LevelOne

PLI-2040

200 Mbps HomePlug AV Adapter

User Manual

HomePlug PowerLine

HomePlug PowerLine is an excellent solution that can be used to extend your network. In the home or small office building, use HomePlug Ethernet Bridge Adapters to link multiple locations without the need to run Ethernet cable. Combined with a broadband DSL/Cable connection, every room with electrical power outlets will have easy access to high-speed Internet connection.

Introduction

200 Mbps HomePlug AV Adapter allows you to connect any device which has an Ethernet port to a PowerLine network. In operation, the 200 Mbps HomePlug AV Adapter is completely transparent, and simply passes data between the Ethernet port and the PowerLine network. The PowerLine data transfer rate can be reached up to 200 Mbps. Any device may be connected to the 200 Mbps HomePlug Ethernet Bridge's Ethernet port, but a Windows PC must be used for configuration.

Strongly recommend Windows 2000/XP/Vista for utility configuration

Physical Details

Figure 1: 200 Mbps HomePlug AV Adapter

Front Panel LEDs

Power	**On** - Normal operation.	
	Off - No power	
HomePlug	**On** - The PowerLine network is active. This means that at least one other HomePlug device was detected.	
	Off - PowerLine network is not available - no other HomePlug devices were detected.	
	Flashing - Data is being transmitted or received via the PowerLine network.	
Ethernet	**On** - Ethernet connection is active.	
	Off - No Ethernet connection.	
	Flashing - Data is being transmitted or received via the Ethernet Port.	

Setup

Configuration requires the use of Windows PC. Once configured, any device may be connected to the 200 Mbps HomePlug AV Adapter's Ethernet port. To perform configuration, follow the procedures list below.

1. Connect a standard LAN cable from the 200 Mbps HomePlug AV Adapter's Ethernet port to your PC.

2. Plug the 200 Mbps HomePlug AV Adapter into a power outlet.

3. Wait a few seconds for startup to be completed, and then check the LEDs

   - The *Power* LED should be ON.
   - The *HomePlug* LED will be ON if other HomePlug devices are detected, otherwise it will be OFF.
   - The *Ethernet* LED should be ON.

4. Insert the supplied CD-ROM into your Windows PC, and wait for it to start, select "Utility" from the autorun screen. If it does not start automatically, locate and run SETUP.EXE.

5. Follow the prompts to install the *PLI-2040* utility.

6. **Microsoft .NET Framework 1.1** is needed for installing *PLI-2040* utility. The wizard will check automatically whether the **Microsoft .NET Framework 1.1** was installed on your PC or not. If not, the wizard will pop up a message box. Click *OK* to install **Microsoft .NET Framework 1.1** first.
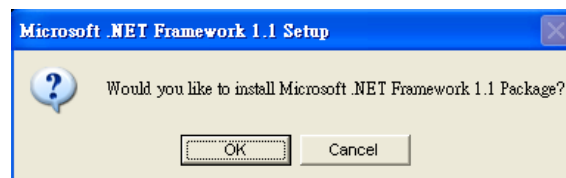

