HomePortal™

user's guide

Model 1500CW

_____

Owner's Record

The serial number is located on the bottom of your 2Wire HomePortal. Record the serial number in the space provided here and refer to it when you call Customer Care.

Serial Number:_____

Safety Information

- To prevent fire or shock hazard, do not expose your HomePortal to rain or moisture.
- To avoid electrical shock, do not open the HomePortal. Refer servicing to qualified personnel only.
- Never install modem or telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wire or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using your modem during an electrical storm.
- Do not use your modem or a telephone to report a gas leak in the vicinity of the leak.
- A socket outlet should be as close as possible to the unit and easily accessible.

About this guide

This guide is designed to help you quickly install the HomePortal and your HomePortal network. It introduces you to the features of the HomePortal and guides you through the installation process. After installation, you can access the most current and detailed version of this guide online by selecting **Help** in the HomePortal Monitor or in the home console.

The HomePortal User's Guide is organized as follows:

Chapter 1 Introduction
Acquaints you with the benefits of the HomePortal, describes how to find your HomePortal Key Code, and helps you plan your home network.

Chapter 2 Installing the HomePortal hardware
Shows you how to physically install the HomePortal and describes the five ways you can connect your **first** computer to the HomePortal network.

Chapter 3 Installing the HomePortal software
Describes how to launch the HomePortal Setup Wizard on Windows and Macintosh computers.

Chapter 4 Adding computers to your network
Shows you the five ways you can add computers to your network.

Chapter 5 Using HomePortal Monitor
Provides an overview of the HomePortal Monitor. This chapter familiarizes you with the Monitor's components and shows you how to get the most from your home network experience.

Chapter 6 Using network-enabled games and applications
Provides instructions for playing network-enabled games and applications.

Chapter 7 Glossary

Gives you brief definitions of some of the networking terms used in this guide.

Chapter 8 Frequently asked questions

Answers questions often asked about the HomePortal, home networking in general, and phoneline networking.

Chapter 9 Troubleshooting

Provides tips for solving problems that may occur when installing the HomePortal and connecting to the Internet.

Chapter 10 Contacting 2Wire Customer Care

Provides contact information for 2Wire Customer Care.

Index

At the end, you'll find an index so you can quickly find information in this guide.

Contents

Contents

Chapter 6: Using network-enabled games and applications

Chapter 7: Glossary

Chapter 8: Frequently asked questions

Chapter 9: Troubleshooting HomePortal

Chapter 10: Contacting 2Wire Customer Care

Introduction

Welcome to the HomePortal

The HomePortal securely delivers rich content from the Internet through a broadband connection and distributes it to multiple simultaneous users within the home. This means that you can share one high-speed Internet connection with all of your computers simultaneously. The HomePortal also makes it easy to share files and printers between all of your Windows computers.

Features

❖ **Simplicity**

The HomePortal comes with friendly installation tools to make setting up your home network easy, and the HomePortal is as easy to use as browsing the Web.

❖ **Speed**

The HomePortal enables high-speed, always-connected Internet access to multiple computers.

❖ **Sharing**

The HomePortal allows every member of your household to use the Internet *simultaneously*. The HomePortal also makes it easy to share printers, MP3 players, Internet radios, game consoles and other Internet devices.

❖ **Security**

The HomePortal includes business-grade security features such as firewall and denial of service attack protection to block hackers from accessing your computers and private files.

Before you begin

Before you install the HomePortal, you need to arrange and prepare your home network. A home network connects the computers and Internet devices in your home. These computers are connected by way of wires such as the phone wires already in your home or by way of wireless.

Locating and recording your HomePortal Key Code

On the back of the HomePortal packaging, locate the HomePortal Key Code label. Use the blank form below to record your Key Code. You will need to have this Key Code handy when you are installing the HomePortal software on your first computer, and you may need it if you ever have to reinstall the HomePortal software.

Note: *If your HomePortal packaging does not have a Key Code label, you may obtain an activation Key Code on the 2Wire Web site: http://www.2wire.com/keycode. Or your service provider may have provided your Key Code by other means.*

Check your computers

Each computer you connect to your HomePortal network must have:

- Windows 95, Windows 98, Windows ME, Windows NT 4.0 with Service Pack 6, Windows 2000, or Mac OS 8.5 or higher. You must have administrator privileges on Windows NT and Windows 2000.

  Note: *If you would like to use the HomePortal with computers running other operating systems, see "Does the HomePortal work with Linux, FreeBSD, and other operating systems?" on page 8-4.*

- CD-ROM drive. If one or more of the computers on your home network does not have a CD-ROM drive, see "One of my computers doesn't have a CD-ROM drive." on page 9-4.

- At least 5 MB available disk space if the computer has an up-to-date Web browser installed (see below), or 150 MB available disk space if it does not.

- A screen resolution of at least 800 x 600 pixels.

- One of the following Web browsers:

    – Windows: Internet Explorer 5.0 and higher **or** Netscape Navigator 4.7 and higher.

    – Macintosh: Internet Explorer 4.51 and 5.1 **or** Netscape Navigator 4.74 and higher.

    Note: *2Wire provides a current Windows Web browser on the HomePortal Setup Wizard CD. If one or more of your Windows computers does not have a current Web browser, the Setup Wizard provides an opportunity to install one.*

- One of the following network interfaces:

    – Ethernet adapter.

    – HomePNA adapter.

    – Wireless Ethernet adapter (IEEE 802.11b).

    – USB port on the computer. (Only one Windows 98 SE, Windows ME, or Windows 2000 PC can be networked via USB. USB port/HomePortal connection is not available for Macintosh, Windows 95, or Windows NT.)

    Note: *To learn how to determine whether your system meets the network interface requirement, see "Troubleshooting installation" on page 9-1.*

Remove conflicting applications

It could be that you, a family member, or a DSL service provider has installed networking software on your computer. This software is no longer necessary when you have the HomePortal and it may prevent successful installation of the HomePortal.

Conflicting applications include 3Com HomeClick, Microsoft Internet Connection Sharing, Intel Anypoint ISS, or proxy software such as WinGate, Sygate, and similar programs. If you have any of these applications on your computers, you should uninstall them before installing the HomePortal.

Windows provides two methods for uninstalling software. The method you use depends on the type of software you are uninstalling. Consult the documentation of the conflicting software for complete uninstallation instruction, or use the following instructions as a guideline.

Method 1 on Windows:

1. **From the Start menu, select Settings > Control Panel.**

2. **Double-click Add/Remove Programs.**

3. **From the list of programs, select the networking software and click Add/ Remove.**

4. **Click Yes to confirm that you want to remove the program and all of its components.**

Method 2 on Windows:

1. **From the Start menu, select Programs.**

2. **From the list of programs, select the networking software.**

3. **From the submenu, select Uninstall.**

4. **Click Yes to confirm that you want to remove the program and all of its components.**

Uninstalling conflicting networking software on Macintosh:

1. **Locate the CD and insert it in the CD-ROM drive.**

2. **Double-click to open the icon that appears on your desktop.**

3. **Choose Uninstall.**

If you cannot locate the CD, you may need to contact your service provider or the manufacturer of the conflicting application for instructions on uninstalling the software.

Plan your home network

The following diagram shows some recommended locations and connection types for the HomePortal and your computers. Below the diagram we explain why

pairing these locations with these connection types makes sense in a home network.

HomePNA

USB   Ethernet

HomePNA

with wireless card

with wireless card

⋯ Phone lines
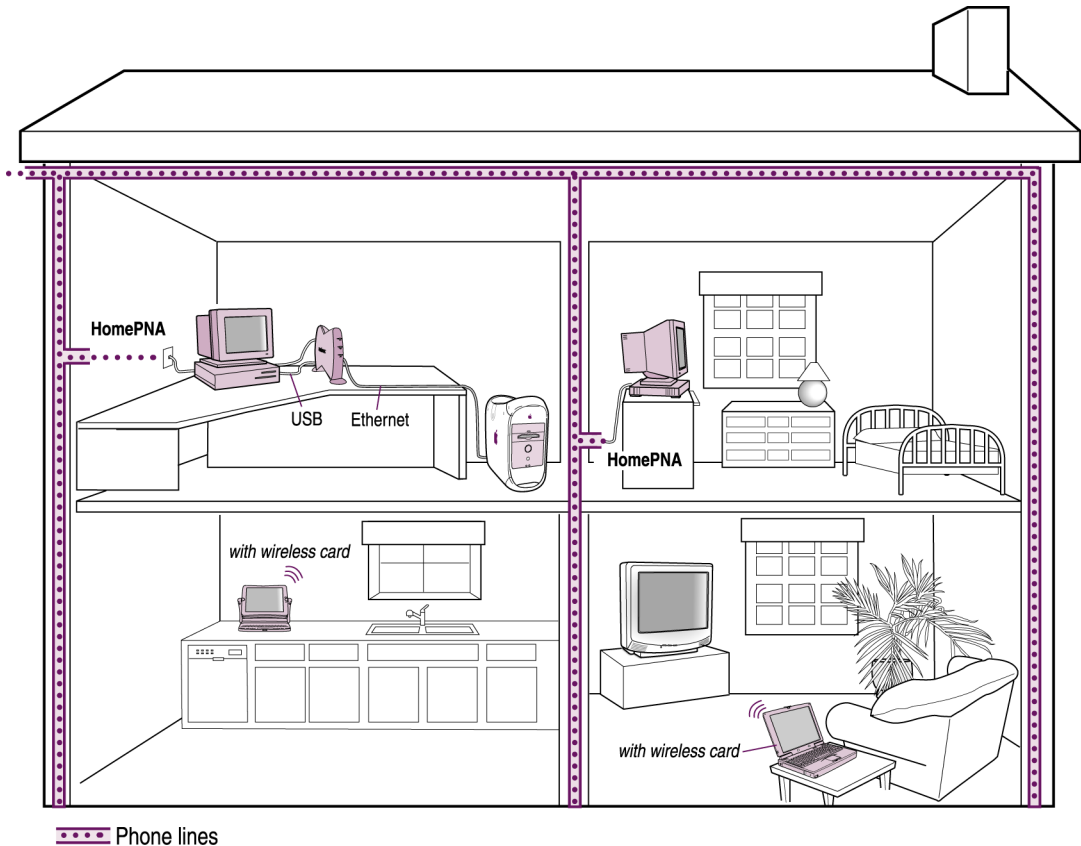
❖ **Study/home office**

Place the HomePortal in a visible, easily accessible location near a power outlet, phone jack, and a computer. If your office computer has Windows 98 SE, ME, or 2000, we recommend connecting it via USB. For two computers, consider USB and Ethernet. If you have multiple computers requiring Ethernet, we recommend using an Ethernet hub (10/100 Mbps) to connect the computers to the HomePortal.

