



# **85M Powerline Ethernet Bridge**

**PL-201-EU**

**User Manual**

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## FCC Compliance Statement

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

## CE mark Warning

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

## WEEE



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

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## **Revision**

User's Manual for PLANET 85M Powerline Ethernet Bridge

Model: PL-201-EU

Part No.: 2081-AE0130-000

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# Chapter 1: Introduction

## Overview

Thank you for purchasing PLANET 85M Powerline Ethernet Bridge. With Planet powerline communication products, your power outlets are no longer to be viewed only as power receptacles but also as network connection point. The PL-201 is a Powerline to Ethernet Bridge with a RJ-45 Ethernet interface which directly connecting to your computer's network card. With multiple outlets in almost every room, PL-201 allows you to use your existing electrical wiring to give your entire household or Office access to your network connection without the clutter of messy wiring around the house and Office.

By using Planet 's powerline communication Products, you will not need to spend time and money to installing Ethernet Cabling to share network, just simply by plugging the PL-201 into the wall anywhere in the house or office. The 56-bits DES data encryption improves the security and reliability, to protect the data leaked by someone else, and you will not need to worry about the data will be leaked; up to 85 Mbps data rate can provide you the higher speed in data transferring. This product is cost-effective, easy to install and do not require any new wired.

## Features

- ◆ Direct attached to power outlets
- ◆ HomePlug Powerline Specification 1.0 Turbo compliant
- ◆ Connect 10/100 Ethernet network to Powerline network
- ◆ Up to 85Mbps data rate on the powerline
- ◆ Up to 200 meters between powerline nodes
- ◆ 56-bits DES link Encryption for security and reliability
- ◆ Throughout the whole house, just use your power circuit to access the Internet or PC network
- ◆ Orthogonal Frequency Division Multiplexing for high data reliability in noisy media conditions

## Specification

Model	PL-201-EU
Standard	HomePlug Powerline Specification 1.0 Turbo compliant IEEE802.3 10 Base-T IEEE802.3u 100 Base-TX
Ports	One RJ-45 port
Speed	UP to 85Mbps
Encryption	56-bits DES encryption
LED	PLC, ETH
Powerline Frequency Band	4.5Mhz to 21Mhz

Dimension	64 x 100 x 64 mm
Weight	110g
Certifications	FCC, CE
Operating Temp.	-5~55 degree C
Operating Humidity	10~95% (non-condensing)
Input Voltage	100V~240V AC 50~60Hz

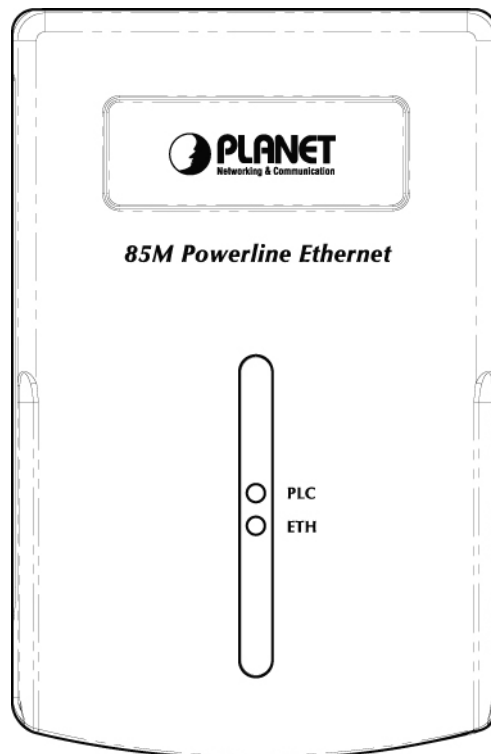
### **Package Contents**

- PL-201 x 1
- CD ROM x 1 (user's manual, utility)
- RJ-45 Ethernet cable x 1
- Quick installation Guide x 1

### **System Requirements**

- At least 2 Powerline devices
- Available Ethernet port each computer or network
- Available empty power outlet
- Standard home power line wiring
- CD-ROM utility

