



Level One

PLI-2021

85Mbps HomePlug Ethernet Bridge

User Manual

V1.0-0511

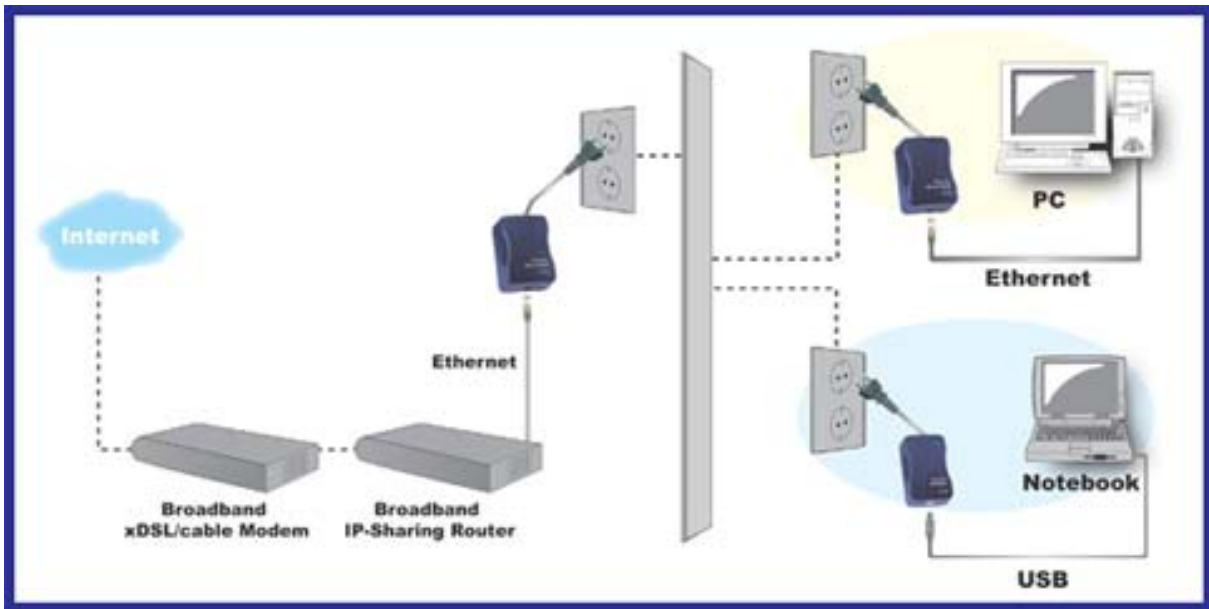
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Chapter 1: Overview

LevelOne 85Mbps HomePlug Ethernet Bridge

PLI-2021 HomePlug Ethernet Bridge is a perfect data communications solution for SOHO and home networking. It makes you simply create a home network. There is no new wire needed. With up to 85 Mbps data rates, it provides high speed data transmission through existing electrical wiring of a home or office. Moreover, if you use a PowerLine bridge to interface one of the broadband routers from your cable or DSL Internet connection to your PowerLine network, you'll be able to get to the Internet from any computer in the house. You may share data, media and other peripherals with other computers connected to the network.



Chapter 2: About LevelOne 85Mbps HomePlug Ethernet Bridge

Ethernet

To work with Ethernet ports, your computer must have Ethernet-equipped.

Ethernet Adapter comes with an Ethernet cable as shown in *Figure 3-1*



Figure 3-1

Front Panel LEDs



Figure 3-2

The Adapter's LEDs (shown in *Figure 3-2*), indicates network activity.

Turbo Orange: The Link LED will light up when network connects with 85 Mbps protocol standard.

HomePlug Green: The Link LED will light up when PowerLine adapters are connected.

Ethernet Green: The Link LED will light up when Ethernet port is connected to computer.

Power Green: The Link LED will light up when PowerLine adapter is connected to AC outlet.