❖ **Kitchen**

With limited counter space, web pads or notebook computers may be your best choice in the kitchen. We recommend using a 2Wire PC Port USB HomePNA adapter to connect via phoneline or using a wireless connection.

❖ **Bedrooms**

We recommend using a 2Wire PC Port USB HomePNA adapter to connect via phoneline because bedrooms are likely to have phone jacks, making phoneline networking convenient.

❖ **Common living areas**

We recommend connecting via phoneline because common living areas are likely to have phone jacks making phoneline networking convenient. Or you may want to connect via wireless to minimize cabling.

Getting started

Make sure your package includes the items shown here.

Note: *The cables are included for your convenience. Your home network may not require all of the included cables.*

Power adapter
(black)

HomePortal

Modular Phone jack
(Y-adapter)

**Documentation
and software**

USB cable
(ivory with
colored ends)

Phone cords
(light gray)

Ethernet cable
(dark gray)
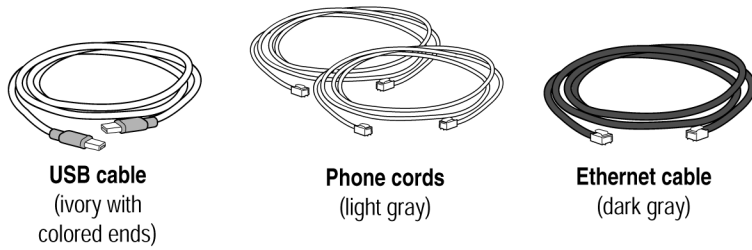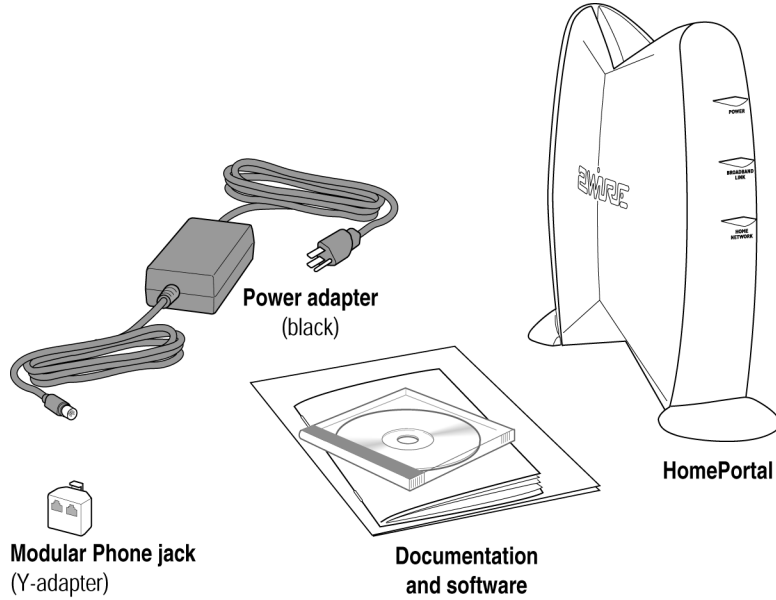
Installing HomePortal hardware

Important: Read this page.

With HomePortal you can use a combination of connectivity methods within your home network. Some of your computers can be networked by way of phoneline networking (HomePNA) by using your existing phoneline, some by way of wireless, some by Ethernet, and one Windows 98 SE, Millenium, or 2000 computer by way of USB.

Assuming the first computer you are connecting to the HomePortal is located near the HomePortal, you may wish to connect it using Ethernet or USB.

To install the HomePortal hardware:

1. **Choose a computer to begin the installation.**

   The first computer you connect to your home network should be near your DSL service wall jack, a telephone jack, and the HomePortal.

2. **Choose a connection type.**

   To add your **first** computer to the HomePortal network, choose *one* of the following five connection types:

	Connection Type	Go to...
	Choice 1: Computer with Ethernet card (no hub)	page 2-3
	Choice 2: Windows 98 SE, ME, or 2000 computer with USB Port	page 2-5
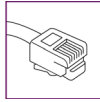
	Choice 3:	
	Computer with HomePNA adapter	page 2-10

	Choice 4:	
	Computer with Wireless Ethernet card	page 2-12
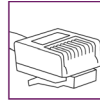
	Choice 5:	
	Network with Ethernet hub	page 2-14

Note: *If you are not sure whether your computer has one of these options, see "Troubleshooting installation" on page 9-1.*

Choice 1: Computer with Ethernet connection
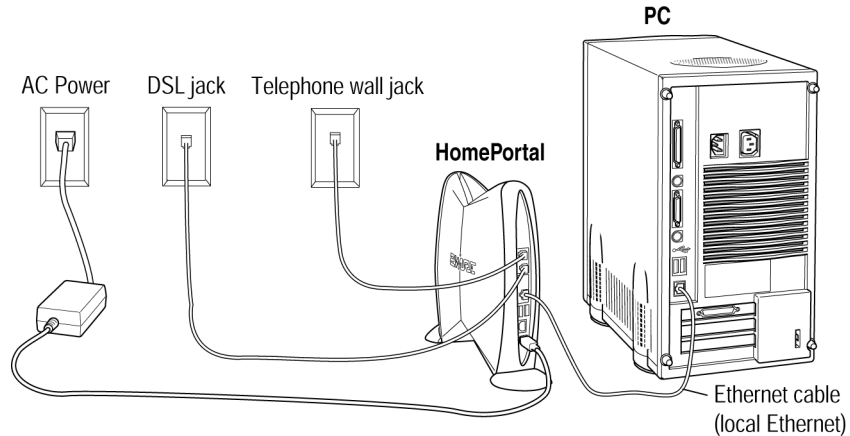
To connect your computer to the HomePortal via Ethernet:

1. **Verify the computer has an Ethernet card.**

   If you are not sure whether your computer has an Ethernet card, see "Troubleshooting installation" on page 9-1.

2. **Making sure the round connector is lined up correctly, plug the black AC power adapter into the HomePortal POWER port (bottom plug) and then plug the other end into an electrical outlet.**

   The green Power light on the front of the HomePortal should come on.

3. *page 8-1***Recommended: If any of the computers in your home today or in the future will connect to your home network via HomePNA, connect the included light-gray telephone cable from the HomePortal LINE port (top plug) to the telephone jack (should have dial tone).**

4. **Connect the other included light-gray telephone cable from the HomePortal DSL port (2nd plug from top) to the DSL service wall jack.**

   This connects the HomePortal's internal DSL modem to your DSL service provider. If you already have an external DSL modem, you no longer need to use it.

> **Note:** *The DSL service wall jack is a special jack set up during installation of DSL service. It is not a regular phone jack and should not have a dial tone. One way to verify that you are connecting to the correct wall jack is to attach a telephone to the jack and then listen for a dial tone. If you do not hear a dial tone through the handset, this is the correct wall jack to connect to the HomePortal DSL port.*

> **Note:** *If your telephone jack is already in use, you can use the included Y-adapter to share it with the HomePortal. See page 8-1.*

5. **Connect the included dark-gray Ethernet cable from the HomePortal LOCAL ETHERNET port (3rd plug from top) to your computer's Ethernet port.**

6. **Power on your computer and after your computer has completely started, verify the top and bottom indicator lights on the front of the HomePortal are green.**

   If the **POWER** and **HOME NETWORK** lights are lit green, the HomePortal is now connected to your computer and the telephone line that runs throughout your home.

   If they are not lit green, see "Checking indicator lights" on page 9-2.

   > **Note:** *After installing the HomePortal software, the* **BROADBAND LINK** *indicator light will also turn green.*

7. **Go to "Installing HomePortal software" on page 3-1.**

Choice 2: Windows 98 SE, ME, or 2000 computer with USB port
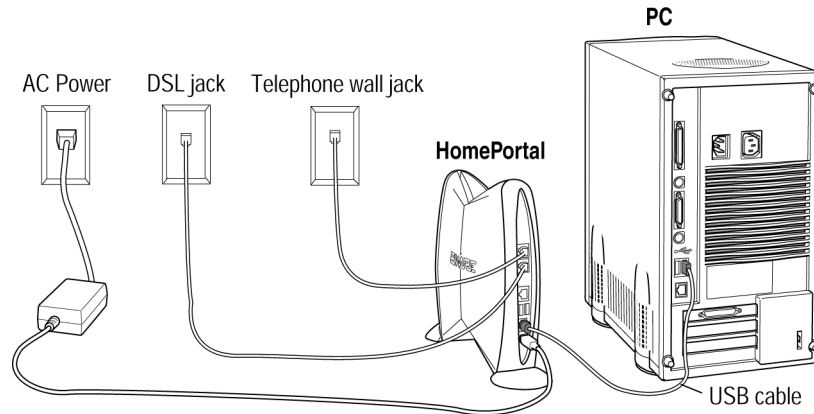
Note: *In a HomePortal network, only one Windows 98 SE, Windows ME, or Windows 2000 computer can be connected via USB. USB/HomePortal connectivity is not available for Macintosh, Windows 95, or Windows NT.*

To connect your computer to the HomePortal via USB:

1. **Making sure the round connector is lined up correctly, plug the black AC power adapter into the HomePortal POWER port (bottom plug) and then plug the other end into an electrical outlet.**

   The green Power light on the front of the HomePortal should come on.

