



User's Guide

TPL-202E
H/W: V1.1R

FCC Warning

This equipment has been tested and found to comply with the regulations for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if it's not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



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INTRODUCTION

Thanks for purchasing of the 85Mbps Powerline Ethernet Adapter. This Adapter will allow your Ethernet device to connect to other Ethernet devices through AC power line.

About the 85Mbps Powerline Ethernet Adapter

The 85Mbps Powerline Ethernet Adapter allows user to connect with other Ethernet enabled devices through AC power line at home or office.

The 85Mbps Powerline Ethernet Adapter is designed to provide the Plug-and-Play installation, user just connected the Ethernet cable on the Adapter and Ethernet enabled device and plugged the Adapter to AC outlet.

Product Features

- ◆ Compliant with HomePlug 1.0 Turbo
- ◆ Compliant with IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX specification
- ◆ ANSI/IEEE 802.3 Auto-negotiation and Auto MDI and MDIX
- ◆ HomePlug speed up to 85Mbps
- ◆ 3 LED indicators for Power, HomePlug Activity and Ethernet port Link/Activity

INSTALLATION

The 85Mbps Powerline Ethernet Adapter is designed to be simple and easy install.

Ethernet Port

Connect to Ethernet enabled device.



AC Power Plug

Plugging into the AC power outlet.

LED Indicators

Power: This LED lights green when the switch is receiving power.

HomePlug: This LED will blink when there is HomePlug activity.

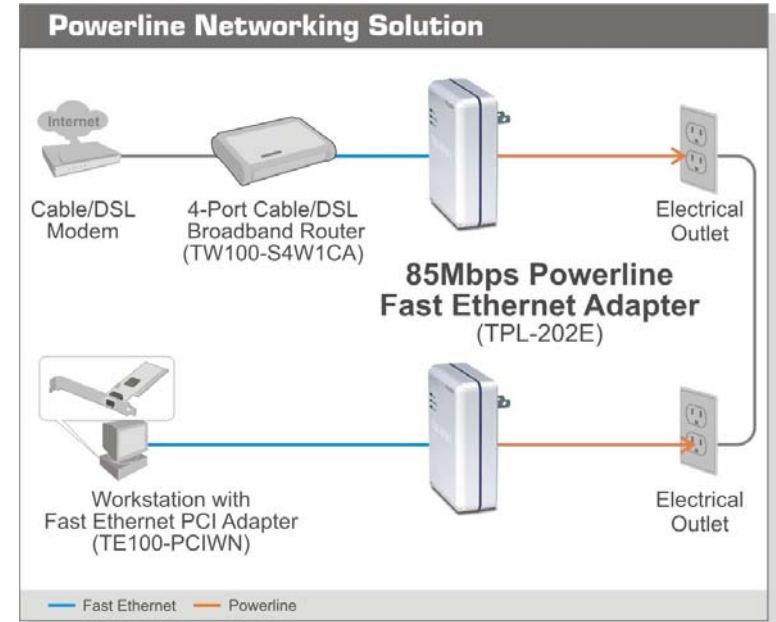


Ethernet: This LED light green when the port is connected to an Ethernet enabled device, if the LED is blinking, the data will be transmitting or received on the Ethernet port.

Connecting to network

You can connect the 85Mbps Powerline Ethernet Adapter directly to PC's network adapter, switch, or any other Ethernet enabled device.

Note: The Ethernet port on the Adapter is supported Auto-MDI/MDIX function, you can use a straight-through or a crossover Ethernet cable when connecting to another Ethernet enabled device.)



Configuration Utility

The HomePlug Configuration Utility for Windows OS enables the users to identify HomePlug devices on the power line network, measures data rate performance, ensures privacy and performs diagnostics by setting user defined secure power line networks.

Install Configuration Utility

Insert the Configuration Utility CD into your CD-ROM drive and the Auto-run program will appear. Alternatively this can also be done manually by double clicking the autorun.exe file on the CD.



Click the “Install Utility” on the menu to install the Configuration Utility, the install wizard will begin the software installation. Follow the install wizard instructions completed the Configuration Utility install.

Using the Configuration Utility

To start the Configuration Utility, double click the icon on the desktop, the Configuration Utility will be executed.

The Configuration Utility was divided into four tabs, Main, Privacy, Diagnostics and About, for details instruction, follow the below section.

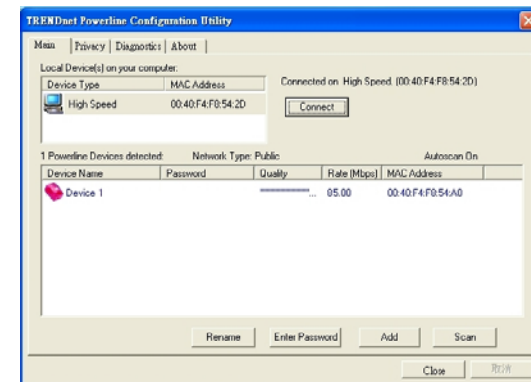


Figure 1. Screen shot of the Configuration Utility

Main

The Main screen provides a list of all HomePlug devices logically connected to the computer when the utility is running.

