Broadband Router User Guide (Windows 95, 98, 2000, NT, Me, XP, and Macintosh)

Introduction

Functions and Features

- Broadband and IP sharing
- Auto-sensing, auto-switching 10/100 Mbps Ethernet ports
- Auto-sensing Ethernet Switch
- VPN supported
- Printer sharing
- Firewall (using Network Address Translation technology)
- DHCP server
- Web-based configuration utilities
- Access Control
- Virtual Server
- User-Definable Application Sensing Tunnel
- User-Definable Port Forwarding
- DMZ Host

What You Need to Begin

- PC with an Ethernet NIC installed
- A functioning Ethernet-based Cable or DSL modem OR an RS-232 based analogue or ISDN modem
- Operating system installation CD-ROM
- Internet Explorer 4 or higher OR Netscape 4 or higher
- If you have an analogue or ISDN modem, an RS-232 cable



Front View

Reset Button: Pressing in and holding the Reset button for one second will reboot the Broadband Router; holding the Reset button for five seconds will reset the Broadband Router to factory defaults.
Power LED: The green Power LED stays lighted to indicate the system is functioning properly and flashes during the self-test phase or firmware upgrade process.
WAN LED: The green WAN port LED flashes when the WAN port is sending or receiving data.
LAN Ports 1-4: The LAN ports are used to connect devices to the local area network. The green Link/Act LEDs flash when the specific LAN port is sending or receiving data. The yellow 10/100 LEDs are illuminated to indicate a speed of 100 Mbps and not illuminated to indicate a speed of 10 Mbps.



Back View

PRINTER: This parallel port is used to attach a printer to the local area network.
WAN: The RJ-45 WAN port is used to connect to a broadband modem.
COM: This serial port can be used to connect an analogue modem.
12VDC: This connection port is for the power supply of the Broadband Router.

Note: The U.S. Robotics Broadband Router can easily be connected to any Ethernet-based Cable modem or DSL modem, or an RS-232 based analogue or ISDN modem. You can verify compatibility by checking to see if your Cable or DSL modem is connected to the network adapter in your

computer using an Ethernet cable. The Broadband Router cannot be connected to a Cable, DSL, analogue, or ISDN modem that only uses a USB connection.

There are five types of WAN network connections that are supported by the Broadband Router: **Static IP**, **Dynamic IP**, **PPPoE**, **PPTP**, or **Dial-up analogue or ISDN**. If you have a Static or Dynamic IP connection, refer to the Before you begin - Cable or DSL connection section. If you have a PPPoE connection, refer to the Before you begin - PPPoE connection section. If you have a PPTP connection, refer to the Before you begin - PPTP connection section. If you have a Dial-up connection, refer to the Before you begin - Analogue or ISDN connection section. If you are unsure about the specifics of your network connection, contact your Internet Service Provider (ISP).

Before you begin - Cable or DSL connection

This User Guide covers most Cable and DSL installations that are configured for Dynamic or Static IP addressing. This guide assumes that you have an active and properly functioning Cable or DSL Internet service.

Note: DSL users, if you use a login application to access the Internet, you are more than likely using a PPPoE connection. Refer to the appropriate section in this User Guide for information on collecting your configuration information. If you use Dial-Up Networking and a VPN adapter, you are most likely using a PPTP connection. Refer to the appropriate section of this User Guide for information on collecting your configuration information. If you are unsure about what type of connection you are using, contact your Internet Service Provider.

Note: Your Cable or DSL modem must be connected to your computer via an RJ-45 Ethernet connection. The Broadband router is not compatible with Cable or DSL modems with only a USB connection. You must have an Ethernet adapter (NIC) installed on your computer.

You will be required to gather the following information about your computer from your Internet Service Provider. Contact them for assistance in obtaining this information.

IP Address:	_____-_____-_____-_____
Subnet Mask:	_____-_____-_____-_____
Gateway/Router	_____-_____-_____-_____
DNS Servers/ Name Servers:	_____-_____-_____-_____ _____-_____-_____-_____
Host Name/ DHCP Client ID:	_____

Not all of this information may be required for the installation of the Broadband Router. If your ISP cannot provide you with this information, the following basic steps will assist you in gathering most of the required information.