2. **Connect the ivory-colored USB cable from the HomePortal PC port (2nd plug from bottom) to your computer's USB port.**

3. *page 8-1* **Recommended: If any of the computers in your home today or in the future will connect to your home network via HomePNA, connect the included light-gray telephone cable from the HomePortal LINE port (top plug) to the <u>telephone jack</u> (should have dial tone).**

4. **Connect the other included light-gray telephone cable from the HomePortal DSL port (2nd plug from top) to the DSL service wall jack.**

    This connects the HomePortal's internal DSL modem to your DSL service provider. If you already have an external DSL modem, you no longer need to use it.

    Note: *The DSL service wall jack is a special jack set up during installation of DSL service. It is not a regular phone jack and should not have a dial tone. One way to verify that you are connecting to the correct wall jack is to attach a telephone to the jack and then listen for a dial tone. If you do not hear a dial tone through the handset, this is the correct wall jack to connect to the HomePortal DSL port.*

    Note: *If your telephone jack is already in use, you can use the included Y-adapter to share it with the HomePortal, as shown on page 8-1.*

5. **Power on your computer.**

    Note: *The following screens may vary somewhat on Windows ME and Windows 2000.*

    –   The Add New Hardware Wizard appears. Click **Next** to continue.

    –   Select **Search for best driver for your device**. Click **Next** to continue.

- Place the HomePortal Setup Wizard CD in the CD-ROM tray, and then select **CD-ROM drive**. Click **Next** to continue.

- Select **The updated driver**. Click **Next** to continue.

– Click **Next** to continue.

Note: *If asked to insert your Windows CD, please do so and follow on-screen instructions. If you don't have your Windows CD handy, try the following options for locating the driver:*

> C:\WINDOWS\options\cabs
>
> C:\Windows
>
> C:\Windows\system
>
> D:\Win98

– Click **Finish**.

– Remove the CD from the CD-ROM tray, and then click **Yes** to restart your computer.

6. **After your computer has completely restarted, verify the top and bottom indicator lights on the front of the HomePortal are green.**

    If the **POWER** and **HOME NETWORK** lights are lit green, the HomePortal is now connected to your computer and the telephone line that runs throughout your home.

    If they are not lit green, see "Checking indicator lights" on page 9-2.

    Note: *After installing the HomePortal software, the* **BROADBAND LINK** *indicator light will also turn green.*

7. **Go to "Installing HomePortal software" on page 3-1.**

Choice 3: Computer with HomePNA connection
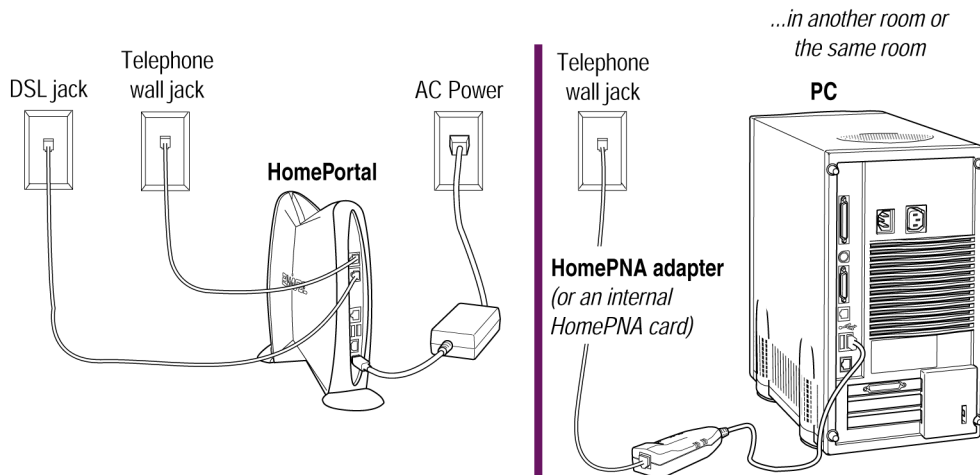
To connect your computer to the HomePortal via HomePNA:

1. **Verify the computer has a HomePNA adapter.**

    You can order HomePNA adapters from 2Wire (2Wire PC Port Phoneline 10 Mbps USB Adapter).

    Note: *If you are not sure whether your computer has a HomePNA adapter, see "Troubleshooting installation" on page 9-1.*

2. **Verify that the telephone line in the room with your computer is active by attaching a telephone to the wall jack and then listening for a dial tone.**

   If you hear a dial tone, you can use this jack for HomePNA.

3. **Connect a telephone cord from the HomePNA adapter (or from the HomePNA card in your computer) to a telephone wall jack.**

   Note: *Your computer may have an internal analog modem. Analog modems are used to connect to the Internet or other external networks by dialing a phone number. Analog (dial-up) modems can look similar to HomePNA adapters. Make sure that you connect your computer to the HomePNA adapter and not to an analog modem.*

4. **Making sure the round connector is lined up correctly, plug the black AC power adapter into the HomePortal POWER port (bottom plug) and then plug the other end into an electrical outlet.**

   The green Power light on the front of the HomePortal should come on.

5. *page 8-1***Connect the included light-gray telephone cord from the HomePortal LINE port (top plug) to your <u>telephone jack</u> (should have dial tone).**

6. **Connect the other included light-gray telephone cable from the HomePortal DSL port (2nd plug from top) to the DSL service wall jack.**

   This connects the HomePortal's internal DSL modem to your DSL service provider. If you already have an external DSL modem, you no longer need to use it.

   Note: *The DSL service wall jack is a special jack set up during installation of DSL service. It is not a regular phone jack and should not have a dial tone. One way to verify that you are connecting to the correct wall jack is to attach a telephone to the jack and then listen for a dial tone. If you do not hear a dial tone through the handset, this is the correct wall jack to connect to the HomePortal DSL port.*

   Note: *If your telephone jack is already in use, you can use the included Y-adapter to share it with the HomePortal. See page 8-1.*

7. **Power on your computer and after your computer has completely started, verify the top and bottom indicator lights on the front of the HomePortal are green.**

   If the **POWER** and **HOME NETWORK** lights are lit green, the HomePortal is now connected to your computer and the telephone line that runs throughout your home.

   If they are not lit green, see "Checking indicator lights" on page 9-2.

   Note: *After installing the HomePortal software, the* **BROADBAND LINK** *indicator light will also turn green.*

8. **Go to "Installing HomePortal software" on page 3-1.**

Choice 4: Computer with Wireless Ethernet connection

To connect your computer to the HomePortal via Wireless Ethernet:

AC
Power

DSL
jack

Telephone
wall jack

*...in another room or
the same room*

HomePortal

PC
(with wireless card)

1. **Verify the computer has a** Wireless Ethernet **card, and verify the card is configured to operate with your HomePortal.**

   We provide general guidelines for configuring Wireless Ethernet cards to operate with the HomePortal in the *Wireless Card Configuration* booklet included with your HomePortal. For your convenience, the *Wireless Card Configuration* booklet also includes detailed instructions for configuring Lucent, 3Com, Aironet, and Apple wireless cards.

Note: *If you are not sure whether your computer has a wireless card, see "Troubleshooting installation" on page 9-1.*

2. **Making sure the round connector is lined up correctly, plug the black AC power adapter into the HomePortal POWER port (bottom plug) and then plug the other end into an electrical outlet.**

   The green Power light on the front of the HomePortal should come on.

3. *page 8-1***Recommended: If any of the computers in your home today or in the future will connect to your home network via HomePNA, connect the included light-gray telephone cable from the HomePortal LINE port (top plug) to the <u>telephone jack</u> (should have dial tone).**

4. **Connect the other included light-gray telephone cable from the HomePortal DSL port (2nd plug from top) to the DSL service wall jack.**

   This connects the HomePortal's internal DSL modem to your DSL service provider. If you already have an external DSL modem, you no longer need to use it.

   Note: *The DSL service wall jack is a special jack set up during installation of DSL service. It is not a regular phone jack and should not have a dial tone. One way to verify that you are connecting to the correct wall jack is to attach a telephone to the jack and then listen for a dial tone. If you do not hear a dial tone through the handset, this is the correct wall jack to connect to the HomePortal DSL port.*

   Note: *If your telephone jack is already in use, you can use the included Y-adapter to share it with the HomePortal. See page 8-1.*

5. **Power on your computer and after your computer has completely started, verify the top and bottom indicator lights on the front of the HomePortal are green.**

   If the **POWER** and **HOME NETWORK** lights are lit green, the HomePortal is now connected to your computer and the telephone line that runs throughout your home.
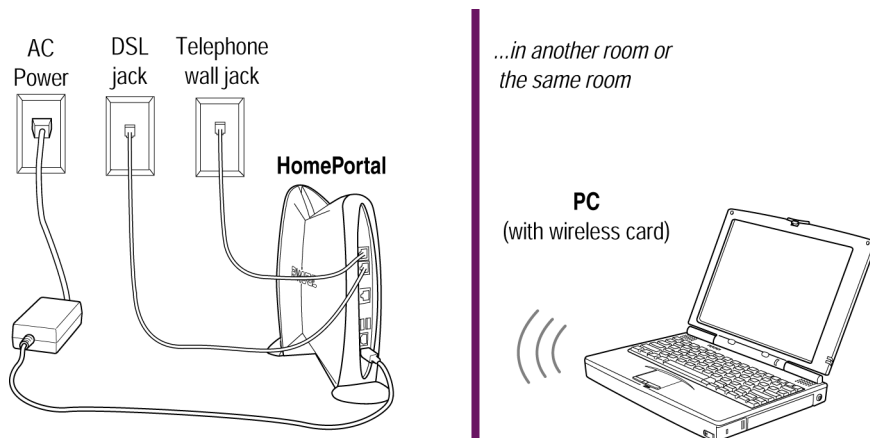
   If they are not lit green, see "Checking indicator lights" on page 9-2.

