



85Mbps Powerline HomePlug Ethernet Adapter

User Manual



Copyright 2008 EUSSO Technologies, Inc. All rights reserved.

About This Manual

The 85Mbps Powerline HomePlug Ethernet Adapter User's Manual describes how to install, configure, and troubleshoot the 85Mbps Powerline HomePlug Ethernet Adapter.

Chapter 1

Installing the 85Mbps Powerline HomePlug Ethernet Adapter

This chapter describes how to set up the 85Mbps Powerline HomePlug Ethernet Adapter on your local area network (LAN) and connect to the Internet.

Package Contents

The product package should contain the following items:

- One or Two 85Mbps Powerline HomePlug Ethernet Adapter.
- Resource CD, including:
 - 85Mbps Powerline HomePlug Ethernet Adapter User's Manual.
 - Management Utility

If any of the parts are incorrect, missing, or damaged, contact your dealer. Keep the carton, including the original packing materials, in case you need to return the Powerline HomePlug Ethernet Adapter for repair.

Status Lights and Label Information

The 85 Mbps Powerline HomePlug Ethernet Adapter has status indicators and a label with important information. Familiarize yourself with these features of your product.

Front Panel Status Lights

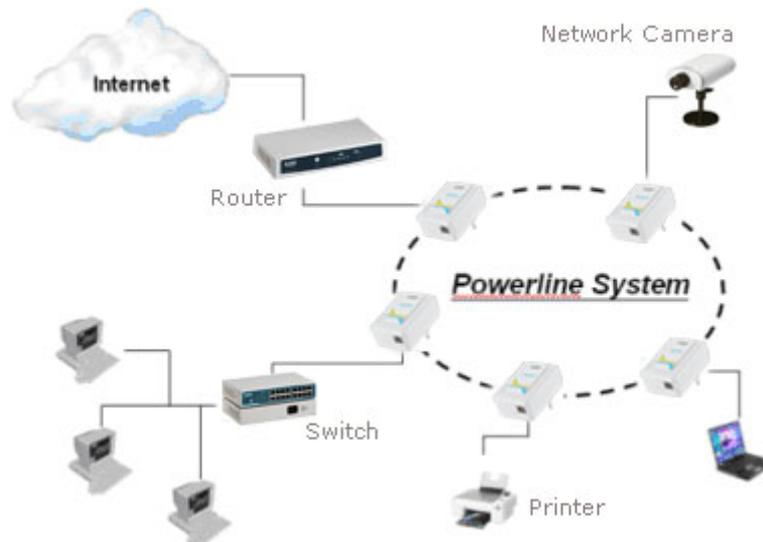
The front panel of the 85Mbps Powerline HomePlug Ethernet Adapter contains status lights. You can use them to verify connections. The table below describes the lights on the front panel.

Status Lights on Front Panel	Description
Power	✓ Off – Power Off
	✓ Solid Blue – Power On
Powerline HomePlug Ethernet Adapter Link/ACT LED	✓ Off – No Link
	✓ Solid Blue – Link
	✓ Blinking Blue – Activity
Ethernet Link/ACT LED	✓ Off – No Link
	✓ Solid Blue – Link
	✓ Blinking Blue – Activity

How the 85Mbps Powerline HomePlug Ethernet Adapter Fits in Your Network

You can use the 85Mbps Powerline HomePlug Ethernet Adapter to implement or extend an Ethernet local area network (LAN) anywhere in your house using your existing electrical power line in place of a dedicated LAN wiring infrastructure. An example is illustrated in the following diagram:

Follow the instructions below to set up your 85Mbps Powerline HomePlug Ethernet Adapter.



