Powerline Adapter

User's Manual

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Disclaimer

Important Safety Instructions

1. Read these instructions carefully.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water.
5. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation provided.
6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
7. This product relies on the building's electrical installation for short-circuit (over current) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC or 230 VAC (depends on the power supply type in your country) is used on the phase conductors (all current-carrying conductors).
8. Plug the device directly into a 120 VAC or 230 VAC (depends on the power supply type in your country) wall outlet. Do not use an extension cord between the adapter and the AC power source.
9. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks as well as ruin product warranty. Refer all servicing to qualified service personnel.
10. Unplug the AC coupler from the wall outlet and refer the product to qualified service personnel for the following conditions:
    - If liquid has been spilled into the product.
    - If the product has been exposed to rain or water.
    - If the product does not operate normally when the operating instructions are followed.
    - If the product exhibits a distinct change in performance.

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Chapter 1 Getting Started

Congratulations on your purchase of this Powerline Adapter. This product features the latest innovations in high-speed network, making electronic communication faster and easier. It allows you to network your computers via your existing home power lines. It offers a data transmission speed of up to 85 Mbps, and reaches up to 990 feet through standard power lines. This User Manual will show you how to install and properly use this product in order to take full advantage of its features.

1.1 Package Contents

Make sure that you have the following items:

1. *Power line Adapter with Ethernet interface*
2. *CD with Manual and Configuration Utility*
3. *RJ-45 CAT 5 crossover cable*

If any of the items is damaged or missing, contact your dealer immediately.

1.2 System Requirements

- *Available AC power outlets in the room*
- *Standard home power line wiring*
- *Computers with 10/100Base-T adapters, or 10/100Base-T switch/hub (For Ethernet Powerline Adapter)*
  Computers with available USB interface (For USB Powerline Adapter)
- *CD-ROM drive*
- *The laptop or desktop must have one of these operating systems, i.e., Microsoft Windows 98SE, Millennium, Windows 2000 and Windows XP*
- *Pentium II 300 MHZ MMX-Compatible PC or greater*
- *At least 64MB hard disk space and memory*

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Chapter 2 Overview

Before you proceed with the installation, it is necessary that you have enough information about this product. This chapter tells you all you need to know about the Powerline Adapter.
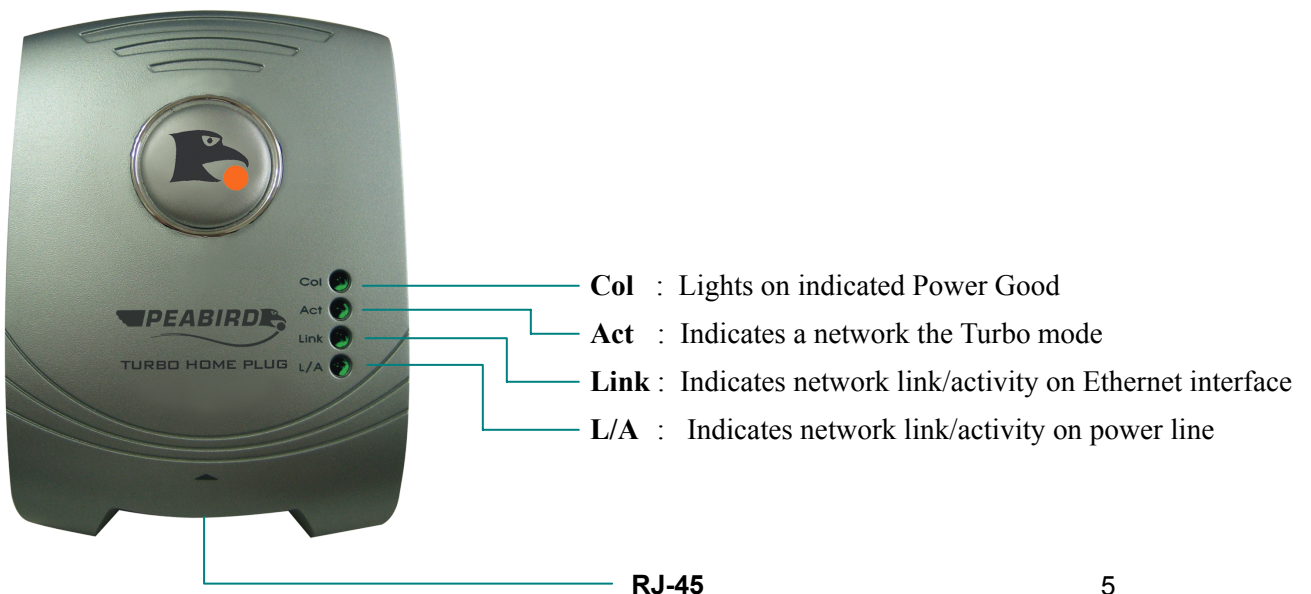
2.1 Specifications