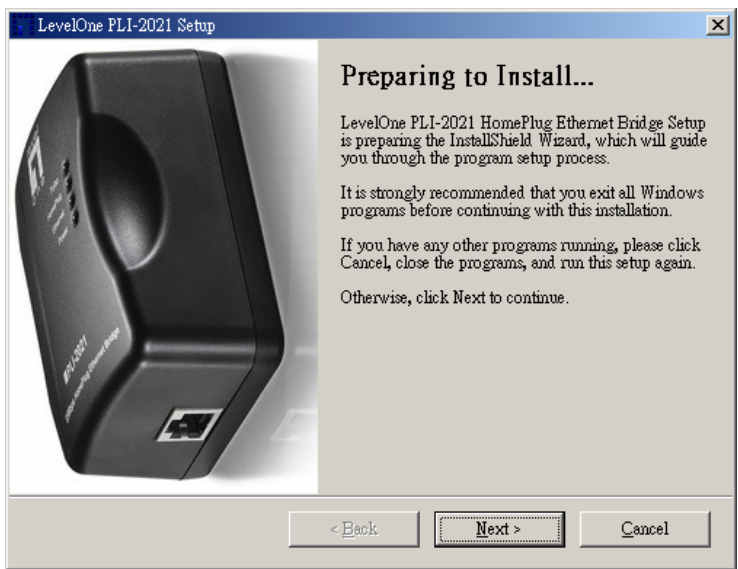
Chapter 3: How to install Configuration Utility

Introduction

LevelOne Configuration Utility is a tool to help you managing the home network with PLI-2021 HomePlug Ethernet Bridge. You may easily view all devices' status and activities. The utility also enables you to manage all connections, such as dividing different groups, setting password for specific device,..etc.

Note: Configuration Utility is not mandatory for the HomePlug Ethernet Bridge. The product can works without configuration utility installed.

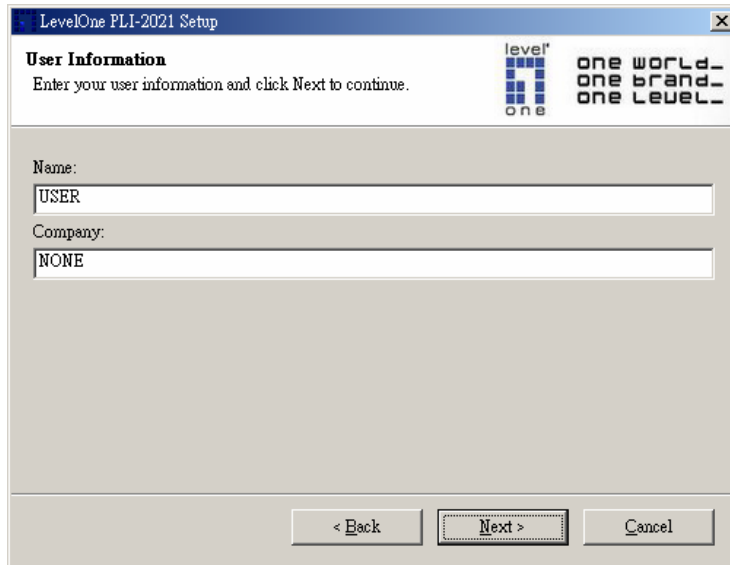
1. Please insert the CD into your computer's CD-ROM drive. The installation wizard will pop out automatically. Click "**Next**" to begin installation.



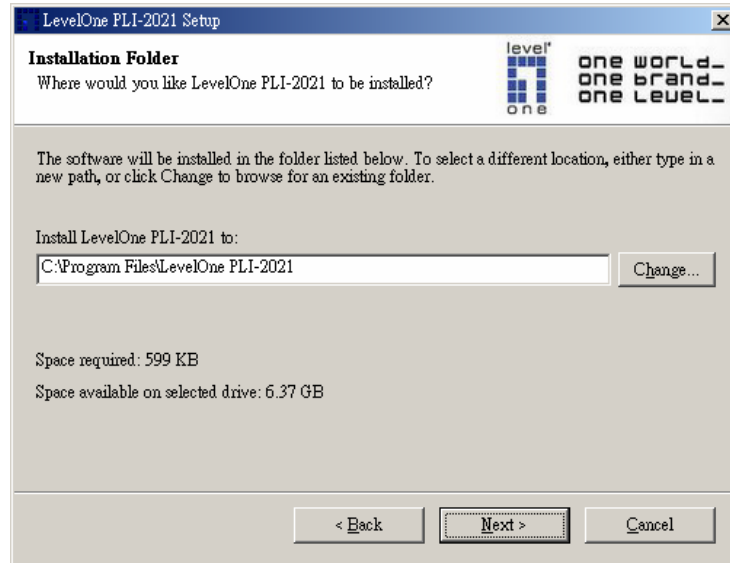
2. Please click **“Next”** to continue.



