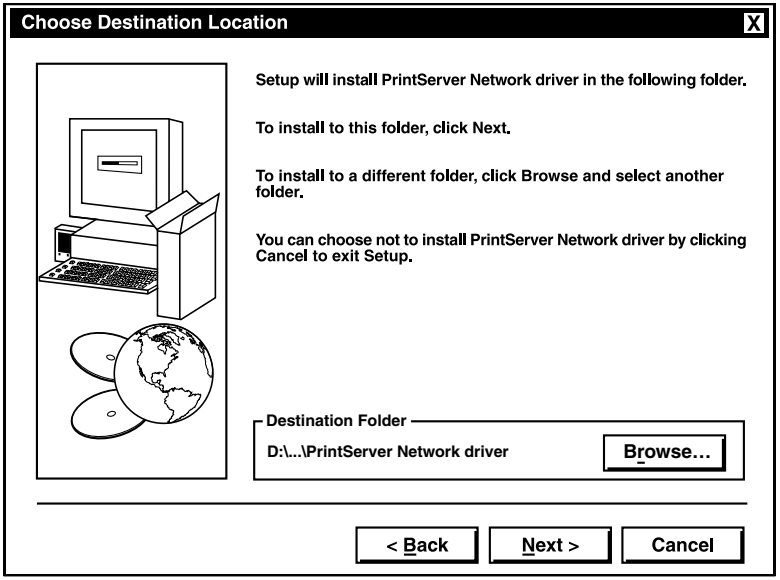


Figure 3-2. Choose Destination Location window.

Table 3-1 lists the button functions shown in Figure 3-2.

Table 3-1. Destination Location window parameters.

Parameter	Description
Browse	Click on this button to browse through the available destination folders.
Back	Click on this button to go back to the previous screen.
Next	Click on this button to save your changes and go on to the next screen.
Cancel	Click on this button to cancel your changes.

4. Click on the **Next** button and specify the program folder where the program icons will be added. See Figure 3-3.

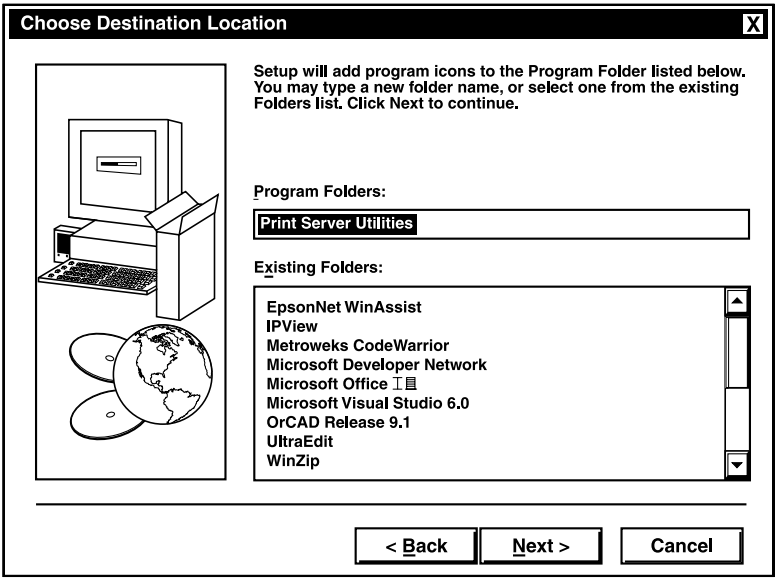


Figure 3-3. Select Program Folder window.

Table 3-2 describes the program folder options.

Table 3-2. Program folder parameters.

Parameter	Description
Program Folders	Type in the program folder name.
Existing Folders	Scroll through the existing folders list.
Back button	Click on this button to go back to the previous screen.
Next button	Click on this button to save the changes and go on to the next screen.
Cancel button	Click on this button to cancel the changes.

5. Click on the **Next** button to start installation. The **Utilities Installation** window (not shown here) appears on your screen.