Features:

- ▸ *Powerline Turbo Adapter compliant*
- ▸ *Operates on existing home electric wiring*
- ▸ *Plug-and-Play (PnP) operation provides easy setup*
- ▸ *LED indicators indicate connection status*
- ▸ *Data transmission rate up to 85Mbps for Ethernet interface*
- ▸ *Built-in QoS and Error Correction features*
- ▸ *56-bit DES Link Encryption with key management for secure powerline communications*
- ▸ *Compliant with IEEE 802.3 / 802.3u*
- ▸ *10 / 100 auto-sensing*
- ▸ *Hassle-free communication software suit provided*

2.2 Front View

The LED indicators located on the front panel show the status and activity.

- ▸ <u>*Ethernet Power line Adapter*</u>

Col : Lights on indicated Power Good

Act : Indicates a network the Turbo mode

Link : Indicates network link/activity on Ethernet interface

L/A : Indicates network link/activity on power line

RJ-45

2.3 Back View

▶ *Ethernet Power line Adapter*

Left: USA type power plug
Right: EUR type power plug
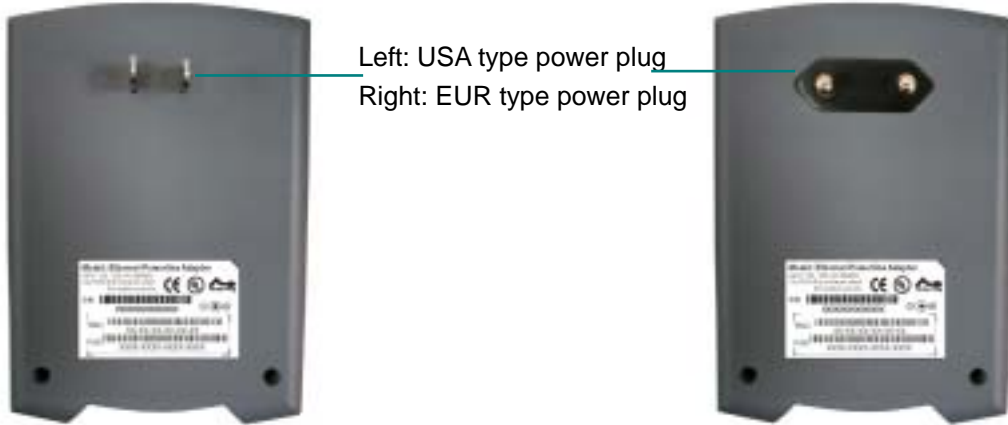
Chapter 3 Setting Up

This chapter contains detailed instructions on how to install and configure the Powerline Adapter as well as how to verify its installation. We recommend that you follow the steps accordingly to avoid future problems.

3.1 ESD Precautions

Electrostatic discharge (ESD) can damage your processor, disk drives, expansion boards, and other system components. Always observe the following precautions before you install any computer system components.