> **Note:** *After installing the HomePortal software, the* **BROADBAND LINK** *indicator light will also turn green.*

6. **Go to "Installing HomePortal software" on page 3-1.**

Choice 5: Network with Ethernet hub/switch
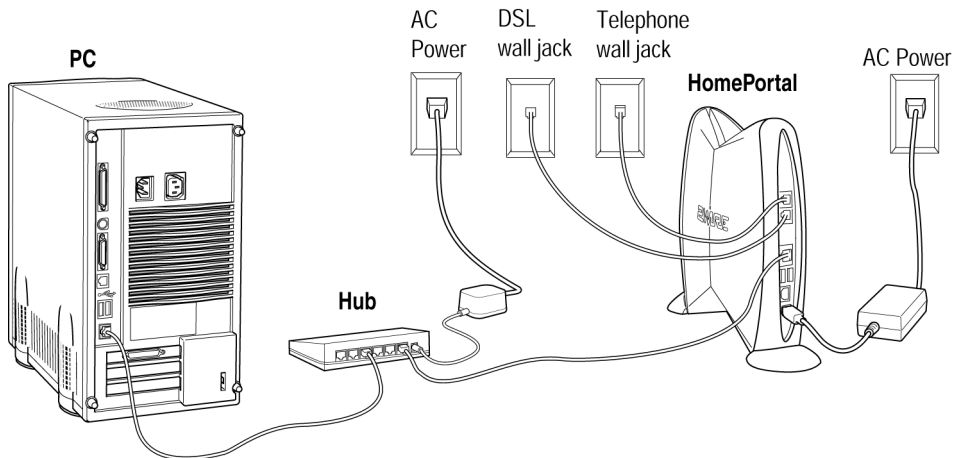
To connect your computer to the HomePortal via Ethernet hub:

1. **Verify the computer has an Ethernet card.**

   Note: *If you are not sure whether your computer has an Ethernet card, see "Troubleshooting installation" on page 9-1.*

2. **If you have not already done so, connect each Ethernet device's network card to the hub with a network cable, similar to the dark-gray cable included with the HomePortal.**

   Note: *You can purchase additional Ethernet cables at any consumer electronics retailer.*

3. **Make sure your Ethernet hub's power adapter is plugged into an AC power outlet.**

4. **Making sure the round connector is lined up correctly, plug the black AC power adapter into the HomePortal POWER port (bottom plug) and then plug the other end into an electrical outlet.**

   The green Power light on the front of the HomePortal should come on.

5. *page 8-1***Recommended: If any of the computers in your home today or in the future will connect to your home network via HomePNA, connect the included light-gray telephone cable from the HomePortal LINE port (top plug) to the** <u>telephone jack</u> **(should have dial tone).**

6. **Connect the other included light-gray telephone cable from the HomePortal DSL port (2nd plug from top) to the DSL service wall jack.**

   This connects the HomePortal's internal DSL modem to your DSL service provider. If you already have an external DSL modem, you no longer need to use it.

   Note: *The DSL service wall jack is a special jack set up during installation of DSL service. It is not a regular phone jack and should not have a dial tone. One way to verify that you are connecting to the correct wall jack is to attach a telephone to the jack and then listen for a dial tone. If you do not hear a dial tone through the handset, this is the correct wall jack to connect to the HomePortal DSL port.*

   Note: *If your telephone jack is already in use, you can use the included Y-adapter to share it with the HomePortal, as shown on page 8-1.*

7. **Connect the included dark-gray Ethernet cable to the HomePortal LOCAL ETHERNET port (3rd plug from top) and to any port on the Ethernet hub.**

8. **Power on your computer and after your computer has completely started, verify the top and bottom indicator lights on the front of the HomePortal are green.**

   If the **POWER** and **HOME NETWORK** lights are lit green, the HomePortal is now connected to your computer and the telephone line that runs throughout your home.

   If they are not lit green, see "Checking indicator lights" on page 9-2.

Note: *After installing the HomePortal software, the* **BROADBAND LINK** *indicator light will also turn green.*

9. **Go to "Installing HomePortal software" on page 3-1.**

Installing HomePortal software

Congratulations! You have completed the hardware installation. But before you start sending print jobs to the printer in the other room or start playing network games with your family, you need to tell your computer that it is connected to a network by installing the HomePortal software.

> **Note:** *Before installing the HomePortal software, locate your HomePortal Key Code. See* **Before you begin** *in Chapter 1.*

The Setup Wizard on Windows

It is strongly recommended that you close all Windows programs before running the Setup Wizard.

To install the HomePortal software on Windows computers:

1. **Place the HomePortal Setup Wizard CD in the CD-ROM drive and close the CD tray.**

   > **Note:** *If your computer does not have a CD-ROM drive, see "One of my computers doesn't have a CD-ROM drive." on page 9-4.*

2. **Follow on-screen instructions.**

   After the Setup Wizard completes, the **BROADBAND LINK** indicator light on the front of your HomePortal will flash green as the HomePortal establishes a connection to your broadband service provider. This could take several minutes. The light will turn solid green once the connection is established.

Starting the Setup Wizard manually on Windows

Some Windows computers will automatically run the Setup Wizard. If after a full minute the Setup Wizard doesn't run automatically, you can start the Setup Wizard manually.

To start the Setup Wizard manually:

1. **Double-click the "My Computer" icon located on the desktop.**

2. **Double-click the icon that corresponds to your CD-ROM drive.**

3. **Double-click Setup.exe.**

The Setup Wizard on Macintosh

It is strongly recommended that you close all Macintosh programs before running the Setup Wizard.

To install the HomePortal software on Macintosh computers:

1. **Place the HomePortal Setup Wizard CD in the CD-ROM drive and close the CD tray.**

   A 2Wire icon appears on your desktop.

2. **Double-click the 2Wire icon.**

   A window opens with two icons. One is a HomePortal Install icon and the other is an Internet Explorer 5 folder.

   IMPORTANT: If your Macintosh does not have a current Web browser, you must install a current Web browser **before** installing the HomePortal software. To install Internet Explorer 5, drag the Internet Explorer folder to your Macintosh hard drive, double-click the Internet Explorer icon, and, when prompted, agree to make Internet Explorer 5 your default browser. Alternatively, you can download and install the current version of Netscape Navigator.

3. **Double-click the HomePortal install icon.**

4. **Click Continue.**

5. **Click Install to copy the HomePortal software to a folder called 2Wire HomePortal on the Macintosh hard drive.**

   To copy the files to a different folder, click **Select Folder...** from the pull-down menu and select another folder. Then click **Install**.

6. **Follow on-screen instructions.**

    After the Setup Wizard completes, the BROADBAND LINK indicator light
    on the front of your HomePortal will flash green as the HomePortal
    establishes a connection to your broadband service provider. This could take
    several minutes. The light will turn solid green once the connection is
    established.

Chapter **4**

Adding computers to your network

With HomePortal you can use a combination of connectivity methods within your home network. Some of your computers can be networked by way of phoneline networking (HomePNA) by using your existing phoneline, some by way of wireless, some by Ethernet, and one Windows 98 SE, Millenium, or 2000 computer by way of USB.

Unless you already have an Ethernet network installed, you may wish to add computers to your network using HomePNA or a combination of HomePNA and wireless because these technologies don't require placing new wiring throughout your home.

Choose a connection type for each computer to be added to your home network and then refer to the indicated page for instructions:

	Connection Type	Go to...
	Choice 1: Computer with HomePNA adapter	page 4-2
	Choice 2: Computer with Wireless Ethernet card	page 4-3
	Choice 3: Network with Ethernet hub	page 4-4
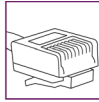
	Choice 4:	
	Computer with Ethernet card (no hub)	page 4-5
	Choice 5:	
	Windows 98 SE, ME, or 2000 with USB Port	page 4-6

> **Note:** *If your computers have more than one of the above networking technologies installed, choose one way to connect each computer to the HomePortal. If you are not sure whether your computers have one of these options, see "Troubleshooting installation" on page 9-1.*

Choice 1: Computers with HomePNA connection
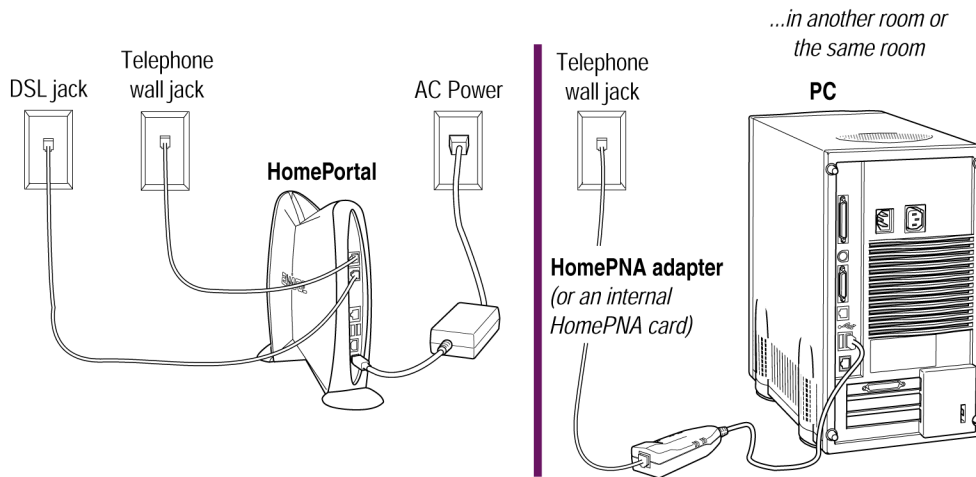
> **Note:** *You can connect computers to up to two phone lines that have different phone numbers. See HomePortal online Help for details.*

To add a computer to your network via HomePNA:

1. **Verify the computer has a HomePNA adapter.**

   You can order HomePNA adapters from 2Wire (2Wire PC Port Phoneline 10 Mbps USB Adapter).