Prepare to Install Your 85Mbps Powerline HomePlug Ethernet Adapter

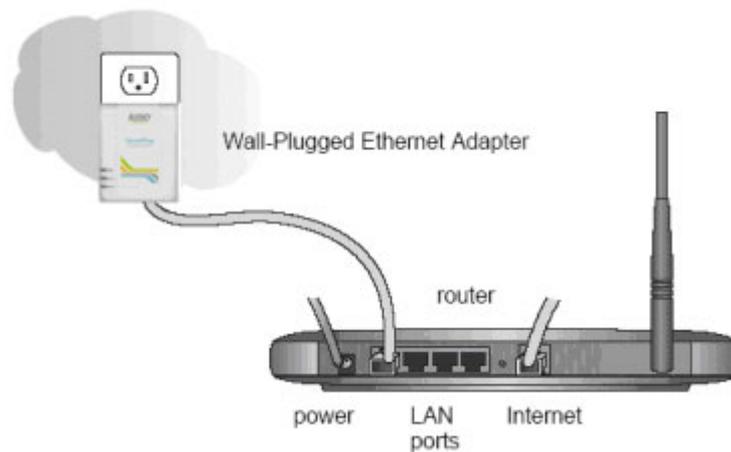
Check that these minimum requirements are met.

- Your Ethernet network is set up and an Ethernet port is available on your router.
- Your Internet connection is working.
- Each computer or device to be used on your network has an Ethernet port.

Connect an 85Mbps Powerline HomePlug Ethernet Adapter to the Router

First, connect an Powerline HomePlug Ethernet Adapter to a LAN port on the router so that the Powerline HomePlug Ethernet Adapter network can access the Internet. Do not connect the 85Mbps Powerline HomePlug Ethernet Adapter to a power strip, extension cord, or surge protector as this may prevent it from working properly or degrade the network performance.

- a. Plug the Ethernet cable that came in the box into a LAN port on your router or switch in your network.



- b. Plug the Powerline HomePlug Ethernet Adapter into an electrical outlet near the router.
- c. Plug the other end of Ethernet cable that came in the box into the 85Mbps Powerline HomePlug Ethernet Adapter. Check the status lights:
 - Power: The power LED turns solid green. If it does not, see Chapter 2, “Troubleshooting”.
 - Power Link: The Power Link LED blinks to indicate that the device is connected to the power line, and that no other Powerline HomePlug Ethernet Adapter devices have been detected at this stage.
 - Ethernet Link: The Ethernet LED blinks to indicate activity. If not, make sure that the Ethernet cable on the Powerline HomePlug Ethernet Adapter that you connected in the previous step is securely attached to the Powerline HomePlug Ethernet Adapter and the router, that the router is connected to the modem, and the router and modem are powered on.
- d. Make sure that the Internet port of your router is connected to your modem, and that your computer is either connected to a LAN port on the router or to a port on the Powerline HomePlug Ethernet Adapter.

Connect other Ethernet Powerline HomePlug Ethernet Adapters

1. Before plugging in your other Powerline HomePlug Ethernet Adapter devices, take a note of the device password printed on the label on the back of each device. You will need this password later if you want to change the Powerline HomePlug Ethernet Adapter network password. If you are adding more than one other Powerline HomePlug Ethernet Adapter, also note the MAC address given on the label, so that you will know which device the password is for.
2. Plug your other Powerline HomePlug Ethernet Adapter devices into power outlets in your home near to the other computers and peripherals to be included in your Powerline HomePlug Ethernet Adapter local area network.
3. Use an Ethernet cable to connect an Ethernet port on each of the computers and peripherals to the nearest Powerline HomePlug Ethernet Adapter device.

4. When you plug in a second Powerline HomePlug Ethernet Adapter into a power outlet, check the blue Powerline HomePlug Ethernet Adapter LEDs. They should turn on and then briefly blink at the same time as the Ethernet activity LED.

This completes the Powerline HomePlug Ethernet Adapter installation.

Install the 85Mbps Powerline HomePlug Ethernet Adapter Utility (Highly Recommended)

The utility gives you the option of setting a unique encryption Powerline HomePlug Ethernet Adapter network password. Important features:

- The encryption password is case-sensitive.
- Each device must be set to exactly the same encryption password—if they are to communicate on the same network. Powerline HomePlug Ethernet Adapter devices on different networks will not be able to communicate.
- A default button resets the encryption password to the default password (HomePlug).
- The encryption password can protect your network from unauthorized access through the Powerline HomePlug Ethernet Adapter network.
- A device password is printed on each Powerline HomePlug Ethernet Adapter product. This is not the network password, but you are required to enter it if you are setting the network password with another Powerline HomePlug Ethernet Adapter device.