1. *Do not remove a component from its protective housing until you ground yourself from electrostatic discharge.*

2. *Wear a wrist-grounding strap and attach it to a metal part of the system unit or any grounding item before handling computer components. If a wrist strap is not available, maintain contact with the system unit or grounding item throughout any procedure requiring ESD protection.*
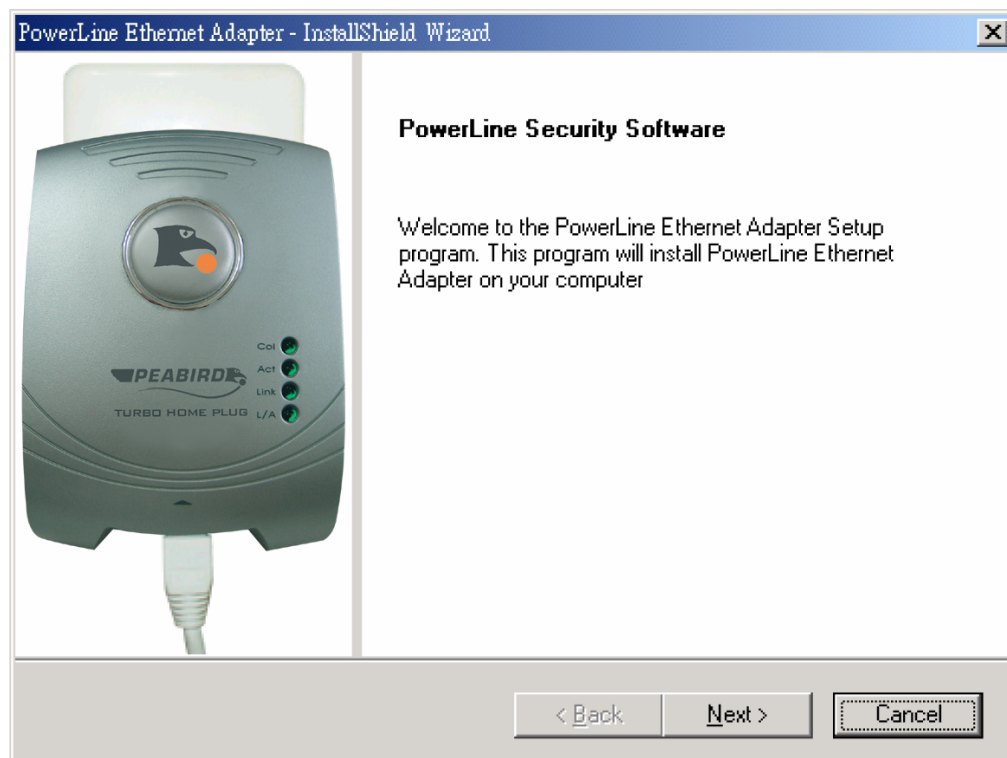
3.2 Installing the Powerline Adapter

1. *Arrange an open wall outlet near your computer system and plug the Powerline Adapter into the wall outlet.*

2. *Connect the Ethernet cable to the Power line Adapter,* **but do not connect the other end of the Ethernet cable to the computer system yet.**

NOTE: Check the voltage range in your area before plugging your Powerline Adapter into an outlet.

3.3 Installing the Utility

1. *Insert the included packaged CD into your CD-ROM drive.*

2. *Go to **My Computer** and double click on your CD-ROM and open up the **Utility** file, then click **setup.exe**.*