2. **Connect the HomePNA adapter to a telephone wall jack.**

   Note: *Your computer may have an analog modem. Analog modems are used to connect to the Internet or other external networks by dialing a phone number. Analog (dial-up) modems can look similar to HomePNA adapters. Make sure that you connect your computer to the HomePNA adapter and not to an analog modem.*

3. **Install the HomePortal software.**

Choice 2: Computers with Wireless Ethernet connection
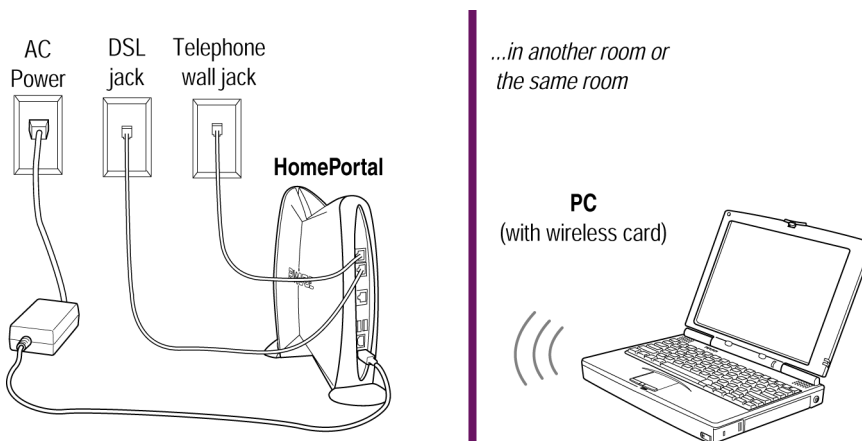
To add a computer to your network via Wireless Ethernet connection:

1. **Verify the computer has a** Wireless Ethernet **card, and verify the card is configured to operate with your HomePortal.**

   We provide general guidelines for configuring Wireless Ethernet cards to operate with the HomePortal in the *Wireless Card Configuration* booklet included with your HomePortal. For your convenience, the *Wireless Card*

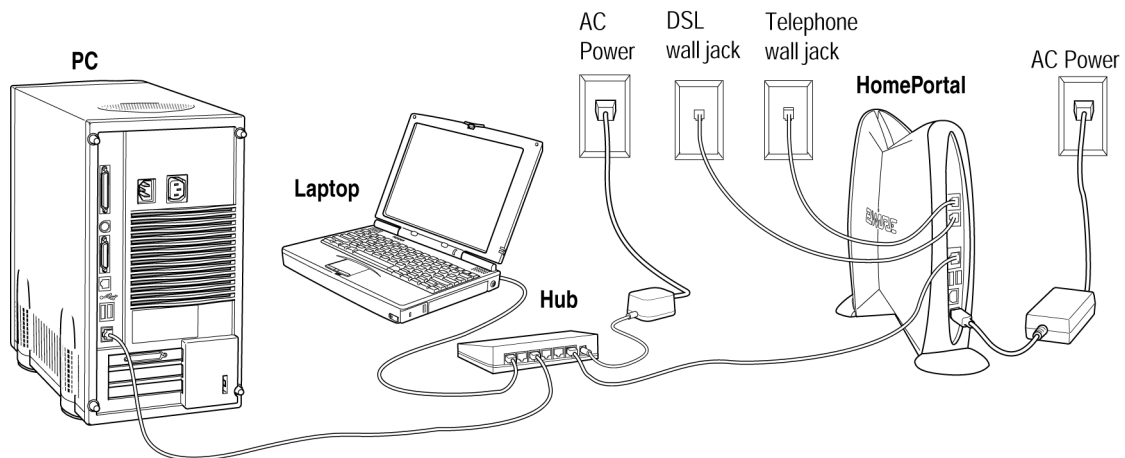*Configuration* booklet also includes detailed instructions for configuring Lucent, 3Com, Aironet, and Apple wireless cards.

Note: *If you are not sure whether your computer has a wireless card, see "Troubleshooting installation" on page 9-1.*

2. **Install the HomePortal software.**

Choice 3: Network with Ethernet hub/switch

To add devices to your network via Ethernet hub:

1. **Verify the devices have Ethernet cards.**

Note: *If you are not sure whether your computers have Ethernet cards, see "Troubleshooting installation" on page 9-1.*

2. **Connect the included dark-gray Ethernet cable to the HomePortal LOCAL ETHERNET port (2nd from top plug) and to any port on the Ethernet hub.**

Many hubs have one port designated as the "Unlink" port. Computers directly connected to this port may require the use of a special cable called a crossover cable. For more information see your hub documentation.

3. **If you have not already done so, connect each Ethernet device's network card to the hub with a network cable, similar to the dark-gray cable included with the HomePortal.**

   Note: *You can purchase additional Ethernet cables at any consumer electronics retailer.*

4. **Install the HomePortal software on each connected computer.**

Choice 4: Computer with Ethernet connection
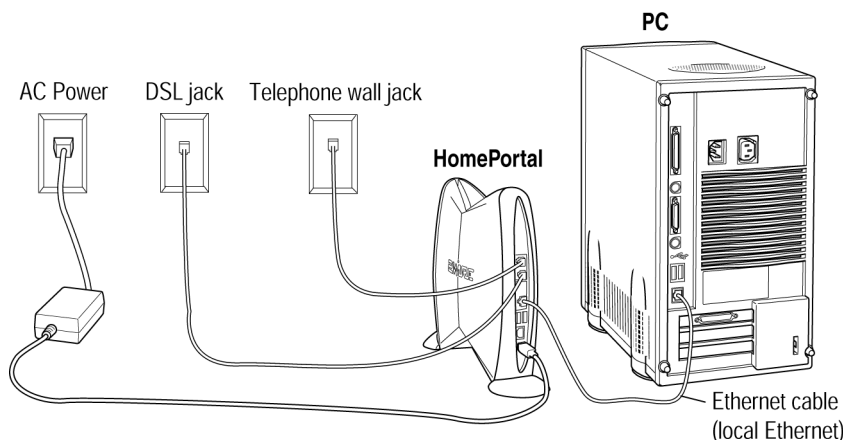
Note: *If you recently purchased the Ethernet card, install the card and software before proceeding with the HomePortal connection.*

To add a computer to your network via Ethernet connection:

1. **Connect the included dark-gray Ethernet cable from the Ethernet adapter to the HomePortal LOCAL ETHERNET port (2nd from top plug).**

   Note: If the dark-gray Ethernet cable is not long enough, you can purchase a longer cable (RJ-45 CAT 5) from any consumer electronics retailer.

2. **Install the HomePortal software.**

Choice 5: Windows 98 SE, ME, or 2000 computer with USB port
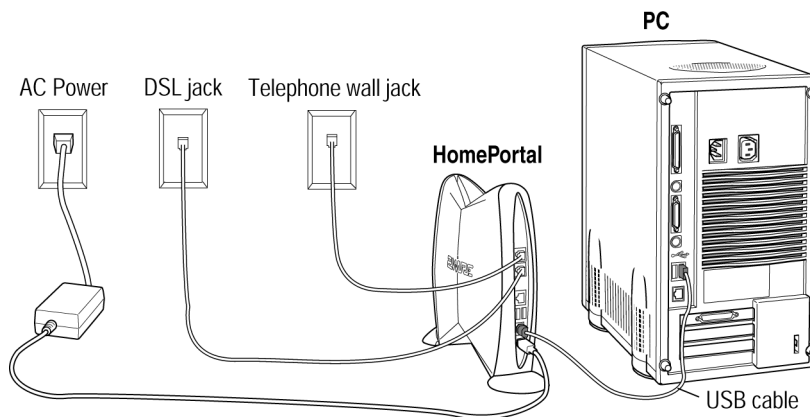
> **Note:** *In a HomePortal home network, only one Windows 98 SE, ME, or 2000 computer with USB port can be connected via USB. USB/HomePortal connectivity is not available for Macintosh, Windows 95 or Windows NT.*

To add a computer to your network via USB:

1. **Connect the included ivory-colored USB cable to the HomePortal PC port (2nd plug from bottom) and the computer's USB port.**

2. **Power on your computer.**

   Note: *The following screens may vary somewhat on Windows ME and Windows 2000.*

   – The Add New Hardware Wizard appears. Click **Next** to continue.

–   Select **Search for best driver for your device**. Click **Next** to continue.

–   Place the HomePortal Setup Wizard CD in the CD-ROM tray, and then select **CD-ROM drive**. Click **Next** to continue

– Select **The updated driver.** Click **Next** to continue.