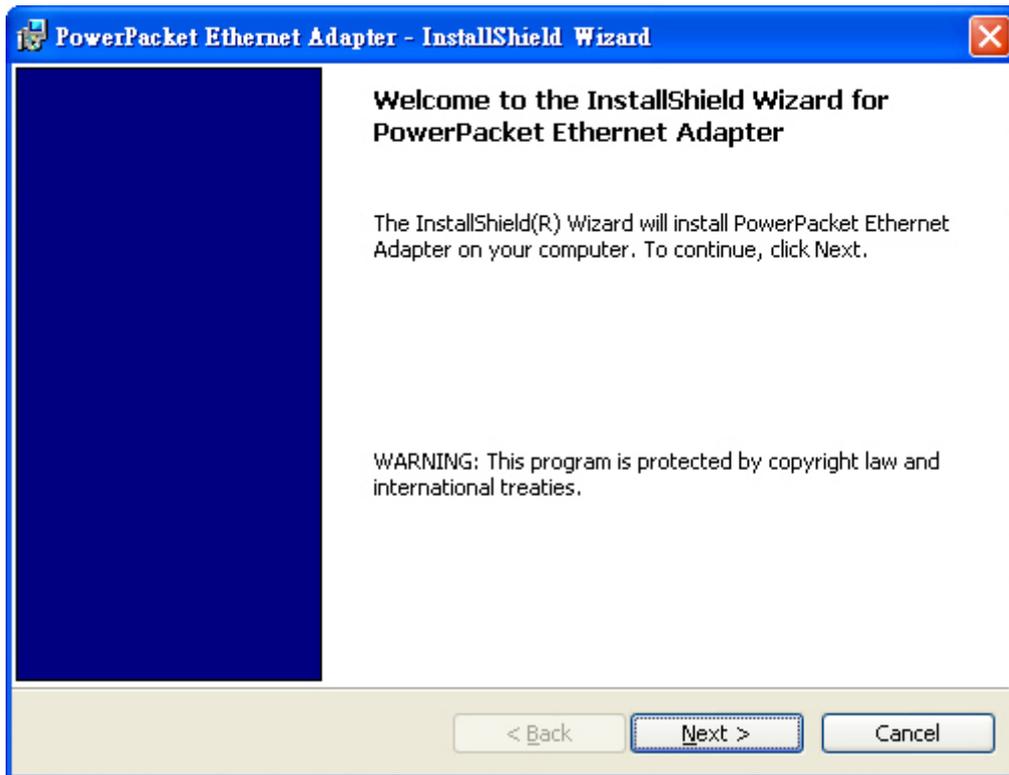
To install the 85Mbps Powerline HomePlug Ethernet Adapter Encryption Utility, follow these steps:

5. Insert the 85Mbps Powerline HomePlug Ethernet Adapter Resource CD into a CD drive on the computer that is connected to your router.