3. *Click the **Next** button on the setup window.*

4. The installation should begin installing the software into your system.
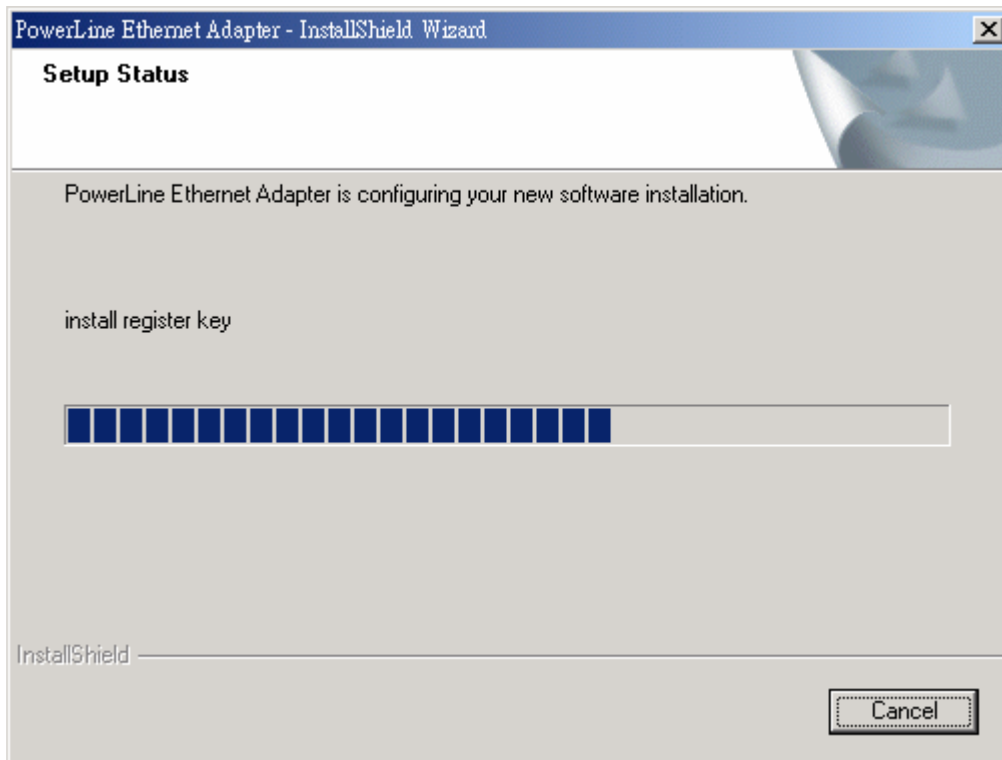
*5. The completed window page