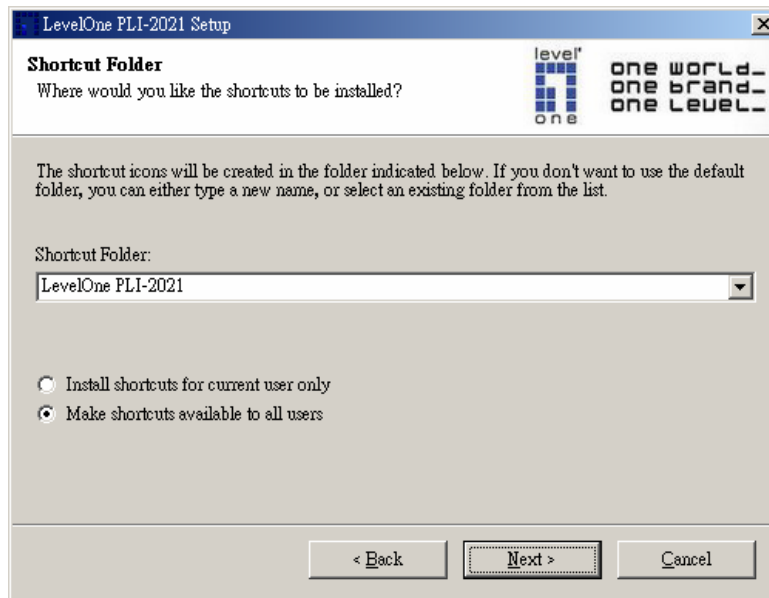
3. Please enter user name and organization name then click **“Next”** to continue.



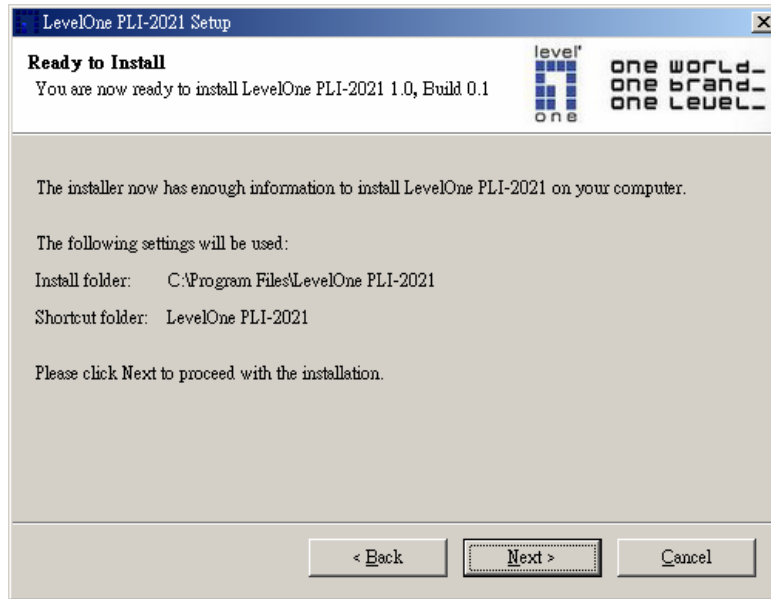
4. Utility will be saved to the default folder, **C:\Program Files\LevelOne PLI-2021**. You may change it by pressing “**Change**” bottom.