– Click **Next** to continue.

Note: *If asked to insert your Windows CD, please do so and follow on-screen instructions. If you don't have your Windows CD handy, try the following options for locating the driver:*

C:\Windows\options\cabs

C:\Windows

C:\Windows\system

D:\Win98

– Click **Finish**.

–   Remove the CD from the CD-ROM tray, and then click **Yes** to restart your computer.

3.   **Install the HomePortal software.**

Using HomePortal Monitor

HomePortal Monitor provides useful networking tools for all the computers in your home network.

HomePortal Monitor tools
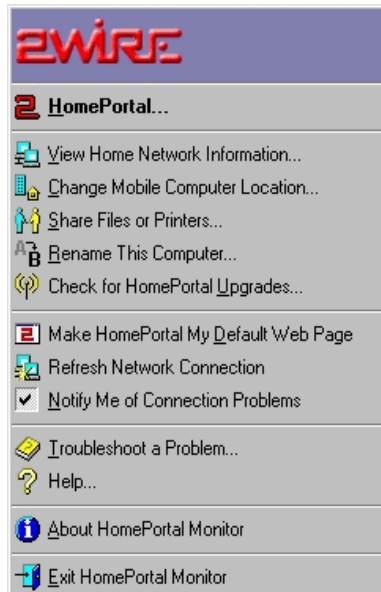
After running the HomePortal Setup Wizard, a **2** icon appears in the task bar of your computer screen.

2 Click the icon to launch HomePortal Monitor, which is a handy menu of tools such as Share Files or Printers, View Home Network Information, and Online Help.

The following pages briefly describe how to use the tools in HomePortal Monitor. For more detailed instructions, refer to the online Help system.

2 Launch your HomePortal default page

From HomePortal Monitor, select **HomePortal...** to launch your home console (http:\\homeportal).

View home network information

From HomePortal Monitor, select **View Home Network Information...** to open your home network page, which displays information about all your networked devices.

Change mobile computer location

From HomePortal Monitor, select **Change Mobile Computer Location…** to switch network settings between home and one other location, such as work or school. When you switch to a mobile location, your home settings are preserved. When you switch back to your home settings, the most recent mobile settings are preserved.

This feature is useful even if you don't have a mobile computer because you can use it to protect the network settings required for your computer to function properly with the HomePortal. For example, if you wish to experiment with network settings or you are installing hardware or software that might alter network settings, we highly recommend that you first switch to work mode. This will protect your home mode settings from being altered.

Share files and printers (available on Windows 95, 98, and ME)

From HomePortal Monitor, select **Share Files or Printers...** to select drives and printers you wish to share with other Windows 95, 98 SE, or ME computers on the network. This is a computer-specific option, so if you want to share all drives and printers, you must use this tool on each computer.

Rename your computer

From HomePortal Monitor, select **Rename This Computer…** to change your computer name. The name you choose is the name you will see when you view the computer on the home network. Each computer on your network must have a unique name.

Check for HomePortal upgrades

From HomePortal Monitor, select **Check for HomePortal Upgrades...** to launch a page that intelligently offers upgrades as needed and shows the HomePortal software version currently in use on your computer.

Make HomePortal your default Web page

From HomePortal Monitor, select **Make HomePortal My Default Web Page** so that every time you open your browser, you will see your home console.

Refresh your home network connection(s)

From HomePortal Monitor, select **Refresh Home Network Connection** to automatically resynchronize your computer and the HomePortal. This is useful if your computer ever needs to be assigned a new IP address.

Choose to be notified of connection problems

From HomePortal Monitor, check **Notify Me of Connection Problems** if you would like to automatically initiate 2Wire's ongoing help in diagnosing and troubleshooting potential problems on your home network.

Troubleshoot

From HomePortal Monitor, select **Troubleshoot a Problem...** to open HomePortal online FAQs and Troubleshooting.

Get help using HomePortal

From HomePortal Monitor, select **Help...** to open HomePortal online Help system.

Using network-enabled games and applications

For security reasons, the HomePortal normally blocks communication from the Internet to "application servers" on your home network. If you need to "host" an application server in your home, you may designate one computer in your home as the host computer for that application, allowing data specifically associated with that application to pass through to that computer. Only one computer may host a particular application server at a time.

To view available hosted applications:

1. **Double-click the 🔁 icon on the bottom of the computer screen or point your browser to http://homeportal to open the home console.**

2. **From the home console, click the Network tab.**

3. **Click the Advanced... link corresponding with the computer you want to set up as a host computer.**

To assign a hosted application to a computer:

1. **From the left-hand list of available hosted applications, click to select the one you want to apply to your network computer.**

2. **Click Add>>.**

3. **Click OK.**

To remove a hosted application assignment:

1. **From the right-hand list of assigned hosted applications, click to select the one you want to remove from your network computer.**

2. **Click Remove>>.**

3. **Click OK.**

If your computer is not powered on, it will appear as inactive (grayed-out) in the list of Networked Devices. Even if your computer in inactive, you can designate it

to be a host. However, the computer must be powered on to actually function as a host for the designated application.

Playing games with other players in your home

To play a game with other players in the home:

1. **Start the game software.**

    If you are playing a network-enabled game that requires a host computer, start the software on the host computer first.

2. **When the game starts, select the multi-player or equivalent option.**

3. **If the game prompts you to choose a host, choose the computer you started the software on first.**

4. **If the game prompts you to select a protocol, choose TCP/IP. All players must select the same protocol.**

For more information on setting up a network-enabled game, see the manufacturer's documentation.

Glossary

The following terms are provided to help you become familiar with some of the technologies related to your HomePortal network.

DSL The DSL (Digital Subscriber Line) modem inside the HomePortal creates a high-speed connection between your home and your service provider. DSL allows fast, always-connected, reliable Internet access and does not tie up your telephone line. If you do not already have DSL service, you can use 2Wire's DSL Lookup Service at www.2Wire.com to help locate a provider.

Ethernet Ethernet allows you to create your home network using special wiring known as Category 5 wiring like the dark gray cable included with the HomePortal. The **LOCAL ETHERNET** port on the HomePortal connects to a computer's Ethernet card or to an Ethernet hub. However, for today's home networks you do not necessarily need to have an Ethernet network. Alternatives such as HomePNA are equally effective and allow you to network your computers without special wiring.

HomePNA or HPNA HomePortal supports the HomePNA (Home Phoneline Networking Alliance) protocol. This protocol allows you to simply and easily use the telephone wiring within your home to create your home network with shared Internet access and shared access to peripherals. HomePNA 1.0 offers 1 Mbps (megabit-per-second) transmission speed, and HomePNA 2.0 offers 10 Mbps technology, allowing faster real-time, multi-player gaming and swift downloading of large files and graphic images. The **LINE** port on the HomePortal connects the HomePortal to your HomePNA network.

> **Note:** *Whenever possible, use HomePNA 2.0 products rather than 1.0 products to avoid interfering with DSL service or slowing your home network.*

TCP/IP Transmission Control Protocol/Internet Protocol. TCP/IP is a networking protocol, a type of machine-to-machine language that provides communication across interconnected networks, between computers with diverse hardware architectures and various operating systems. Generally Windows and Macintosh

PCs come with TCP/IP already installed. Every computer in your HomePortal network must have TCP/IP.

USB Most computers and digital devices manufactured in the last few years come with USB (Universal Serial Bus) connections. The HomePortal has a USB connection for a computer. The HomePortal also has USB connections to attach peripherals, such as printers and digital cameras. These peripheral ports will be functional in a later release of HomePortal software. Check with 2Wire.com to learn when these ports will become active on your HomePortal.

Additional resources

Following are some additional resources for learning about networking technology:

- www.2Wire.com

- www.whatis.com

- www.homepna.org

Frequently asked questions

Following are frequently asked questions for networking in general, the HomePortal, and HomePNA.

Frequently asked questions about networking

How can I share files and printers between Macintosh computers?

The HomePortal file and printer sharing feature is not currently supported on Macs. The HomePortal does not interfere with the Macintosh method for sharing files and printers on a network. Refer to your Macintosh online Help system.

How can I share files and printers between Windows NT machines?

The HomePortal network fully supports Windows NT and Windows 2000 file and printer sharing. However, the HomePortal Monitor's sharing setup feature is not currently supported for Windows NT and 2000. Instead, use the Windows method for setting up file and printer sharing; this method is explained in detail in the Windows online Help system.

Do I need to use a network hub or switch with my home network?

Only if you want to connect more than one Ethernet device (for example, two computers with Ethernet cards or one computer with an Ethernet card and one wireless base station). You do not need to use crossover cables when connecting devices to the HomePortal.

To connect the HomePortal to an Ethernet hub, see "Choice 5: Network with Ethernet hub/switch" on page 2-14.

What kind of Ethernet cable should I use, and how should I connect it?

With HomePortal you can use any kind of Ethernet cable and connect it in either direction. This is because the HomePortal features built-in automatic sensing capability that detects the difference between crossover and straight-through Ethernet cabling (RJ-45 CAT 5). You still need to be careful with other devices connected to your hub and follow the instructions that come with those devices.

How can I connect my telephone to the same telephone wall jack the HomePortal connects to?

Use a phone-line filter and the included Y-adapter as shown in the following figure.