should pop up. Click the **Finish** button to complete the installation setup.*
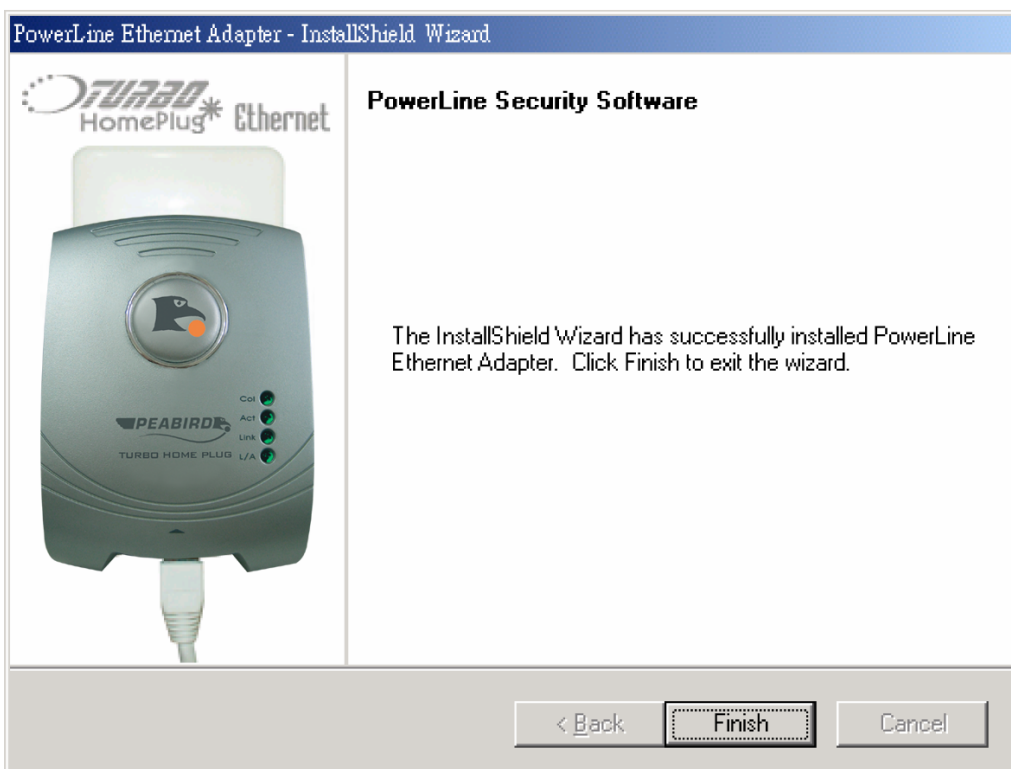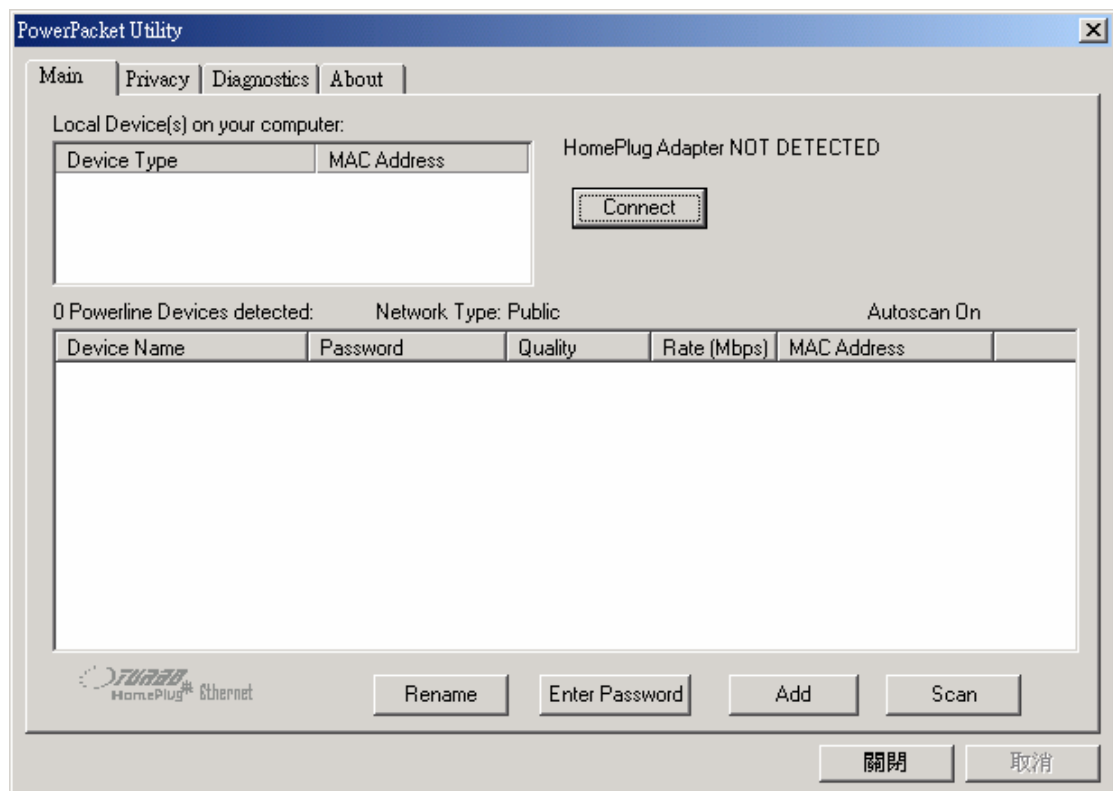
3.4 Configuring the Powerline Adapter

