



2WIRE®

HomePortal®

Installation and Support Guide

Notice to Users

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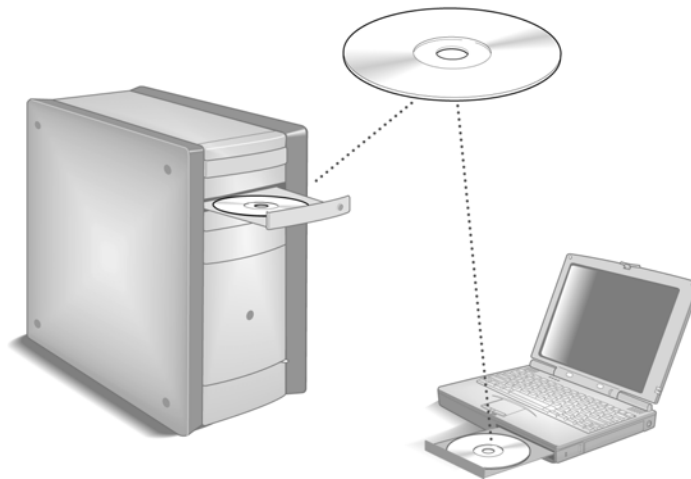
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Congratulations on your HomePortal purchase. To install your HomePortal and configure your home network, follow these steps.

1 Insert the HomePortal Setup Wizard CD

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

DO NOT INSTALL ANY EQUIPMENT UNTIL INSTRUCTED BY THE CD DURING YOUR INSTALLATION.



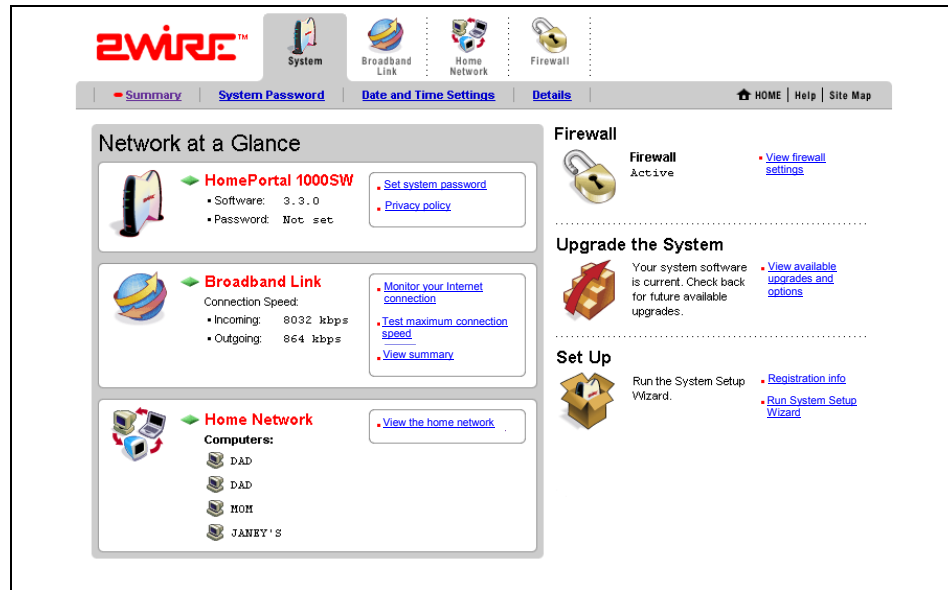
2 Add Computers to Your Network

Insert the HomePortal Setup Wizard CD into the CD-ROM drive of each computer that you wish to connect to your network and follow the onscreen instructions.

The HomePortal Home Page

When your installation is complete, the HomePortal Home Page will display. Use this page to perform a variety of administrative functions for easy management of your home network. From this page you can:

- ▶ Upgrade your HomePortal software
- ▶ View your network settings
- ▶ Change wireless network settings (wireless models only)
- ▶ Modify the security settings for your broadband connection



Accessing the HomePortal Home Page


There are three ways in which to access the HomePortal Home Page:

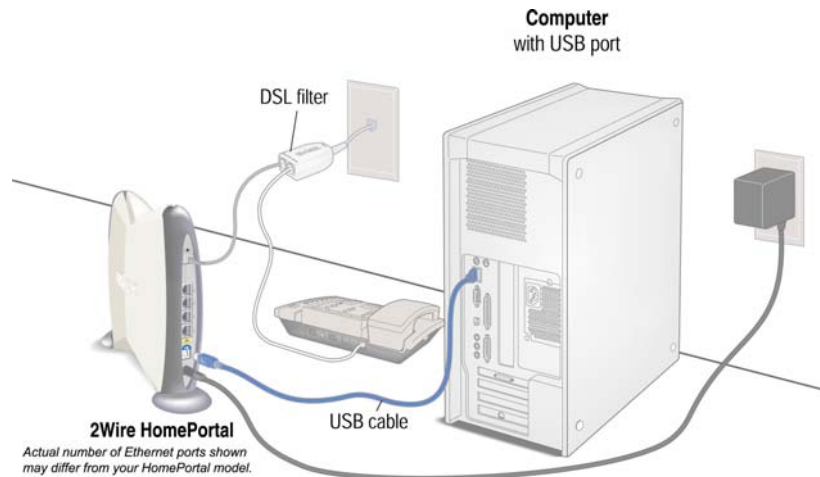
- ▶ Click on the **2** icon on your desktop *or*
- ▶ Open a browser and type **http://gateway.2Wire.net** *or*
- ▶ Click on the **2** icon in the task bar located on the lower right corner of your computer screen, then choose **Go to HomePortal HOME Page...** from the HomePortal Monitor menu.

Connecting Your Computer Using USB

Connecting your computer to the HomePortal using USB requires an available USB port. Only *One Windows or Macintosh computer can be directly connected to the 2Wire HomePortal using the USB connection.*

Installing the HomePortal and USB Driver on a Windows PC

With your computer powered off and the *HomePortal Setup Wizard CD* still in the CD-ROM drive, connect the provided **blue USB cable** from the USB port on the 2Wire Gateway to your computer's USB port. A USB port is identified by the following icon: 



To complete your USB connection to the HomePortal, you must install the 2Wire gateway USB driver on your computer.

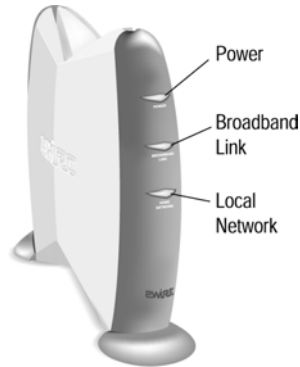
1. Power on your computer. If the Add Hardware Wizard displays, follow the onscreen instructions selecting the recommended default settings. If prompted to identify where to search for drivers, **uncheck Floppy Disk drive** and check **CD-ROM drive**.
2. After the driver installs click **Finish** to complete the driver installation. Your *HomePortal Setup Wizard CD* will now resume when your PC has rebooted.

NOTE TO WINDOWS 98 USERS: Microsoft Windows 98 users may be prompted to insert the Windows 98 installation CD-ROM after installing the 2Wire gateway USB drivers. Once Windows 98 updates have been completed, remove the Windows 98 CD and reinsert the HomePortal Setup Wizard CD into your CD-ROM prior to rebooting your PC.

Troubleshooting

HomePortal Indicator and Status Lights

The HomePortal has three indicator lights that can be used to diagnose installation and connection problems. The following tables describe how to interpret the POWER, BROADBAND LINK, and LOCAL NETWORK lights.



Power light	Operating state
OFF	The HomePortal is not getting power.
Blinking green	The HomePortal is booting up.
Solid green	Power is on.
Solid red	System error. Contact Technical Support.

Broadband Link light	Operating state
OFF	No broadband signal is present. The HomePortal is not plugged into a power outlet, or the HomePortal is not physically connected to your broadband service.
Blinking orange	The HomePortal is attempting to establish a physical broadband connection.
Solid red	The HomePortal has not detected a broadband signal.
Solid orange	The HomePortal has established a physical broadband connection but was not able to successfully connect to your Internet Service Provider, or has not yet been configured.
Blinking green	The HomePortal is attempting to establish a connection to your broadband service(s).
Solid green	The HomePortal is fully connected to your broadband service(s).