The top panel shows all local HomePlug connected to the computer’s NIC (Network Interface Card). In most cases, only one device will be seen. In situations where there are more than one local device being connected, such as a USB or an Ethernet adapter, the user can select the local device by clicking on it and then click the Connect button to its right. The status area above the button indicates that your PC is connected to that same device. Once connected to the local device, the utility will automatically scan the Homeplug periodically for any other HomePlug devices. If no local HomePlug devices are discovered, the status area above the connect button will indicate with a message ‘**NO HomePlug ADAPTERS DETECTED**’.

The lower panel displays all the HomePlug remote devices, discovered on the current logical network. The total number of remote devices connected on the same network can be found on top of the remote device panel. The Network type (Public or Private) is also displayed based on the network status of the local device. The scan status option is displayed on the top right corner above the Remote devices panel showing whether the auto scan functionality is turned ON or OFF. The following information is displayed for all devices that appear in the lower panel.

Device Name

Column shows the default device name, which may be user re-defined. A user can change the name by either using the rename button or by clicking on the name and editing in-place. (Figure 2)

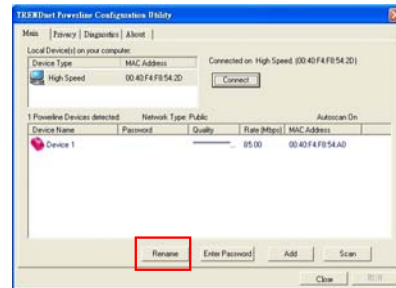


Figure 2. Change Device Name

MAC Address

Column shows the Remote device's MAC address.

Password

Column by default is blank and 'Enter Password' button can be used to enter it.

To set the Password of the device (required when creating a private network). First select the device by clicking on its name in the lower panel and then click on the Enter Password button. A dialog box will appear as shown in Figure 3 to type the password. The selected device name is shown above the password field and the password can be verified by hitting the OK button. The Password field accepts the Device password in any case formats, with or without



Figure 3. Set device password

dashed between them.

A confirmation box will appear if the password was entered correctly (Figure 4). If a device was not found, the user will be notified along with the suggestions to resolve common problems. This process might take a few seconds to get completed.



Figure 4. Confirmation box

The **Add** button is used to add a remote device to the existing network by entering the device password of the device. A dialog box will appear as shown below in Figure 5. The dialog box allows the user to enter both a device name and the password.

A confirmation box will appear if the password was entered correctly (Figure 4) and if the device was found in the HomePlug network. If a device was not found, the user will be notified and suggestions to resolve common problems will be presented.



Figure 5. Add remote device

The Scan button is used to perform an immediate search of the HomePlug devices connected to the HomePlug network. By default, the utility automatically scans every few seconds and updates the display screen.

Privacy

The Privacy screen provides the user with an option to maintain security for their logical network and also to select the devices that has to be included in the network. The appearance is shown in Figure 6.

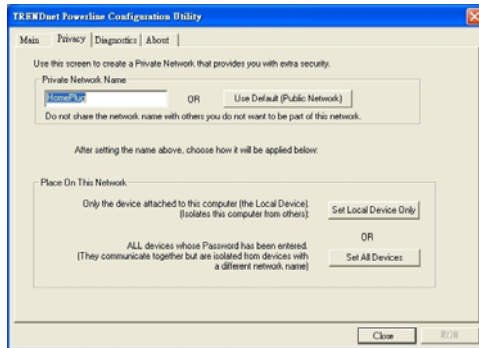


Figure 6. Privacy screen

All HomePlug devices are shipped using a default logical network (network name), which is normally “HomePlug”. The Privacy dialog screen allows user to change to a private network by changing the network name (network password) of devices.

User Default Button

The user can always reset to the HomePlug network (Public) by entering “HomePlug” as the network name or by clicking on the User Default button.

Set Local Device Only button

The Set Local Device Only button can be used to change the network name (network password) of the local device. If a new network password is entered, all the devices seen on the Main panel prior to this will be no longer present in the new network, effectively making the local devices not to communicate to the devices that were in the old logical network. Devices previously set up with the same logical network (same network name) will appear in the device list afterward selecting this option.

Set All Device button

The Set All Devices button is used to change the logical network of all devices that appear on the Main panel whose Device’s Password had been entered for the same logical network. A dialog window will appear to report the success of this operation. For devices whose device passwords were not entered, this operation will fail and will report a failure message.