1. On your desktop, you should see a **PowerLine. lnk** icon. Double-click on it to open the utility.
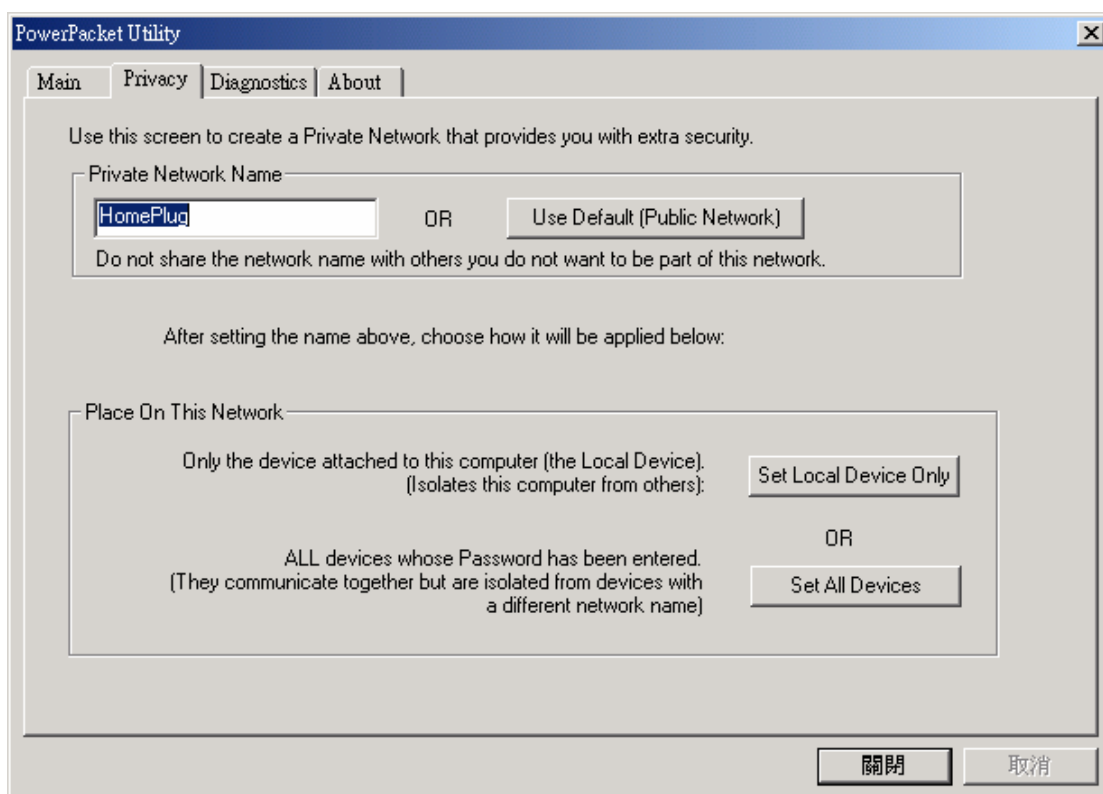