Local Network light	Operating state
OFF	The HomePortal is not plugged into a power outlet, or the HomePortal is not connected to any computer or hub by way of HomePNA, USB, Ethernet, or Wireless.
ON	The HomePortal is connected to a computer or hub by way of HomePNA, USB, Ethernet, or Wireless.

Diagnosing Connection Problems

This section describes some connection problems you may encounter with your HomePortal home network and provides suggestions for solving those problems. If the problem you are having is not covered here or in the 2Wire online Help system, or if the suggestions provided do not solve the problem, contact Technical Support.

The **POWER** indicator light is not lit

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

1. Check to see if the power cable is plugged into the power outlet or power strip.
2. If the power cable is plugged into a power strip, make sure the power strip is turned on.
3. Make sure the power cord is correctly and securely connected into the HomePortal.
4. Verify that both ends of the power cord are firmly plugged into the brick.

NOTE: *If the **POWER** indicator light is red (signifying a system error), or does not light after performing the steps above, contact Technical Support.*

The **BROADBAND LINK** indicator light is red

If the **BROADBAND LINK** indicator light is red, the HomePortal has not established a connection to your broadband service provider:

1. Verify that your broadband modem is connected to the HomePortal **BROADBAND MODEM** port.
2. Verify that you have configured the HomePortal with the correct settings (for example, username and password) provided by your service provider.
3. Verify that your broadband service is activated by calling your broadband service provider.

The **LOCAL NETWORK** indicator light is not lit

If your networked computers are powered on and the **LOCAL NETWORK** indicator light is not lit, the HomePortal may not have been connected correctly.

Running Your HomePortal Setup Wizard Manually

If after one minute the HomePortal Setup Wizard does not automatically run:

Windows Users: Double-click the **My Computer** icon located on the desktop.
Double-click the icon that corresponds to your CD-ROM drive.
Double-click **Setup.exe** and follow the onscreen instructions.

Mac Users: Double-click the **2Wire** icon.
Double-click the **2Wire Install** icon and click Continue.
Click **Install** to copy the HomePortal software to a folder.
Click **Install** and follow the onscreen instructions.

Troubleshooting Adapters

This section details troubleshooting procedures to address adapter installation problems.

Verify That Your Adapter Driver is Properly Installed

There are two common errors that may occur during installation that will result in an error message:

- The appropriate adapter driver software was not installed,
- The adapter driver software was only partially installed or is incompatible with your operating system.

Follow the procedure appropriate to your operating system to determine whether the driver was correctly installed.

Windows XP:

1. Click **Start** and double-click Control Panel
2. Select **Performance and Maintenance**, then click the **System** icon.
3. Select the **Hardware** tab, then click **Device Manager**.

Continue to Step 4 under *Accessing Driver Status* on page 7.

Windows 2000:

1. Click **Start >Settings** and double-click Control Panel.
2. Double-click the **System** icon.
3. Select the **Hardware** tab and click **Device Manager**.

Continue to Step 4 under *Accessing Driver Status* on page 7.

Windows 98 SE or Windows ME:

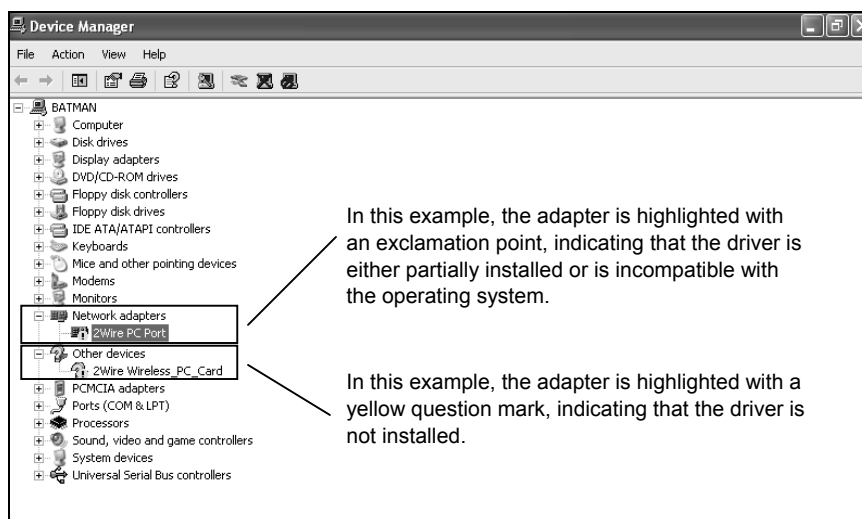
1. Click **Start >Settings** and double-click Control Panel.
2. Click the **System** icon.
3. Select the **Device Manager** tab.