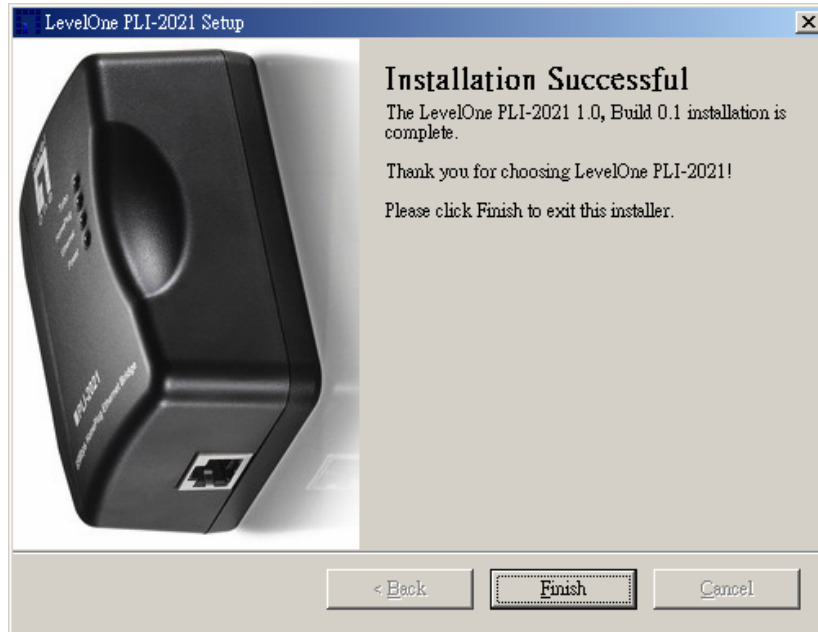
5. Shortcut Icon will be saved to the default folder, **C:\Program Files\LevelOne PLI-2021**. You may change it by pressing “**Change**” bottom.



6. Please click “**Next**” to proceed with the installation.



7. Click **Finish** to exit.



Chapter 4: How to Connect the LevelOne HomePlug Ethernet Bridge

Note: Please make sure the driver installation is finished.

1. Insert the Ethernet cable connector into the PC's Ethernet port or DSL/Cable/Wireless Router Ethernet port.
2. Insert the Ethernet cable another connector into the Ethernet port on the HomePlug Ethernet Bridge.
3. Insert the Power cord's connector into the HomePlug Ethernet Bridge and plug the power cord into the outlet.

Chapter 5: Introduction to the LevelOne Configuration Utility

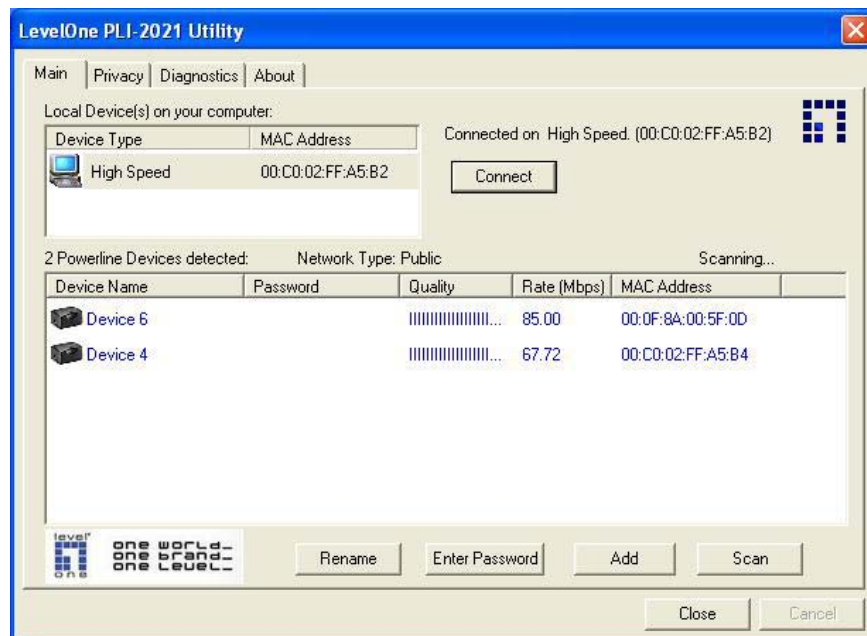
To Access the LevelOne Configuration Utility

The **short-cut icon** is automatically created on your desktop. You may double click the icon to access the LevelOne configuration utility.