PowerLine.lnk

2. The Power Packet Utility should open up to the Main tab.

In here, you can view the Powerline adapter(s) that are connected to your computer system and in your Power line network. You can **Rename** the device name in your Power line network. You can **Enter Password** of the Power line adapters (usually found on the label of the adapter and comes in the form of XXXX-XXXX-XXXX-XXXX) in your network, so that you can change the privacy network key remotely. You can **Add** additional Power line adapters by entering in the Power line's password. You can **Scan** for additional Power line adapters that are in the Power line network as well. Lastly you may **Connect** to the Power line adapter of your choice.

3. Privacy page will provide you the security from other Power line intruders

*In here, you can enter your **Private Network Name**, so that other Power line adapters in the Power line network that uses this Private Network Name will only connect to this network. If **Use Default (Public Network)** is used, it will default to the original password. Once the Private Network Name is chosen it must be set. You may **Set Local Device Only**, which sets the Power line adapter that's connected to the computer system. Or you may **Set All Devices**, which sets the remote Power line adapters that has their password entered in the Main page.*

4. *Diagnostics page will provide system information and history of your Power line Network*
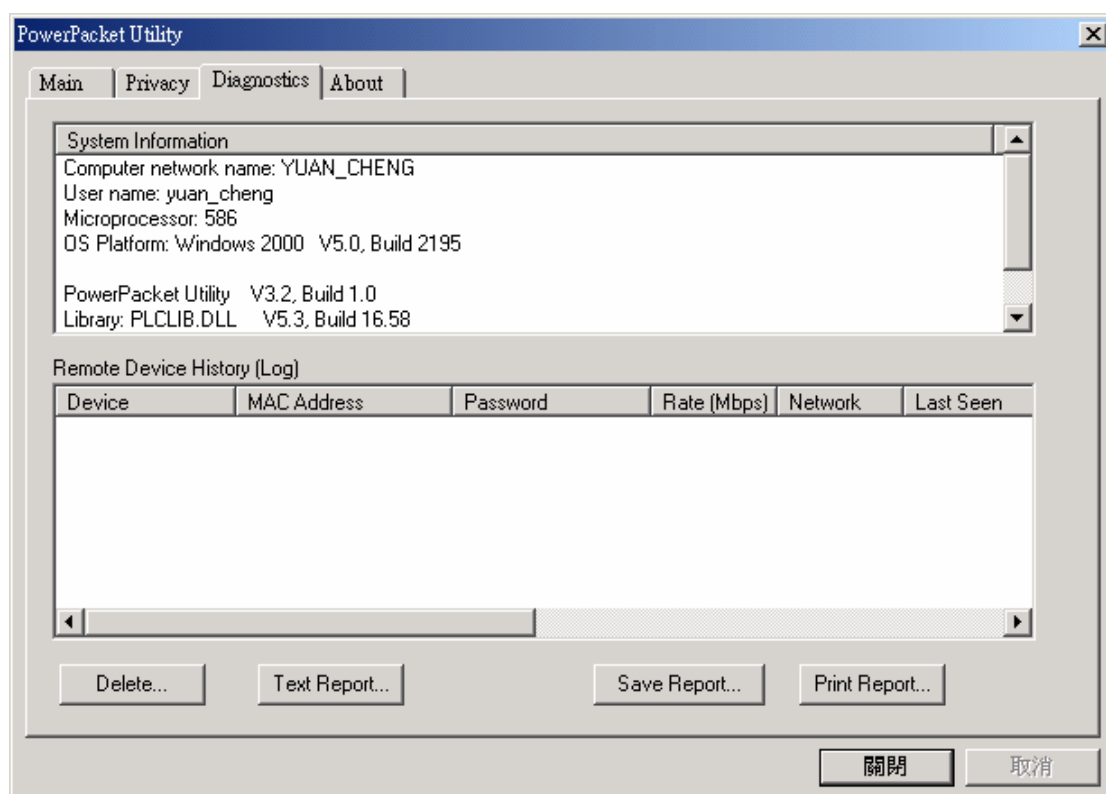
*In here you can **Delete** the history. **Email Report** of the diagnostics information, which will provide you a text form with all the information filled in. **Save Report**, so you can save the diagnostics information in a file. Or you can **Print Report**, which will print the Diagnostics information.*