A. These steps will need to be performed on the computer that is currently connected to your Cable or DSL modem.

Windows Users

1. **All Windows Users:**
   Click Windows **Start**, **Settings**, and then **Control Panel**.
2. **Windows 95/98/Me Users:**
   Double-click **Network**.

   Windows 2000 and XP Users:
   Double-click **Network and Dial-up Connections**.

   Windows NT Users:
   Double-click **Network** and then click the **Protocols** tab.
3. **All Windows Users:**
   Select the TCP/IP option for the network adapter that is used to connect to your Cable or DSL modem and click **Properties**. Proceed to Step B.

Macintosh Users

Macintosh OS 9.x Users:
Click **Apple**, **Control Panels** and then **TCP/IP**. Proceed to Step B.

Macintosh OS X Users:
Click **Apple**, **System Preferences** and then **Network**. Proceed to Step B.

B. **All Windows Users:**
You should now be in the TCP/IP properties window.

- If the **Obtain an IP address automatically** option is selected, you may proceed with the installation of the Broadband Router in the Cable or DSL Connecting section that follows.
- If this option is not selected, you will need to collect the necessary configuration information if it was not provided by your Service Provider. Depending on your operating system, you may need to click multiple tabs within the TCP/IP window to obtain all the necessary information. Once completed, select the **Obtain an IP address automatically** option and click **OK**. If necessary, click **OK** again to close the Network Properties page. If you are prompted to restart your computer, click **No**. You may proceed to the Cable or DSL Connecting section of this UserGuide.

All Macintosh Users:
Change the **Connect via:** option from whatever it is currently at to **Connect via: Ethernet**.

Check to see what the **Configure:** option is set to and if any information is supplied by your service provider for the IP address, DHCP Client ID, or Name Servers.

- If the **Configure:** option is set to **Using DHCP**, you may proceed to the Cable or DSL Connecting section of this User Guide.
- If the **Configure:** option is not set to **Using DHCP**, you will need to collect the necessary configuration information if it was not provided by your Service Provider. You may need to click multiple tabs within the TCP/IP or Network window to obtain all the necessary information. Set the TCP/IP **Configure:** option to **Using DHCP**. Click **Save** and close the TCP/IP or Network window. You may proceed to the Cable or DSL Connecting section of this User Guide.

Before you begin – PPPoE connection

This User Guide covers most Cable and DSL installations that are configured for Dynamic or Static IP addressing. This guide assumes that you have an active and properly functioning Cable or DSL Internet service.

Note: DSL users, if you use a login application to access the Internet, you are more than likely using a PPPoE connection. If you are unsure about what type of connection you are using, contact your Internet Service Provider.

You will be required to gather the following information about your computer from your Internet Service Provider. To obtain the necessary information, first look within your login application. If you cannot find all the necessary information, contact your Service Provider for assistance in obtaining this information.

IP Address:	_____-_____-_____-_____
Subnet Mask:	_____-_____-_____-_____
Gateway/Router:	_____-_____-_____-_____
DNS Servers/ Name Servers:	_____-_____-_____-_____ _____-_____-_____-_____
User Name:	_____
Password:	_____
Service Name (optional):	_____

Not all of this information may be required for the installation of the Broadband Router.

Before you begin – PPTP connection

Note: If you use Dial-Up Networking and a VPN adapter, you are most likely using a PPTP connection. If you are unsure about what type of connection you are using, contact your Internet Service Provider.

You will be required to gather the following information about your computer from your Internet Service Provider. To obtain the necessary information, first look within your login application. If you cannot find all the necessary information, contact your Service Provider for assistance in obtaining this information.

PPTP Account (User Name):	_____
PPTP Password:	_____
Service Name:	_____
IP Address:	_____-_____-_____-_____
Subnet Mask:	_____-_____-_____-_____
Server IP address:	_____-_____-_____-_____
Connection ID:	_____

Not all of this information may be required for the installation of the Broadband Router.