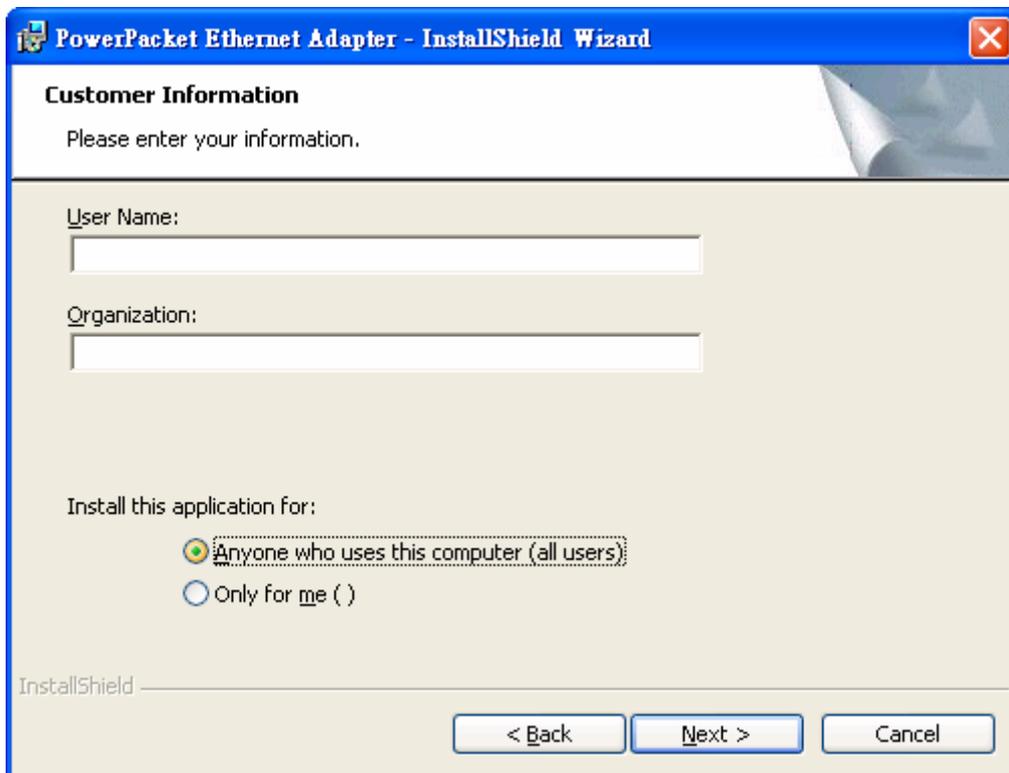
— Go to My Computer on the Windows Start menu, and double-click the drive that contains the 85Mbps Powerline HomePlug Ethernet Adapter Resource CD

All devices on a Powerline HomePlug Ethernet Adapter network can be managed from one computer. If you add another 85Mbps Powerline HomePlug Ethernet Adapter device to an existing Powerline HomePlug Ethernet Adapter network, you can install the Powerline HomePlug Ethernet Adapter encryption utility on the computer connected locally to the new 85Mbps Powerline HomePlug Ethernet Adapter device or on the computer originally used to set up the Powerline HomePlug Ethernet Adapter network password. You can use any computer to manage the network, but this procedure assumes that you are working from the computer that is connected to your router.