Figure 2: Microsoft .NET Framework 1.1 Screen

7. Once installation is completed, run the *PLI-2040* utility program. The first screen (*Network* Tab) will display information of the compatible devices found, such as their MAC Addresses and current transfer speeds. Choose the desired device from the *Device Selection*, and the information of the selected device will be displayed in the table.
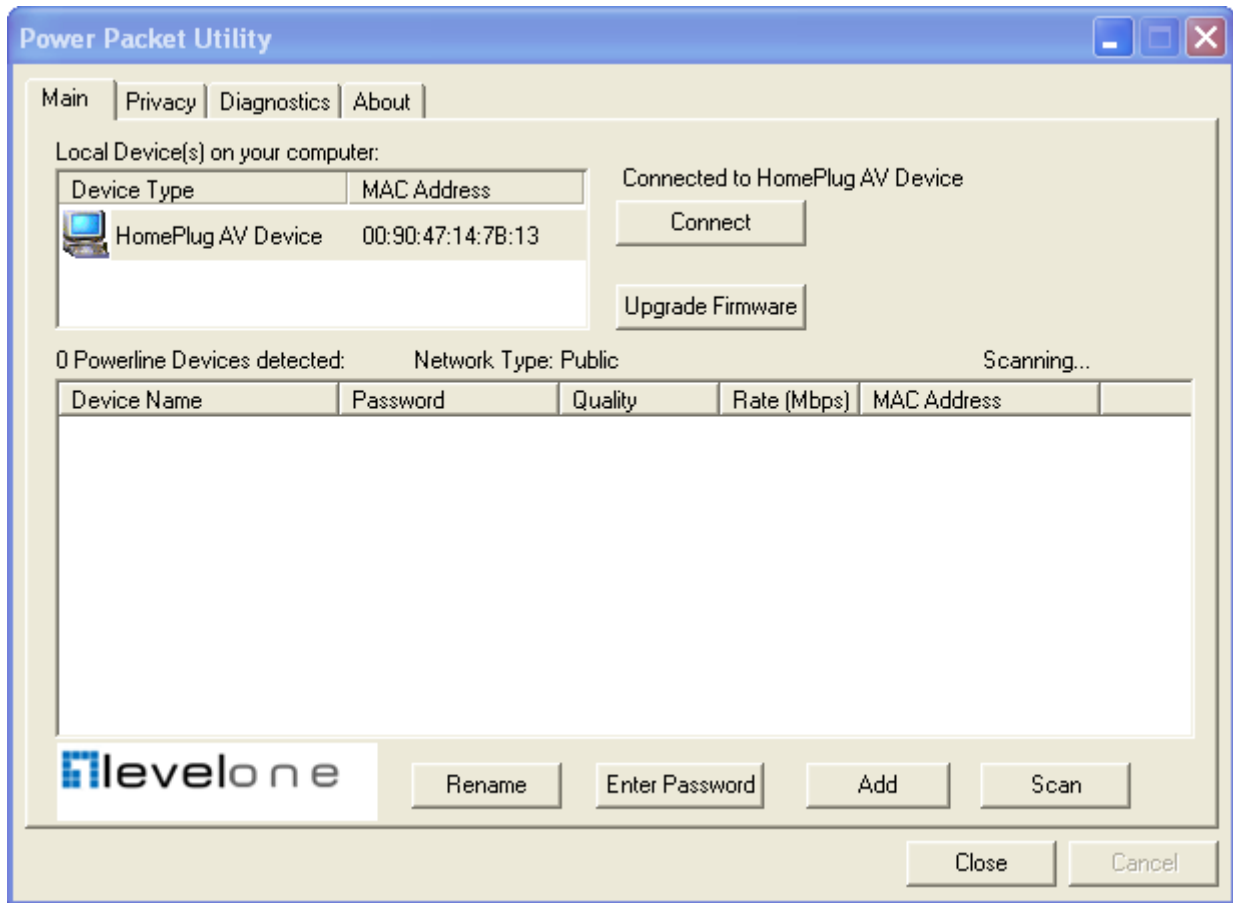

Figure 3: PLI-2040 Utility - Network Tab

8. Click *Close* to exit the *PLI-2040* utility.

   Setup is now complete.

   If your PC is not the device you wish to use with the 200 Mbps HomePlug AV Adapter, connect the Ethernet cable from the 200 Mbps HomePlug AV Adapter to the desired device.

The 200 Mbps HomePlug AV Adapter is now ready for use.

Operation

Operation is completely automatic, and no user intervention is required.

If your HomePlug devices have difficulty communicating with each other, check the following:

- Each HomePlug device must use the same **Network Key**.

  You can use the *Encryption* tab of the *PLI-2040* utility to assign a **Network Key** to other HomePlug devices.

- **200 Mbps HomePlug AV Adapter** works better when plugged into the wall socket. Connect the **200 Mbps HomePlug AV Adapter** into the power strip or surge protectors may degrade the network performance.

Specification

PowerLine Standards	HomePlug AV
Transfer Rate	Up to 200 Mbps
Modulation	1024/256/64/16/8 QAM, QPSK, BPSK
Forward Error Correction	Turbo Codes
Protocol	TDMA, CSMA/CA
Security	128-bit AES Encryption
LEDs	1 * Power 1 * HomePlug 1 * Ethernet
Ethernet Interface	1 * RJ45 LAN Port Auto-negotiation, Auto MDI/MDIX
Ethernet Standards	Ethernet specification IEEE802.3, IEEE802.3u, IEEE802.3x
Power	100 - 240VAC, 50/60 Hz
Power Consumption	100mA (max.)
Operating Temperature	0° C to 40° C
Storage Temperature	-20° C to 70° C
Operating Humidity	10-90%RH (max)
Certifications	FCC Part 15 Class B CE Mark
Safety Approvals	UL Listed (UL60950-1)/cUL CSA No.22-60950-01-03 CB, IEC/EN 60950-1;2001
Operating Systems	Windows 98SE, Windows ME, Windows 2000, Windows XP, Windows Vista or any other operating system with network support