Diagnostics

The Diagnostics screen shows System information and a history of all remote devices seen over a period of time. The appearance is shown in Figure 7.

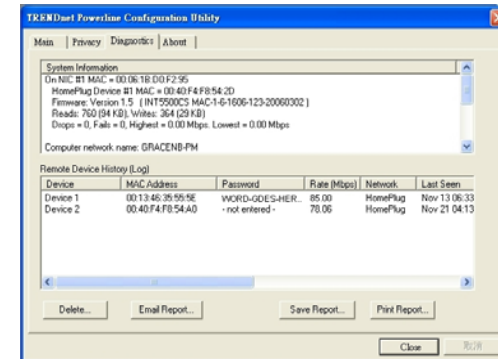


Figure 7. Diagnostics screen

The Upper panel shows technical data concerning software and hardware present on the host computer which were used to communicate over HomePlug on the Power line network. It shall include the following:

- ◆ Operating System Platform/Version
- ◆ Host Network Name
- ◆ User Name
- ◆ MAC Address of all NICs (Network interface card) connected to the host
- ◆ Identify versions of all Driver DLLs and Libraries used (NDIS) and optionally
- ◆ HomePlug chipset manufacturer name (Turbo Only devices)
- ◆ MAC Firmware Version (Turbo Only devices)
- ◆ MAC addresses of all devices connected locally to the host
- ◆ Version of the Configuration Utility

The Lower panel contains a history of all remote devices seen on the computer over a certain period of time. All devices that were on the power line network are listed here along with a few other parameters. Devices that are active on the current logical network will show a transfer rate in the Rate column; devices on other networks, or devices that may no longer exist are shown with a “?” in the Rate column. The following remote device information is available from the diagnostics screen:

- ◆ Operating System Platform/Version
- ◆ Host Network Name
- ◆ User Name
- ◆ MAC Address of all NICs (Network interface card) connected to the host
- ◆ Identify versions of all Driver DLLs and Libraries used (NDIS) and optionally
- ◆ HomePlug chipset manufacturer name (Turbo Only devices)
- ◆ MAC Firmware Version (Turbo Only devices)
- ◆ MAC addresses of all devices connected locally to the host
- ◆ Version of the Configuration Utility
- ◆ Vendor name

About

The About screen shows the software version and Preferences setting.

Preferences

AutoScan function enable or disable.

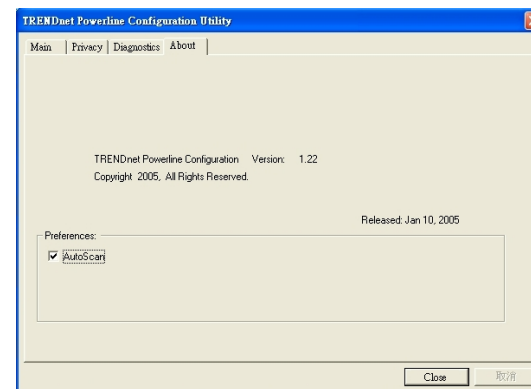


Figure 8. About dialog screen

SPECIFICATIONS

Standards:	HomePlug 1.0 Turbo IEEE 802.3 Ethernet / IEEE 802.3u Fast Ethernet
Data Speed:	Ethernet: 10/100Mbps (Link speed) HomePlug: Up to 85Mbps
Frequency band	4.5MHz ~ 21MHz
Modulation Technology	OFDM
Modulation Schemes	QAM 16/64/256, DBPSK, ROBO
Media Access Protocol	CSMA/CA (HomePlug), CSMA/CD (Ethernet)
Security:	56-bit Data Encryption with Key Management
Range Coverage:	Up 300 meters (depends on environment)
LED indicators:	Power, HomePlug, Ethernet
Ethernet port:	1 x 10/100Mbps Ethernet with Auto negotiation and Auto-MDI/MDIX
Certification	FCC, CE
Storage Temperature:	Storage: -10°C ~ 70°C Operation: 0°C ~ 40°C
Humidity: (non-condensing)	Storage: 10% ~ 90% Operation: 10% ~70%
Power	100 ~ 240VAC, Universal
Power Consumption:	2.5 Watts (maximum)
Configuration Utility:	Windows 98SE/2000/ME/XP/Vista

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

Powerline	Three years
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If a product does not operate as warranted above during the applicable warranty period, TRENDnet shall, at its option and expense, repair the defective product or deliver to customer an equivalent product to replace the defective item. All products that are replaced will become the property of TRENDnet. Replacement products may be new or reconditioned.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product through any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet office

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Governing Law: This Limited Warranty shall be governed by the laws of the state of California.

Note: AC/DC Power Adapter, Cooling Fan, Cables and Power Supply carry 1-Year Warranty



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Product Warranty Registration

Please take a moment to register your product online.

Go to TRENDnet's website at <http://www.trendnet.com/register>

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