Before you begin – Analogue or ISDN connection

This User Guide covers most dial-up or remote access connections that are configured for Dynamic or Static IP addressing. This guide assumes that you have an active and properly functioning analogue or ISDN Internet service.

Note: The Broadband Router requires an external analogue or ISDN modem for dial-up functionality. Your analogue or ISDN modem must be connected to your computer via an RS-232 serial connection. The Broadband router is not compatible with analogue or SDN modems with only a USB connection. You must also have an Ethernet adapter (NIC) installed on your computer.

You will be required to gather the following information about your Dial-up or Remote Access connection to your Internet Service Provider. Contact them for assistance in obtaining this information.

IP Address:	_____-_____-_____-_____
Subnet Mask:	_____-_____-_____-_____
Gateway/Router	_____-_____-_____-_____
DNS Servers/ Name Servers:	_____-_____-_____-_____ _____-_____-_____-_____
User Name:	_____
Password:	_____
Dial-up Access Number:	_____

*If you are using Windows, go to your Dial-up Networking or Network and Dial-up Connections folder to get this information. If you are using a Macintosh, enter Remote Access through Control Panels to get this information.

Not all of this information may be required for the installation of the Broadband Router. If your ISP cannot provide you with this information, the following basic steps will assist you in gathering most of the required information.

A. These steps will need to be performed on the computer that is currently connected to your analogue or ISDN modem.

Windows 95 and 98 Users:
Right-click **My Computer** and then click **Explore**. Double-click **Dial-Up Networking**. Right-click your ISP connection and click **Properties**. Click the **Server Types** tab and then click the **TCP/IP Settings** button. Proceed to Step B.

Windows 2000 Users:
Click Windows **Start**, **Settings**, and then **Control Panel**. Double-click **Network and Dial-up Connections**. Right-click your ISP connection and click **Properties**. Click the **Networking** tab and then scroll down in the list of components. Select **Internet Protocol (TCP/IP)** and click **Properties**. Proceed to Step B.

Windows NT Users:
Right-click **My Computer** and then click **Explore**. Double-click **Dial-Up Networking**. Select your ISP connection from the **Phonebook entry** drop-down menu. Click **More** and select **Edit entry and modem properties**. Click the **Server** tab and then click the **TCP/IP Settings** button. Proceed to Step B.

Windows Me Users:
Click Windows **Start**, **Settings**, and then **Dial-Up Networking**. Right-click your ISP connection and click **Properties**. Click the **Networking** tab and then click the **TCP/IP Settings** button. Proceed to Step B.

Windows XP Users:
Click Windows **Start** and then **Control Panel**. Double-click **Network Connections**. Right-click your ISP connection and click **Properties**. Click the **Networking** tab, select **Internet Protocol (TCP/IP)** from the menu, and click **Properties**. Proceed to Step B.

Macintosh OS 9.x Users:
Click **Apple**, **Control Panels**, and then **TCP/IP**. Proceed to Step B.

Macintosh OS X Users:
Click **Apple**, **System Preferences**, and then **Network**. Proceed to Step B.

B. **All Windows Users:**
You should now be in the TCP/IP Properties window.

If the **Server assigned IP address** and **Server assigned name server addresses** options are selected, you have a Dynamic IP address. Close any open properties windows and may proceed with the installation of the Broadband Router.

If these options are not selected, you have a Static IP address and will need to check for the following information: IP Address, Subnet Mask, and Default Gateway. You may proceed to the analogue or ISDN Connecting section.

All Macintosh Users:

- If the **Configure:** option is set to **Manually**, write any of the suplied information in the previous table. Set the **Configure:** option to **Using DHCP Server**.
- If the **Configure:** option is set to any other selection, change it to **Using DHCP Server**.

Change the **Connect via:** option from whatever it is currently at to **Connect via: Ethernet**.

Click **Save** and close the TCP/IP or network window. You may proceed to the analogue or ISDN Connecting section