5. About page will give information on the utility
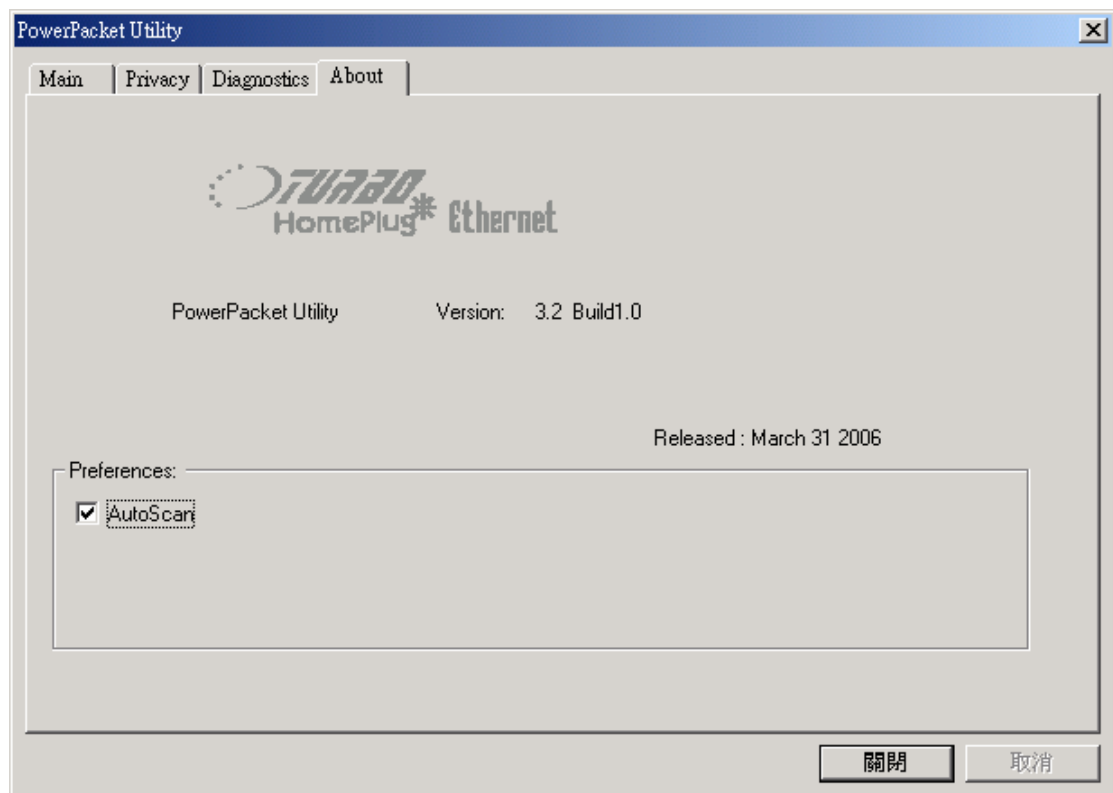
*In here you can view the version of the utility. Visit Intellon's website. Lastly you can choose the option of **AutoScan** for the main page, which will automatically scan the Power line Network for new Power line adapters.*

3.5 Uninstalling the Powerline Adapter Utility

1. *Detach the Powerline Adapter from your computer.*

2. *From your PC desktop, click* **Start** -> **Programs** -> **Powerline Security Software** -> **Uninstall**

Chapter 4 Troubleshooting

1. Why other Powerline Adapters aren't listed on the network of my Configuration Utility?

Ans: Make sure other devices are working properly and correctly installed. Please also check if every device uses the same network password. Try to set each device with the same network password or add other device's device password into your remote password list.

2. What types of security problems will I be encountering?

Ans: If your house is on the same power grid as your neighbor, it is possible for a hacker to get in your network. However, this problem can be easily overcome by activating the encryption key of each Powerline device.

3. Will Powerline Adapter operate on different circuit breakers?

Ans: Powerline Adapter can operate on different circuit breakers without affecting the performance. However, the signal will not pass through the power transformers outside your house.

4. What OS does the Powerline Adapter utility software fully supports?

Ans: Windows 98SE, ME, 2000, and XP.   Windows NT and Mac are only supported by the Ethernet Powerline Adapter as a Bridge.

5. How does 56bit-DES compare with Wireless 802.11b 128bit-WEP encryption?

Ans: 56bit-DES is superior because of its DES type encryption.   Just because 802.11b uses 128bit-WEP with more bits doesn't mean the encryption is better. Powerline Adapter devices use hardware 56bit-DES encryption.   With hardware encryption the signal is almost impossible to crack. The hardware encryption process does not affect bandwidth, and the encryption is enabled at all times.