6. The program will finish installing all the utilities and drivers. So far you've only completed the installation phase and prepared to use the print server. Next, you'll add a remote port for the print server. Click on the **Add** button to add a remote port. See Figure 3-4. Or, click on the **Delete** button to cancel, or the **Exit** button to exit.

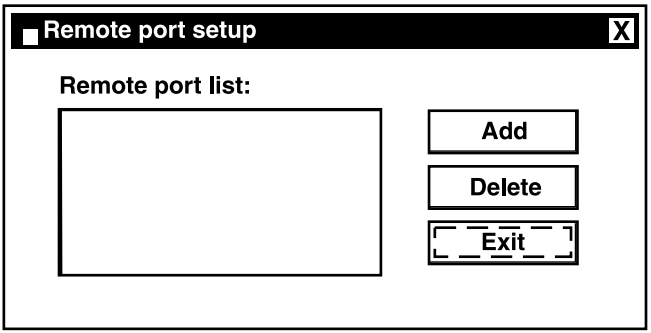


Figure 3-4. Remote Port Setup window.

7. You have to assign a print server name and enter the print server's IP address. You can only select P1 or P2 (the router has only two print ports). After filling in the data, click **OK** to proceed. See Figure 3-5. Or, click on **Cancel** to cancel the changes without saving.

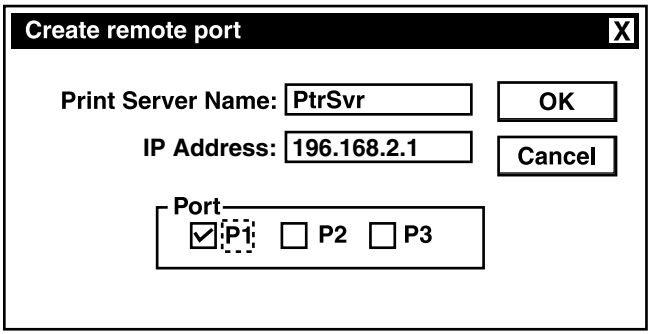


Figure 3-5. Create Remote Port window.

8. After adding a remote port for the print server, you can see the remote port's name in the remote port list. The remote port's name consists of the print server name and the port number, which are separated by a hyphen. For example, if you assign "PtrSvr" as the print server name and select port "P1", then the remote port's name will be "PtrSvr-P1". You can click **Add** to add another remote port. Click **Delete** to delete a selected remote port. When you have finished setting the remote port, click **Exit** to exit the setup tool. See Figure 3-6.

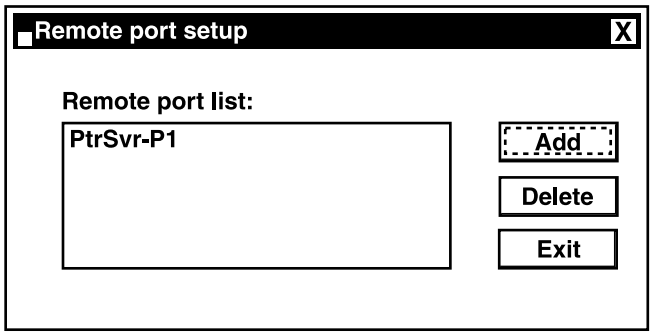


Figure 3-6. Remote Port Setup window.

9. Print server client tool installation is complete. You can start using the print server.

3.2 Add a Network Printer

After installing the print server client tool, you need to add the network printer to your PC.

1. Click the **Start** button. Choose **Setting** and **Printers**.

2. Double-click on **Add Printer**. See Figure 3-7. Click on **Next** to continue.

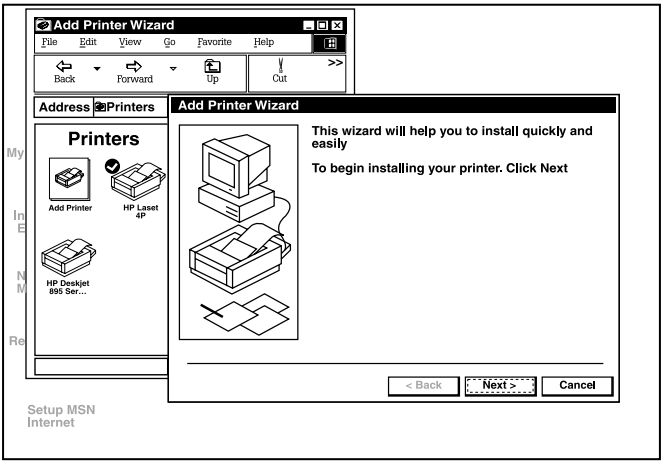


Figure 3-7. Add Printer window.