Continue to Step 4 under *Accessing Driver Status* on page 7.

Accessing Driver Status

4. Click the “+” sign next to the **Other devices** and/or **Network adapters** categories to expand them. This displays a list of all adapters and/or devices that you have installed. Check to see if your adapter is marked with a yellow question mark (driver not installed) or exclamation point (incomplete driver installation or driver not compatible with the operating system).

IMPORTANT: *If your adapter or device does not appear in the list, it may not be properly installed. Reinstall the adapter according to the appropriate documentation.*



NOTE: *If the USB driver for direct USB connection between the modem (HomePortal gateway) and your PC has not been installed, one of the following names will appear in the **Other devices** category (the name that displays is dependent on your operating system):*

- 2Wire USB Remote NDIS Ethernet
- 2Wire Gateway USB

5. Double-click the adapter name highlighted with a yellow question mark or exclamation point.
6. Click the **Reinstall Driver** button to reinstall the driver for your adapter.
7. After you have reinstalled the driver, click the **RETRY** button on the HomePortal Setup Wizard adapter troubleshooting screen.



Non-2Wire Wireless Adapter Configuration

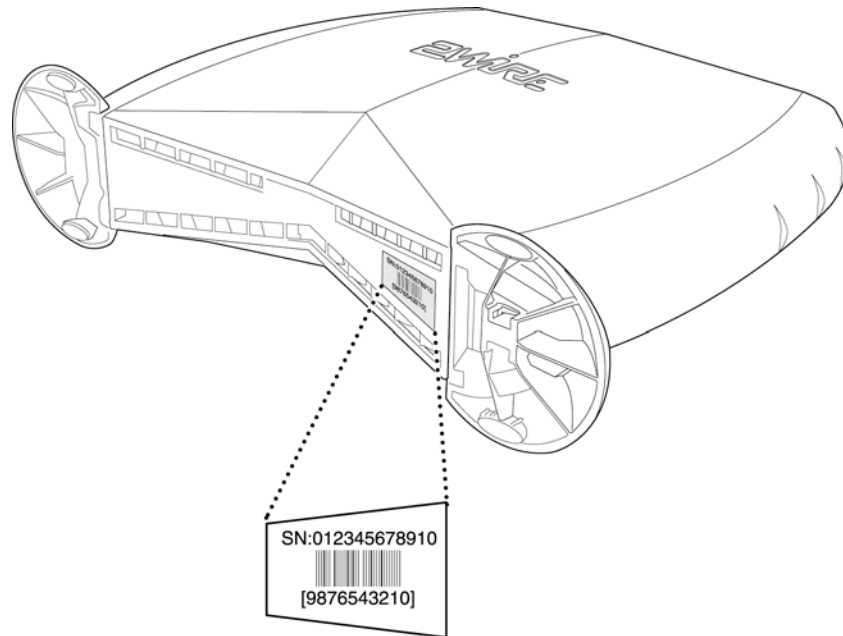
If you use a 2Wire wireless adapter (PC card or USB adapter) for wireless networking, the HomePortal Setup Wizard software automatically configures it to communicate with the HomePortal during setup.

If you are NOT using a 2Wire wireless adapter, you will need to manually configure your adapter of choice to communicate with the HomePortal.

Locate the Serial Number and Wireless Encryption Key

Your HomePortal is configured with unique security parameters that must be configured into your wireless adapter.

On the bottom of your HomePortal you will find two important pieces of information required for configuring your adapter: the serial number and the wireless encryption key.

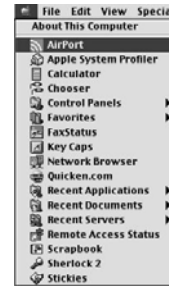


After you have located the serial number and wireless encryption key, configure your wireless adapter according to the manufacturer's instructions. The following pages provide configuration instructions for Apple AirPort, and guidelines for configuring other adapters.