> **Note:** *Phoneline filters are required if you have splitterless DSL and sometimes they are required even if you have splittered DSL because splitters installed by DSL service providers do not always completely eliminate noise on the phone line. Use phoneline filters on each phone, answering machine, fax machine, security system, and analog modem. You can order phoneline filters from 2Wire (2Wire DSL Filter).*

Connecting DSL Filter to single jack with the HomePortal
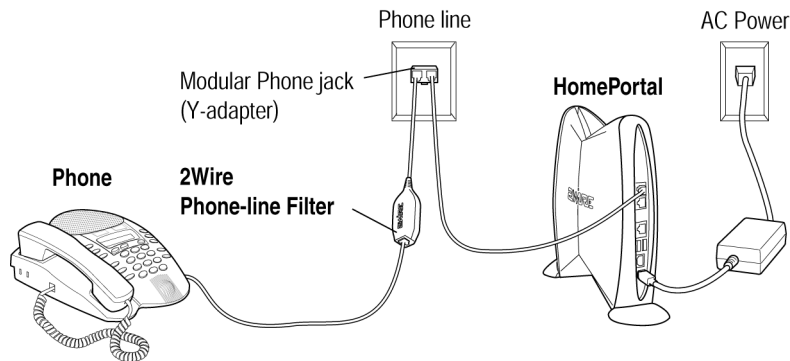
How far apart can any two computers be in my network?

Up to 300 feet for a wireless network, 500 feet for a phoneline network, and 300 feet for an Ethernet network.

IMPORTANT: 2Wire recommends using the included light-gray telephone cables to connect computers via phoneline and the included dark-gray Ethernet cable to connect computers via Ethernet.

How many computers can I attach to my home network?

You can attach as many as 253 computers or Internet devices (only 30 computers via HomePNA).

Frequently asked questions about HomePortal

What security features does the HomePortal provide?

The HomePortal provides some of the best security on the market by acting as a barrier between your computer and the Internet. The hacker simply cannot get around the HomePortal to attack your computers or your network.

The HomePortal does several key things to protect your computer:

- As a separate piece of hardware it offers a layer of protection for a computer owner that software simply can't.

- The HomePortal cannot run software beyond what is factory installed. This prevents a hacker from using the HomePortal to relay attacks.

- Because the HomePortal uses solid state memory and does not have a hard drive, it can only provide limited functionality and is not open to becoming a host to a number of Trojan horses and other hacker applications that are used to crack systems.

- The HomePortal hides the IP addresses of the computer(s) attached to it. This means that a port scanner scans the HomePortal open ports, not your computers. As a first line of defense, this will stop you from being marked as a potential victim by someone who is looking for an easy target with a port scanner. It is similar to a house alarm or large dog that will make a burglar look for another house to rob instead of yours.

- The HomePortal also blocks ports. This means that a port may be open on your computer(s), but the open port will not be accessible from the Internet.

- The HomePortal prevents denial of service and distributed denial of service attacks. This means that attempts to attack your home network by using repeated connect requests, a common technique used by hackers, will fail.

- The HomePortal supports VPN (virtual private network) software, which encrypts data and network addresses before sending them through the public network and decrypts them at the receiving end.

Test your network security. Visit **http://www.grc.com** and use their ShieldsUP! test.

How can I change my home page in my browser to the HomePortal?

> **Note:** *You can reach the HomePortal default page anytime simply by typing* **homeportal** *in your brower's address field.*

To make HomePortal your default home page:

1. **Click the 2 icon at the bottom of your computer screen to open HomePortal Monitor.**

2. **From HomePortal Monitor, select Make HomePortal My Default Web Page.**

How can I add peripherals to the HomePortal?

The HomePortal has two USB peripheral ports; however, these are not currently available for use. Check www.2Wire.com to find out if your USB peripherals can be used.

Does the HomePortal work with Linux, FreeBSD, and other operating systems?

Installation of the HomePortal software on your first computer should be done on a computer running Windows 95, 98, NT, 2000, or Macintosh 8.5 or higher. Also, the HomePortal Monitor portion of the graphical user interface requires Windows 95, 98, NT, 2000, or Macintosh 8.5 or higher. Other operating systems are not fully supported by 2Wire.

However, any computer capable of using a dynamically assigned IP address via DHCP can be used within a HomePortal network. This means that computers running any network-capable operating system can benefit from the security and Internet sharing capabilities of the HomePortal. They can also point their browsers to the HomePortal Web user interface (http://homeportal). To use the HomePortal with an unsupported operating system:

1. **Verify that the DHCP server and the DNS (Domain Name Server) are stopped.**

2. **Configure your system to run as a DHCP client.**

3. **Connect the computer to the HomePortal network by way of HomePNA, wireless, or Ethernet.**

See "Adding computers to your network" on page 4-1.

Note: *USB is not a supported method for adding computers with unsupported operating systems.*

Is the HomePortal software compatible with other Internet sharing software packages out there?

No. You must disable or uninstall other Internet sharing software packages. The HomePortal is designed to serve the Internet sharing function, and if two or more software packages that provide Internet sharing are present, none of the packages perform correctly. If you have inadvertently installed another Internet sharing software package on a machine in your network, then you need to uninstall it and re-install the HomePortal software.

How can I uninstall the HomePortal software?

You can remove all of the HomePortal components installed on your system with the Uninstall utility.

To uninstall HomePortal (Windows):

1. **From the Start Menu, select Programs > HomePortal.**

2. **From the HomePortal submenu, select Uninstall HomePortal.**

3. **Click Yes to confirm that you want to remove the program and all of its components.**

To uninstall HomePortal (Macintosh):

1. **Insert the HomePortal Setup CD.**

2. **Double-click the 2Wire icon on the desktop.**

3. **Double-click the HomePortal Install icon.**

4. **Click Continue.**

5. **From the pull-down menu select Uninstall.**

6. **Click Uninstall.**

7. **Click Continue.**

Frequently asked questions about HomePNA

Do I need to use phoneline filters in a HomePortal-enabled HomePNA network?

Yes, whether or not you are using HomePNA. Phoneline filters are required if you have splitterless DSL and sometimes they are required even if you have splittered DSL because splitters installed by DSL service providers do not always completely eliminate noise on the phone line. Use phoneline filters on each phone, answering machine, fax machine, security system, and analog modem. You can order phoneline filters from 2Wire (2Wire DSL Phone-Line Filter).

Does my DSL service interfere with my HomePNA network?

No. The HomePNA network is designed to be compatible with ADSL as well as voice band.

Can I use HomePNA and my telephone at the same time?

Yes. If you have splitterless DSL, you must use a phone-line filter on each phone in your home.

Can I use HomePNA and the HomePortal in a digital telephone system such as those found in many corporate environments?

No. HomePNA is designed to be used only with standard analog home telephone systems.

Will some devices interfere with my HomePNA network?

Yes, but only if you are using the older HomePNA 1.0 standard. HomePNA 1.0. Ham radios on bands between 4.5 and 9 MHz, some cordless phones, power devices with a rheostat (dimmer switch), and some older phones may affect the HomePortal network. To diagnose such a problem, unplug all of the telephone devices in your house, and turn off any power devices on dimmer switches and ham radios. Then connect the HomePortal network and plug in, one at a time, each of the telephone devices, checking the effect on your network before moving to the next device. Then turn on your dimmer switch and ham radio, and check the result on the HomePortal network connection. 2Wire recommends using only HomePNA devices that support the HomePNA 2.0 standard.

Troubleshooting HomePortal

This chapter describes some problems you may encounter with your HomePortal network, and it provides suggestions for solving these problems. In most cases, you'll be able to diagnose and solve these problems quickly and easily, following the suggestions provided.

If you're having a problem with your HomePortal network, please check this chapter first to see if the problem is included here. Then check 2Wire's online Troubleshooting system before contacting the 2Wire Customer Care Center. If the problem you're having is not covered here or online or if the suggestions provided do not solve the problem, then please don't hesitate to contact us.

Troubleshooting installation

I'm not sure whether my computer has a network adapter that can work with the HomePortal.

To check Windows 95, Windows 98, and Windows ME:

1. **On your desktop, right-click My Computer.**

2. **Select Properties, then click the Device Manager tab.**

3. **Double-click Network adapters and verify that an Ethernet, HomePNA, or wireless adapter is listed.**

4. **If one of these adapters is not listed, install or reinstall an adapter on this computer.**

   Consult the manufacturer's documentation for installation instructions.

To check Windows NT 4.0 and Windows 2000:

1. **Right-click Network Neighborhood.**

2. **Select Properties.**

3. Select the Adapters **tab and verify that an Ethernet, HomePNA, or wireless adapter is listed.**

4. **If one of these adapters is not listed, install or reinstall an adapter on this computer.**

   Consult the manufacturer's documentation for installation instructions.

To check Macintosh OS 8.5 or higher:

1. **On your desktop, double-click your Hard Drive icon.**

2. **Select System Folder > Extension Folder and verify that an Ethernet, HomePNA, or wireless adapter is listed.**

3. **If one of these adapters is not listed, install or reinstall an adapter on this computer.**

   Consult the manufacturer's documentation for installation instructions.

Checking indicator lights

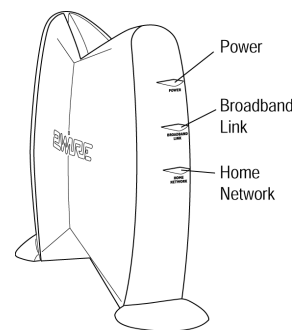The HomePortal has three indicator lights you can use to diagnose installation and connection problems.

Power light

If the **Power** indicator light is not lit the HomePortal is not getting power:

Power

Broadband Link

Home Network

1. **Check to see if the power cable is plugged into the power outlet or power strip.**

2. **Check to see if the power strip is turned on.**

3. **Check to see if the power cord is plugged into the HomePortal.**

   The power cord is keyed and can only go in one way. You should feel a click when you plug it in.