3. Select **Local Printer** and click **Next**. See Figure 3-8.

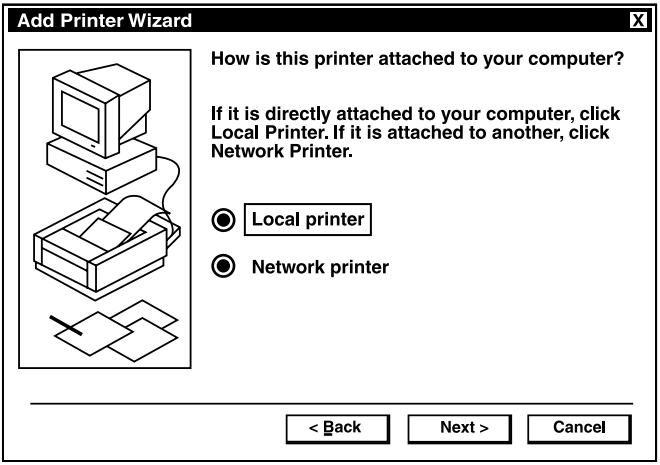


Figure 3-8. Add Printer Wizard.

4. Select the suitable printer manufacturer and model, then click **Next**. See Figure 3-9.

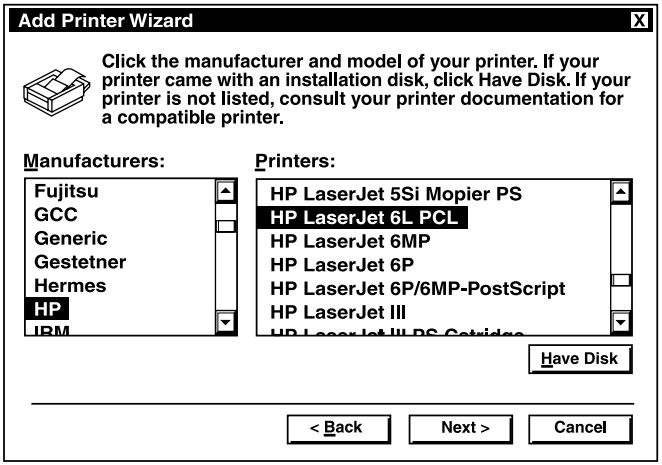


Figure 3-9. Choosing a Printer.

5. Choose the print server's remote port that was created in **Section 3.1** and click **Next**. See Figure 3-10.

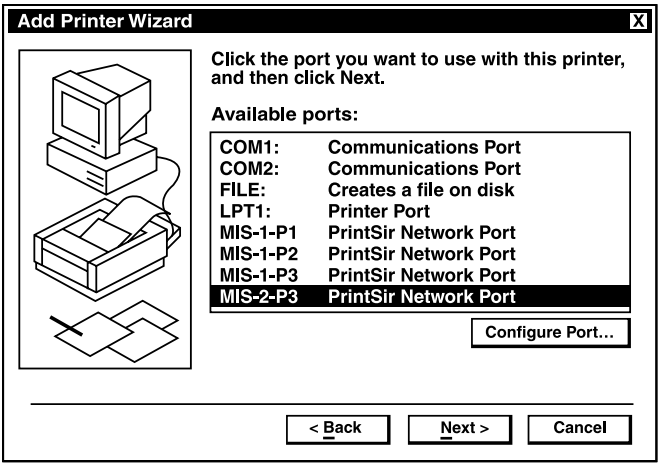


Figure 3-10. Choosing the Print Server's remote port.

6. Complete the rest of the questions that will appear on-screen to finish the network printer setup.