6. Click Install Software, and the Welcome screen appears.

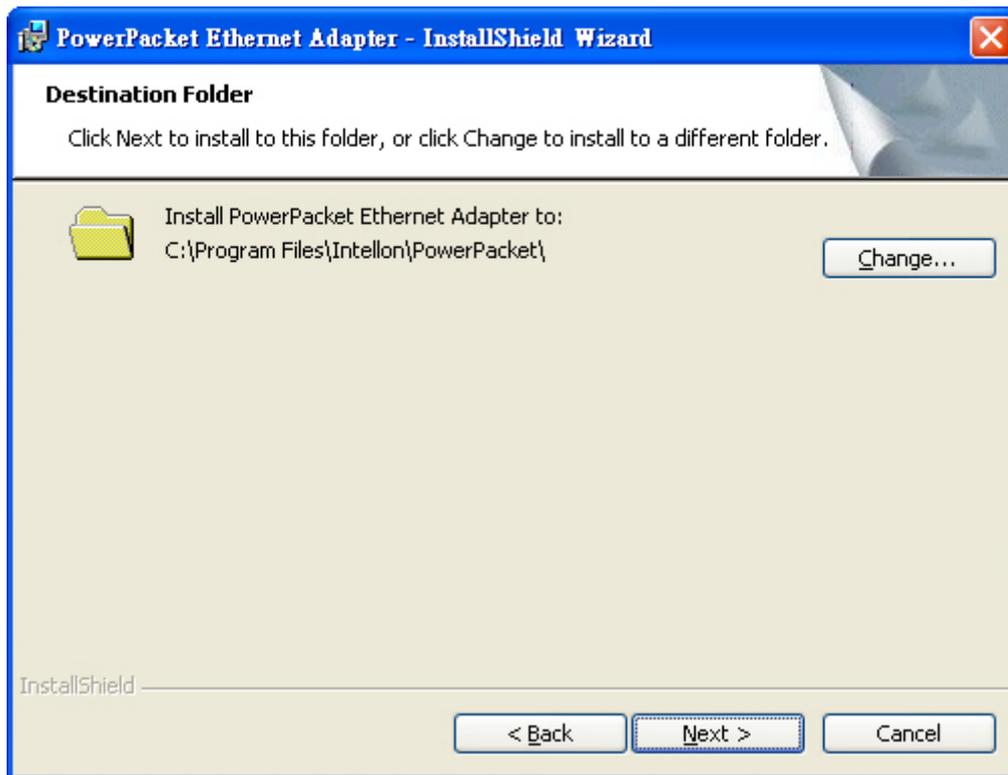


7. Click Next and follow the instructions on the screen.



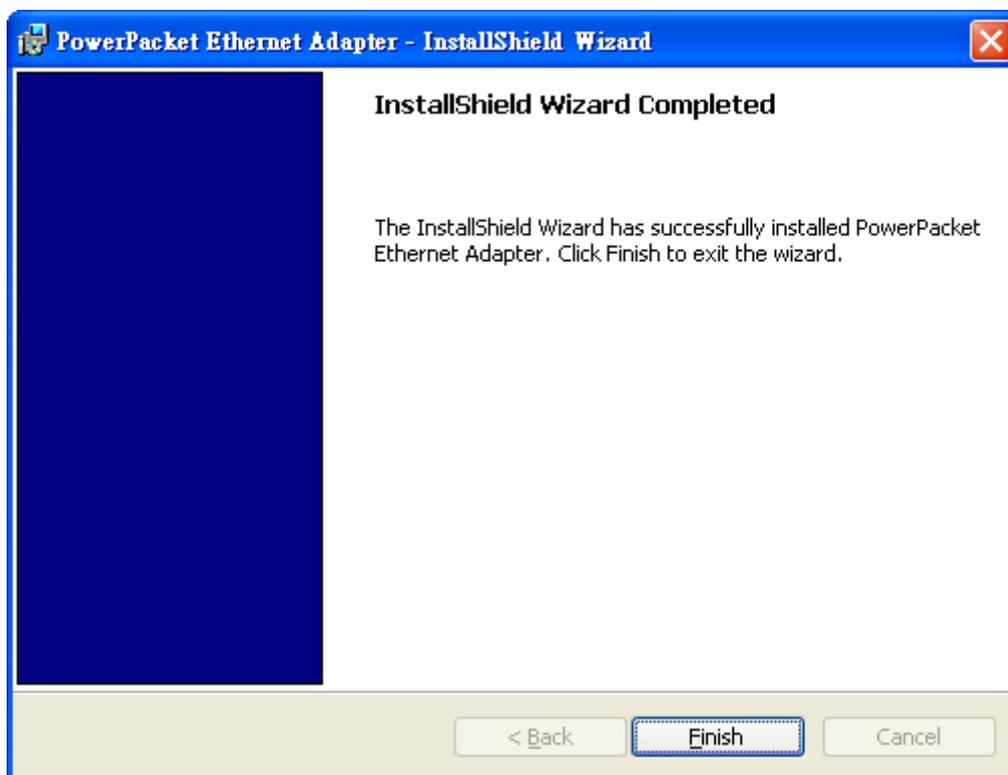
8. Enter your user name and organization and then click Next.

9. Specify where the files will be saved on your computer:



- Change. Choose the location. Type a new folder name or select another location using the folder options and then click OK.
- Next. Accept the default location.