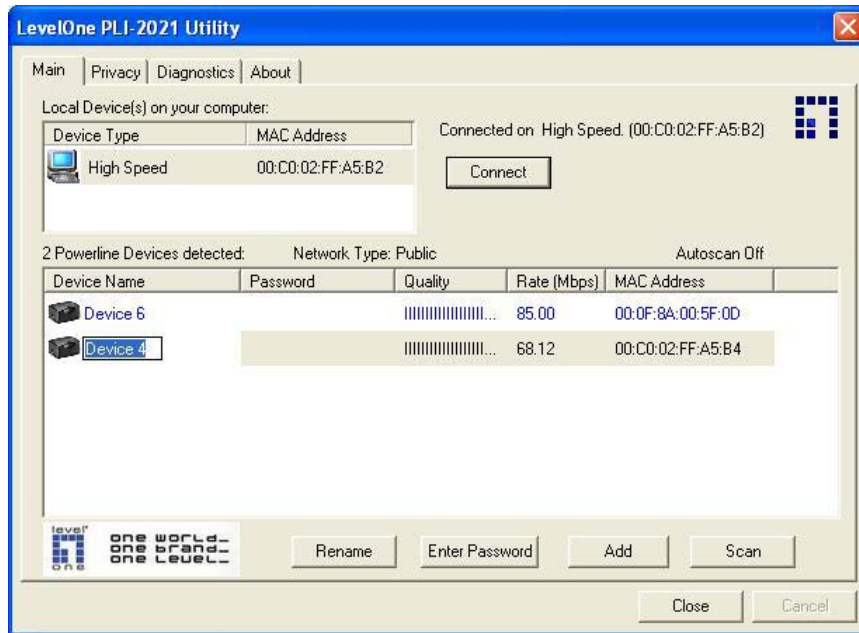
You may see four categories including **Main**, **Privacy**, **Diagnostics** and **About**.

1. **Main:** View current status of all devices which have same name of network and connect to the HomePlug network by Ethernet.



- **Change default name for each device**

Click on a device then click **"Rename"** button. Type device name in text field then press **Enter**.



- **Set device Password**

You may need to set device password in order to create network groups. Click on a device then click “**Enter Password**”. Type **DEK number** then click “**OK**”. You may find the DEK number showed on a label which is stuck on the back of device.



- **Manually scan status of devices**

Click “**Scan**” to refresh current status of all connected devices.

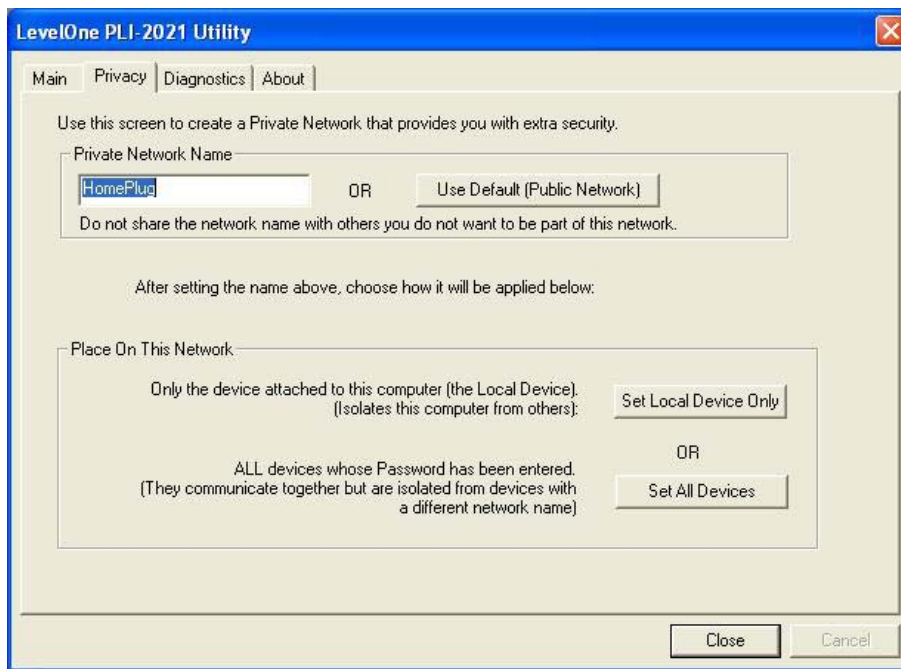
2. **Privacy:** Security setting for the HomePlug network. You may create network groups in the same HomePlug network.