Configuring Apple AirPort

NOTE: Requires AirPort client software revision 2.0 or greater.

1. From the Apple pull-down menu, select AirPort to open the AirPort dialog box.



2. In the AirPort Network panel, click the Choose Network pull-down menu.



3. Select your wireless network name. Your wireless network name is "2WIRE" followed by the last three digits of your HomePortal serial number, located on the bottom of your HomePortal.



4. In the Password field, enter "\$" followed by your ten-digit Wireless Encryption Key, located on the bottom of your HomePortal.



5. Click OK.

Configuring Other Wireless Ethernet Adapters

The following steps are completed using the configuration program provided with your wireless adapter. If you have not already done so, install the wireless adapter configuration software before continuing.

1. Set the network type to Infrastructure. Refer to your wireless adapter documentation for instructions on editing the adapter's network profile. Your wireless adapter should be configured to operate with an access point or residential gateway. This mode of operation is typically enabled by setting network type to Infrastructure.
2. Set the wireless network name. The wireless network name of your HomePortal is 2WIRE in all capital letters, followed by the last three digit of the HomePortal serial number located on the bottom of your HomePortal. For example, if the last three digits of your HomePortal serial number are 102, your HomePortal network name would be 2WIRE102.

The wireless network name is sometimes referred to as the Network Name, SSID, ESS ID, or Wireless LAN ID.

3. Enable wireless security. Your HomePortal is pre-configured to take advantage of wireless security. Referring to the instructions provided with your wireless adapter, enable wireless security.

Wireless security is sometimes referred to as WEP (wired equivalent privacy), 64-bit encryption, or 40-bit encryption.

4. Enter the encryption key. Once you have enabled security on your wireless adapter, you need to enter the unique security key for your HomePortal. To do this, set the network encryption type to hexadecimal, and enter your 10-digit wireless encryption key found on the bottom of your HomePortal.
5. In general, accept your adapter's defaults. The default value for the remainder of configurable settings for your network adapter should allow your wireless adapter to communicate with the HomePortal. Although the HomePortal is set by default to communicate using channel 6, it is not required to change your adapter to this setting as most adapters will automatically detect the appropriate channel.

HomePortal Technical Specifications

Home Network Interfaces

- Ethernet, HomePNA, USB, Wireless 802.11b+

Standards Compatibility

- ADSL G.dmt (ITU G.992.1) (inner or outer pair)
- ANSI T1.413 (inner or outer pair)
- HomePNA 2.0 (10 Mbps) and 1.0 (1 Mbps)
- USB 1.1 and 1.0
- TCP/IP, DHCP, and DNS (client/server for DHCP and DNS)
- VPN pass-through with PPTP, L2TP, and IPSec
- PPPoE and PPPoA, RFC 2364
- Ethernet 802.3
- WiFi 802.11b wireless

Requirements

- All devices to be connected to the HomePortal must have a network interface compatible with the model of HomePortal used.
- A direct USB connection is supported on the following operating systems:
 - Windows 98, 2000, ME, XP.
 - Mac OS 8.6 - 9.x or Mac 10.2 or higher
- Setup CD supports the following operating systems:
 - Windows 98, 98 Second Edition, 2000, ME, XP
 - Mac 8.6 or higher, including Mac OSX
- At least one computer must have a CD-ROM drive.
- Web Browser: Netscape 4.7x, Microsoft Internet Explorer 5.0 or higher.

Physical Specifications

- Dimensions: 10" x 8" x 2"
- Weight: 2 lbs. (approx.)

Regulatory Information

Declaration of Conformity

Trade Name: 2Wire
Responsible Party: 2Wire, Inc.
Address: 1704 Automation Parkway
San Jose, CA

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.

WARNING: *While this device is in operation, a separation distance of at least 20 cm (8 inches) must be maintained between the radiating antenna inside the ERU and the bodies of all persons exposed to the transmitter in order to meet the FCC RF exposure guidelines. Making changes to the antenna or the device is not permitted. Doing so may result in the installed system exceeding RF exposure requirements. This device must not be co-located or operated in conjunction with any other antenna or radio transmitter. Installers and end users must follow the installation instructions provided in this guide.*

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 product was purchased.

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