10. The InstallShield Wizard indicates that the program is ready to install.



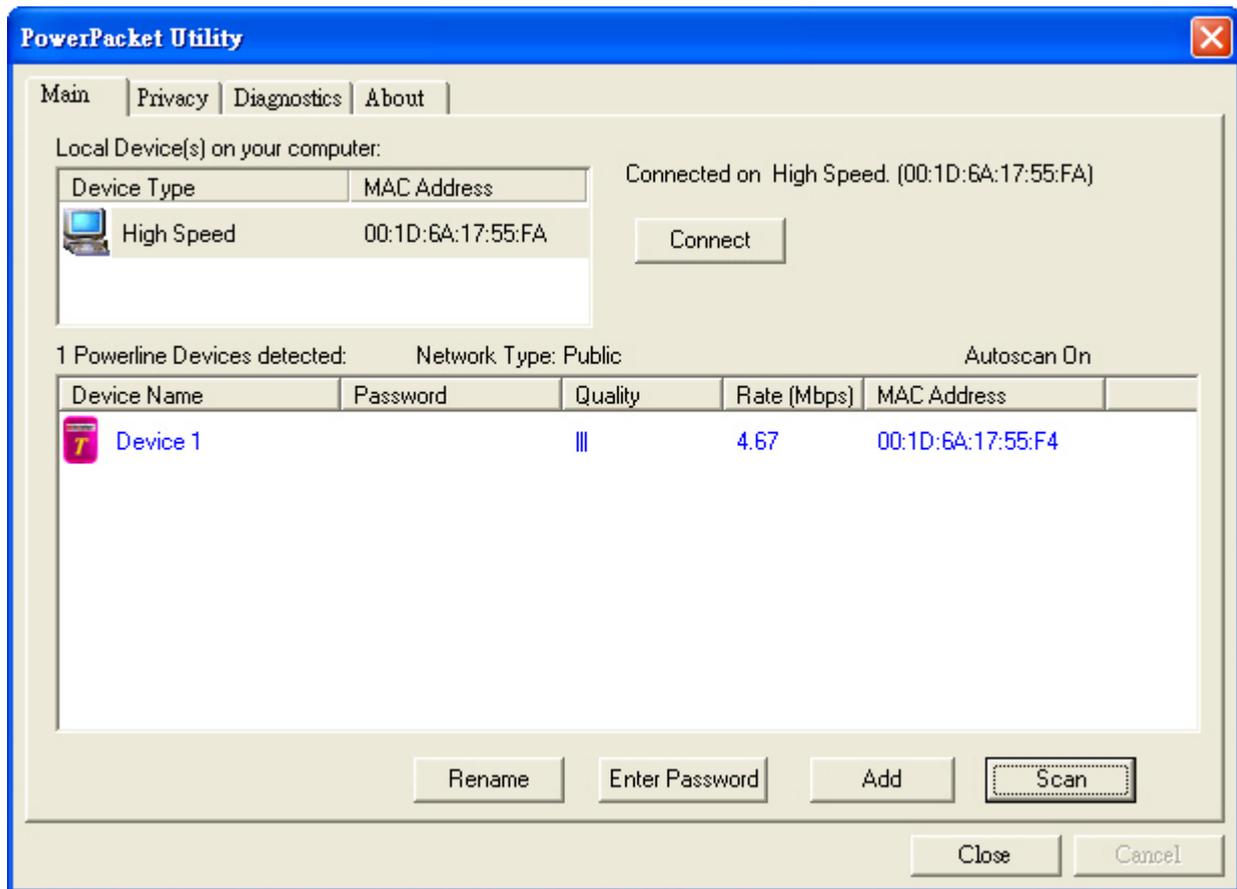
11. Click Install.

12. When the installation is complete, click Finish.

Set Your Network Password

The fastest and most reliable way to set the network password is to set the password for all devices at once. To do this, you need the device password on the back label of each Powerline HomePlug Ethernet Adapter device. There are two steps to setting the password: first enter the device password for each remote Powerline HomePlug Ethernet Adapter device, and then set the network password.