- **Default setting**

HomePlug is the default network group name for all devices.

- **Rename network group**

Type new name in **Private Network Name** for the HomePlug which connects to the local PC you are using and click “**OK**”.



Click **“Set Local Device Only”** to set the HomePlug which connects to the local PC only. Click **“Set all Device”** to set all devices which are in the same network group and have valid password set. Click **“Use Default (Public Network)”** to set as default.

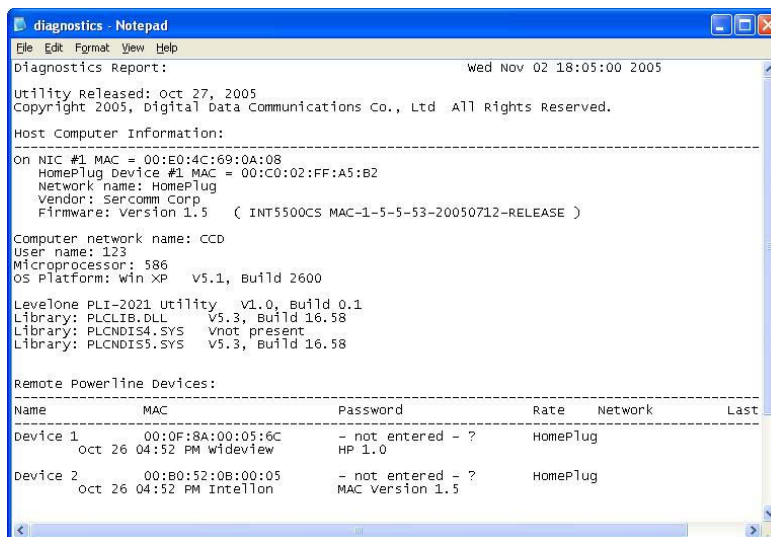
3. Diagnostics: view system information

- **System Information**

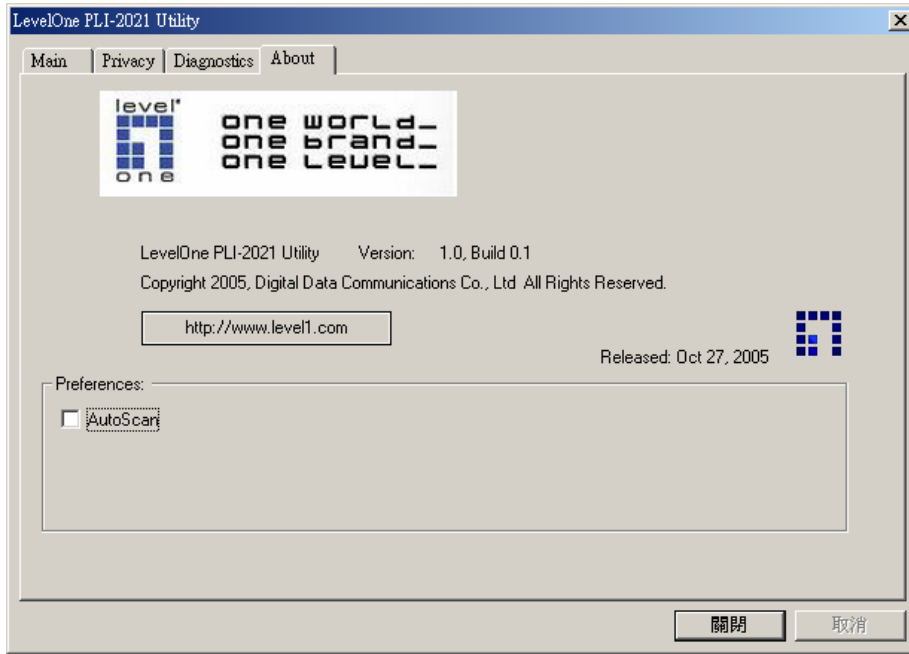
Show system general information of the local PC.