   Note: *If the* **Power** *indicator light is red, there is a system error, and you should contact 2Wire Customer Care.*

Broadband link light

If the **Broadband Link** indicator light is red the HomePortal has not established a connection to your DSL service provider:

1. **Verify that** DSL **service is activated.**

2. **Verify that a regular telephone cord is plugged into the Line port on the HomePortal and into the telephone outlet in the wall.**

3. **Verify that the included light-gray telephone cable is connected from the HomePortal DSL port to your <u>DSL service wall jack</u>.**

   Note: *The DSL service wall jack is a special jack set up during installation of DSL service. One way to verify that this is the right telephone line is to attach a telephone to the wall jack and then listen for a dial tone. If you do not hear a dial tone through the handset, this is probably the right telephone line to connect to the HomePortal DSL port.*

4. **Restart the HomePortal by disconnecting and re-connecting the power cord. This will restart the HomePortal search for your broadband service.**

Home Network light

If your networked computers are powered on and the **Home Network** indicator light is not lit, the HomePortal may not be connected to any computer or hub by way of Ethernet, USB, HomePNA, or wireless. The HomePortal must be connected to your home network in one of these ways:

- Ethernet: Verify that the Ethernet (dark-gray) cable is connected from the HomePortal **LOCAL ETHERNET** port (4th plug from bottom) into the Ethernet card in the computer or into an Ethernet hub. The Ethernet port on the computer looks like a regular telephone jack, but bigger. If you are using an Ethernet hub, verify the hub is plugged into a power outlet.

- USB: Verify that the ivory-colored USB cable is plugged into the computer and the HomePortal **PC** port (2nd plug from bottom).

- HPNA: Verify that a regular telephone cord is connected to your HPNA card or adapter and into a telephone outlet. Also verify that the second included light-gray telephone cord is connected to the HomePortal **Line** port and into a telephone outlet.

- Wireless: Verify that your wireless card is properly installed.

One of my computers doesn't have a CD-ROM drive.

To install the HomePortal software on a computer that does not have a CD-ROM drive, you will need to create installation diskettes from the HomePortal Setup Wizard CD. To do this you need five formatted 1.44MB diskettes and another computer with both a CD-ROM drive and a 3.5-inch diskette drive.

To create installation diskettes:

1. **Label five diskettes "1," "2," "3," "4," and "5."**

2. **Insert the HomePortal Setup Wizard CD into the CD-ROM drive of a computer.**

3. **When the CD automatically starts, click Cancel.**

4. **View the files on the CD-ROM. To do so:**

   – After inserting the CD-ROM into the CD-ROM drive, double-click **My Computer**.

   – Double-click the icon that represents your CD-ROM drive.

5. **On the CD-ROM, locate a file named Makefloppies.exe. Double click this file. The Makefloppies application prompts you for each diskette in turn.**

To install the HomePortal software using the installation diskettes:

1. **Insert the diskette labeled "1" into the floppy disk drive of the computer that does not have a CD-ROM drive.**

2. **View the files on this diskette. To do so:**

   – After inserting the diskette into the floppy disk drive, double-click **My Computer**.

   – Double-click the icon that represents your floppy drive.

3. **On the diskette, locate a file named Install.exe. Double-click this file. The Setup Wizard prompts you for each diskette in turn.**

I'm having trouble installing the HomePortal software on Windows NT or Windows 2000.

Verify that you have administrator user privileges. You must have administrative user privileges to install the HomePortal software on Windows NT.

I can't connect my computer to the HomePortal.

1. Make sure the computer has an adapter installed.

On Windows 95, 98, and ME:

– On your desktop, right-click **My Computer**.

– Select **Properties**, then click the **Device Manager** tab.

– Double-click **Network adapters** and verify that an Ethernet, HomePNA, or wireless adapter is listed.

– If the adapter is not listed, reinstall the adapter on this computer. Consult the manufacturer's documentation for installation instructions.

– If more than one adapter in listed, you may need to disable the adapters that are not being used for your HomePortal network. This is especially true if you are using a Windows 98 computer to connect via USB. To disable an inactive adapter, double-click the adapter, select **Disable**, and click **OK**. Repeat for each unused adapter.

Note: *A disabled adapter is unavailable. Therefore, if you use the adapter on another network (such as work), do not disable it. Instead, use the adapter rather than USB to connect your computer to the HomePortal network.*

On Windows NT 4.0:

– Right-click **Network Neighborhood**.

– Select **Properties**.

– Select the **Adapters** tab and verify that an Ethernet, HomePNA, or wireless adapter is listed.

– If the adapter is not listed, reinstall the adapter on this computer. Consult the manufacturer's documentation for installation instructions.

– If more than one adapter in listed, you may need to disable the adapters that are not being used for your HomePortal network. To do this, click the **Bindings** tab. From the **Show Bindings for** pull-down menu, select **all adapters**. Then select your unused adapter(s) and click **Disable**.

On Windows 2000:

– On your desktop, right-click **My Computer**.

– Select **Properties**, click the Hardware tab, and click the **Device Manager** tab.

– Double-click **Network adapters** and verify that an Ethernet, HomePNA, or wireless adapter is listed.

– If the adapter is not listed, reinstall the adapter on this computer. Consult the manufacturer's documentation for installation instructions.

– If more than one adapter in listed, you may need to disable the adapters that are not being used for your HomePortal network. To do this, double-click the unused adapter, from the **Device Usage** pull-down menu on the **General** tab select **Do not use this device (disable)** and click **OK**. Check the Home Network indicator light.

On Macintosh OS 8.5 or higher:

– On your desktop, double-click your **Hard Drive** icon.

– Select **System Folder>Extension Folder** and verify that an Ethernet, HomePNA, or wireless adapter is listed.

– If the adapter is not listed, reinstall the adapter on this computer. Consult the manufacturer's documentation for installation instructions.

2. **Check the Home Network indicator light.**

– If it is not on, check the adapter's power supply, if one is used.

– If it is on, make sure the adapter is connected to the computer properly.

– If the adapter is not listed, reinstall the adapter on this computer. Consult the manufacturer's documentation for installation instructions.

3. **Check the adapter's power supply, if it requires a power supply.**

- Make sure the outlet has power.

- Make sure the AC adapter is plugged in.

- Unplug the adapter and plug it in again.

- If you have another adapter power cable, try it with the adapter that is causing problems.

4. **If you have changed the way your computer connects to your network (for example, from Ethernet to HomePNA), you should first uninstall and then reinstall the HomePortal software on your computer.**

If you have further problems, consult the Troubleshooting section in the user guide that came with your adapter.

Troubleshooting Internet connection

I got connected once successfully but am now having problems.

From HomePortal Monitor, select **Refresh Home Network Connection**.

I can't connect to the Internet.

Following are some tips to help you diagnose and remedy common Internet connection problems:

1. **Make sure the HomePortal is on and that the indicator lights are green. See "Checking indicator lights" on page 9-2.**

2. **If everything seems ok, but you still cannot connect to the Internet, close any open applications on the computer, and restart it. When the computer has finished restarting, try connecting again.**

3. **Click the (2) at the bottom of your computer screen to open HomePortal Monitor. From HomePortal Monitor, select Refresh Home Network Connection.**

4. **Note to laptop users: You may need to switch back to your home settings. From HomePortal Monitor, select Change Mobile Computer Location and change to your home settings.**

Troubleshooting home networking

I can't see all my computers connected via HomePNA on the network.

See Chapter 2 of this guide and make sure all the computers connected via HomePNA are connected correctly.

If you have multiple phonelines in your home, it is possible that your computers are not connected to the same phoneline wiring. Consult the Phoneline Networking FAQ in HomePortal online Troubleshooting for more information.

My computer doesn't appear on the home console Network page.

If you disconnect the network cable from your adapter and then reconnect it within a few seconds, some computers on the network may not be able to see your computer. If this happens, restart your computer.

I have more than one type of network interface card in my computer, and I'm having network connection problems with this computer.

 If you have multiple network adapters in a single computer, connect only one network adapter at a time to the HomePortal network. You probably don't need to remove the unused adapters, unless you have an unused wireless card or adapter that may be attempting to connect to a wireless base station attached to the HomePortal. In that case, you may need to remove or disable the wireless card or adapter.

Contacting 2Wire Customer Care

Web support

www.2Wire.com/support

Email support

Support@2Wire.com

Toll-free 24 x 7 telephone and fax support

(877) 347-8680

(877) 347-8684 (fax)

Feedback

Your feedback is important to us and is key to product improvement. Please email your product ideas and suggestions to **Support@2Wire.com**.

Index

Regulatory Information

Declaration of Conformity

Trade Name: 2Wire
Responsible Party: 2Wire, Inc.
Address: 1704 Automation Pkwy.
San Jose, CA 95131
Telephone Number.: 408-428-9500

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and the receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Only peripherals (computer input/output devices, terminals, printers, and so forth) that comply with FCC Class B limits may be attached to this computer product.

Operation with noncompliant peripherals is likely to result in interference to radio and television reception.

All cables used to connect peripherals must be shielded and grounded. Operation with cables, connected to peripherals, that are not shielded and grounded may result in interference to radio and television reception.

FCC Part 68

This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five. To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If the terminal equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operations of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact the store, reseller, or agent from whom the HomePortal was purchased.

Regulatory Information

Repair of this equipment should be made only by the 2Wire Service Center or a 2Wire authorized agent.

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Before returning any product, contact 2Wire Customer Support and obtain an RMA number by calling:

US & Canada only: 1-877-347-8680

Other locations: Return the product to the place of purchase.

If the 2Wire Customer Support determines that the product may be defective, they will issue you an RMA number to place on the outer package of the product. 2Wire cannot accept any product without an RMA number on the package.

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June 2000

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