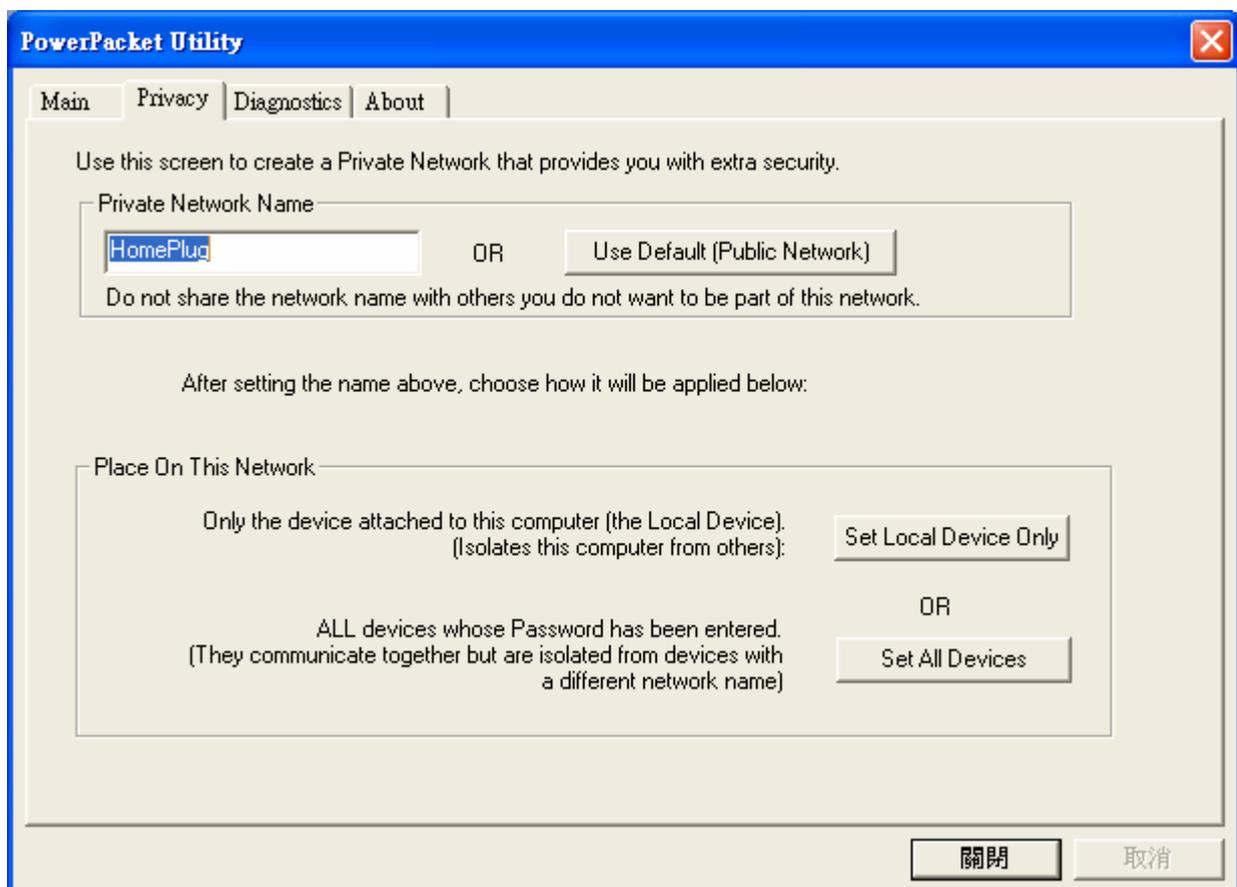
13. Enter the device password for each remote Powerline HomePlug Ethernet Adapter device:
 - e. Make sure that all Powerline HomePlug Ethernet Adapter devices are plugged into 100~240V AC wall sockets.
 - a. Start the Powerline HomePlug Ethernet Adapter encryption utility and click the Main tab.



- b. Check that the utility lists all the remote Powerline HomePlug Ethernet Adapter devices.
- c. Select a Powerline HomePlug Ethernet Adapter device and, if more than one remote device is listed, identify it from the MAC address.
- d. Click Enter Password.



- e. Enter the password recorded from the label on the back of the selected Powerline HomePlug Ethernet Adapter device.
 - f. Click OK.
 - g. Repeat this step for all devices that you want attached to your network.
14. Set the network password.
- h. Select the Security tab.