- **Remote Device History (Log)**

Show information of all devices which ever connected to the system.



4. **About:** View current Software version.



Appendix A: Important Safety Information

This product is intended for connection to the AC power line. The following precautions should be taken when using this product:

- Read all instructions before installing and operating this product.
- Follow all warnings and instructions marked on the product.
- Do not operate this product near water.
- This product relies on a building's electrical installation for short-circuit (over current) protection. Ensure that a fuse or circuit breaker no larger than 16 Amp is used on the phase conductors (all current-carrying conductors).
- Do not allow anything to rest on the product interconnect cords.
- Do not locate this product where people may walk on the cords.
- The wall mount should be plugged directly into a AC wall outlet. (Note: The appropriate voltage, 120/220/230/240V, depends on different areas or countries.)
- Only a qualified technician should service this product. Opening or removing covers may result in exposure to dangerous voltage points or other risks. (Note: Opening or removing the covers will void your product warranty.)
- Unplug the wall mount from the wall outlet and refer the product to qualified service personnel for the following conditions:
 - When the interconnect cords are damaged or frayed.
 - If liquid has been spilled onto the product.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally when the operating instructions have been followed.
 - If the product exhibits a distinct change in performance.

Appendix B: Specifications

Specifications

- 10/100 Ethernet Interface
- Up to 85 Mbps data rate
- Up to 1,000 meters (3,300 feet) in distance
- Intelligent channel adaptation maximizes throughput under harsh channel conditions
- Fully compliant with the HomePlug 1.0.1
- Support QAM 256/64/16, DQPSK, DBPSK and ROBO modulation schemes
- Integrated Quality of Service (QoS) features such as prioritized random access, contention-free access and segment bursting
- Built-in 56-bit DES data encryption
- Shared broadband internet access
- PC files and applications sharing
- Peripheral and printer sharing
- Audio / video stream sharing
- Windows 98SE/ME/2000/XP/ MAC/ Linux system compliant
- Weight: 210 mg

Appendix C: Troubleshooting

Common Problems and Solutions

1. None of the LEDs light up after I installed the HomePlug Ethernet Bridge.
 - Unplug the product from computer and AC outlet then re-plug it again. Make sure the AC outlet is working properly.
2. I can't connect to other computers in the PLI-2021 network or to the Internet.
 - Make sure the IP address and TCP/IP protocol are set up correctly for all the power line networked computers.
 - Make sure all devices on the PLI-2021 network have been configured using Configuration Utility. The network password must be the same for all devices.

FAQ

Q: Does the HomePlug Ethernet Bridge cause interference with other home networking or Power line products?

A: No. The HomePlug Ethernet Bridge can co-exist with phone line and wireless networking technologies. Instant Power Line operates in a different frequency band than PowerLine control and can co-exist with other technologies.

Q: How does the HomePlug Ethernet Bridge handle signal interference between two adjacent homes? How is eavesdropping prevented?

A: The HomePlug Ethernet Bridge uses 56-bit DES security encryption to ensure network separation between homes. To enable 56-bit DES security encryption on Instant PowerLine products, you must run the PowerLine Configuration Utility on each and every Instant PowerLine product.