- a. Type a password in the Private Network Password text box.
- b. Click Set All Devices. A pop-up window indicates that the operation was successful.

Add a Device to an Existing Powerline HomePlug Ethernet Adapter Network

To add a device to a Powerline HomePlug Ethernet Adapter network with the default network password, all you need to do is plug the new device into a power outlet.

If the network password has been set, then you will need to run the Powerline HomePlug Ethernet Adapter encryption utility to set the new device to the network password. How you do this depends on whether the computer running the Powerline HomePlug Ethernet Adapter encryption utility is connected directly to the new Powerline HomePlug Ethernet Adapter device (local) or is connected to a different device in the Powerline HomePlug Ethernet Adapter network (remote).

Adding a New Device from a Locally Connected Computer

15. Plug the new Powerline HomePlug Ethernet Adapter device into an available AC power outlet and connect it to an Ethernet port on the computer.
16. Start the Powerline HomePlug Ethernet Adapter encryption utility and select the Security tab.
17. Type the network password in the Private Network Password text box and click Set Local Device Only.
18. Select the Main tab and check that the other devices in the Powerline HomePlug Ethernet Adapter network appear in the device list. It may take a minute or two for all devices in the network to be detected.

Adding a New Device from a Remotely Connected Computer

19. Note the device password given on the label on the back of the new Powerline HomePlug Ethernet Adapter device.
20. Plug the new Powerline HomePlug Ethernet Adapter device into an AC power outlet.
21. Start the Powerline HomePlug Ethernet Adapter encryption utility on the remote computer and select the Security tab.
22. Click Use Default (Public Network). The password in the Private Network Password text box changes to the default password, Powerline Homeplug Ethernet.
23. Click Set All Devices.
24. Select the Main tab and wait for the new Powerline HomePlug Ethernet Adapter device to be listed.
25. Select the new Powerline HomePlug Ethernet Adapter device from the device list, and click Enter Password.
26. In the pop-up window, enter the password from the back label of the device and click OK.
27. Select the Security tab.
28. Re-enter the network password in the Private Network Password text box, and then click Set All Devices.

Chapter 2 Troubleshooting

This chapter gives information about troubleshooting your 85 Mbps Powerline HomePlug Ethernet Adapter. After each problem description, instructions are provided to help you diagnose and solve the problem.

Basic Functioning

After you plug in the Powerline HomePlug Ethernet Adapter, the following sequence of events should occur:

29. When power is first applied, verify that the Power light is on.
30. After approximately 10 seconds, check the LEDs on the Powerline HomePlug Ethernet Adapter. The following should occur:
 - c. The power LED is solid green.
 - a. The green Power Link LED is lit.
 - b. The Ethernet LED blinks.

If any of these conditions does not occur, refer to the appropriate following section.

- **Power Light Not On**

Make sure that, if power to the AC power outlet is controlled by a wall switch, the wall switch is in the on position.

Verify that the wall socket is live. To do this, disconnect the Powerline HomePlug Ethernet Adapter and plug in another electrical product, such as a lamp or a hairdryer.

If the Power LED still does not come on, and you have confirmed the power outlet is live, you have a hardware problem and should contact technical support.

- **Power Link Light Not On**

If the power light is on but the Power Link light is not, check the following:

- Make sure that power is being provided to more than one Powerline HomePlug Ethernet Adapter device. Another Powerline HomePlug Ethernet Adapter device must be installed for successful communication across the Powerline Homeplug Ethernet.
- Verify that the network password is the same on all devices in the Powerline HomePlug Ethernet Adapter network.

- **Ethernet Light is Off**

- Make sure that the Ethernet cable is plugged in properly at both ends.
- Be sure that you are using the correct cable on the router that the first Powerline HomePlug Ethernet Adapter is connected to. When connecting the router's Internet port to a cable or DSL modem, use the cable that was supplied with the cable or DSL modem. This cable could be a standard straight-through Ethernet cable or an Ethernet crossover cable.
- On the attached Ethernet device or network adapter card, check that the Link light is on.