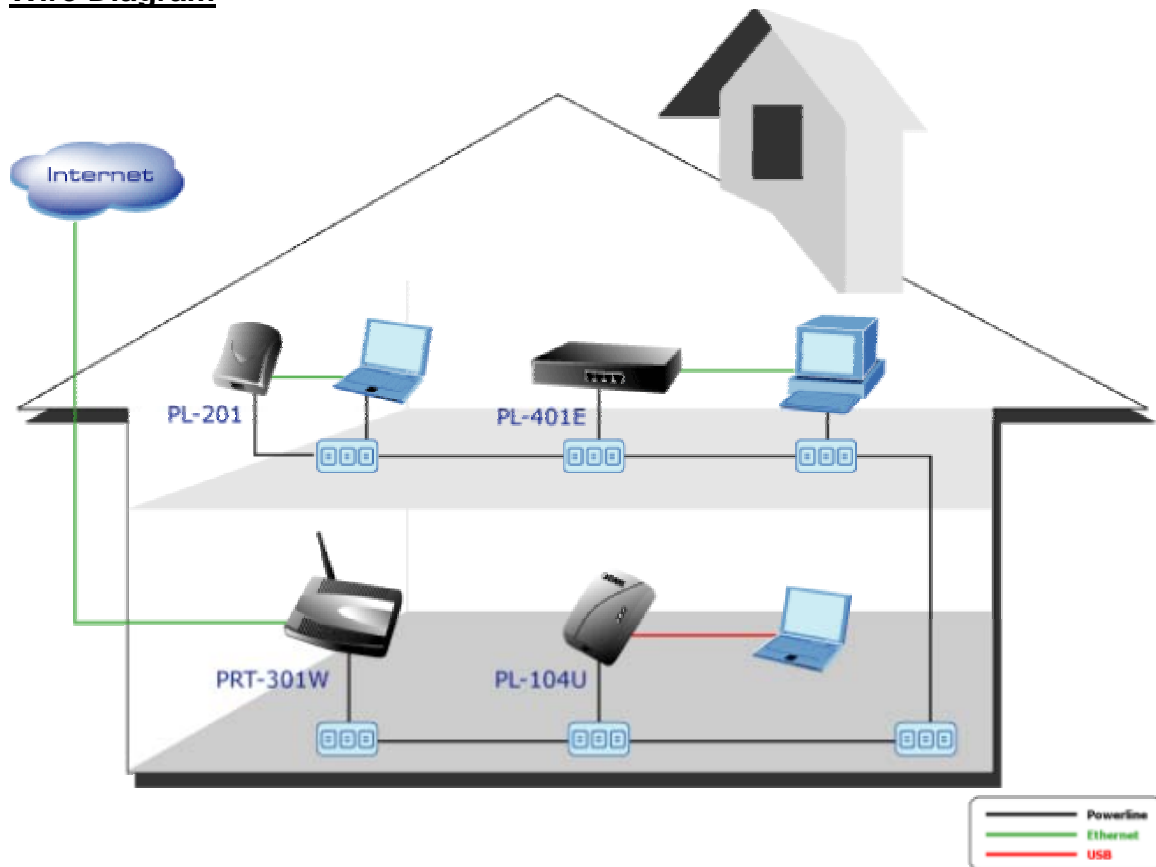
### **Panel**



## LED definition

LED	Description
PLC	Steady on indicates there exists another powerline device
	Blinking indicates the data are transferring
ETH	Steady on indicates the RJ-45 port has correctly connected to the network card of your PC or the Ethernet network
	Blinking indicates the data are transferring

## Wire Diagram



## Chapter 2: Installation

### Overview

The installation of 85M Ethernet Bridge will only take minutes. No need to set up long wires through out the house, just simply install the utility, and physically plug the unit into the wall outlet, then to connect RJ-45 to the computer. Users can select to adjust its security functions and the platform of the network after the installation. For further assistance, please read our Frequently Asked Questions section.

### Running the InstallShield Wizard

Please verify that no other Powerline Management Utilities are installed before installing this product. If other utilities were installed, uninstall them and restart before installing this software.

To install, insert the Windows OS Configuration Utility Setup utility CD into the computer's CD-ROM drive. The main page shall pop up, then to press the link to install the software. Alternatively this can also be done manually by double clicking the setup.exe file on the CD.

Once the software is loaded it will display a dialog as following:



Please click on '**Next**' to continue the installation.



**PowerPacket Ethernet Adapter - InstallShield Wizard**

**Customer Information** **PowerPacket Device**

Please enter your information.

User Name:  
792D02-012

Organization:

Install this application for:

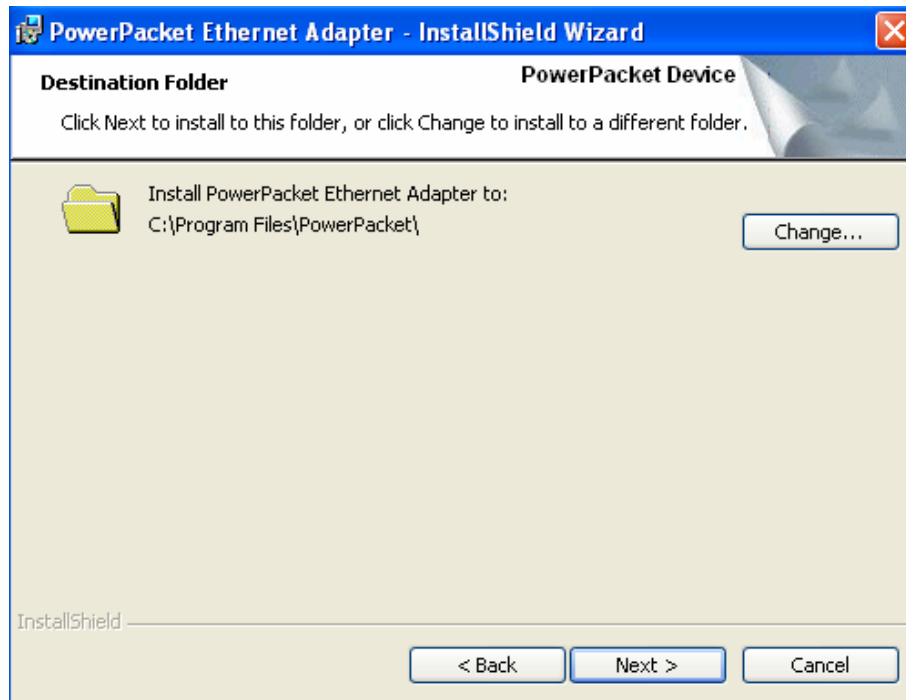
Anyone who uses this computer (all users)

Only for me (792D02-012)

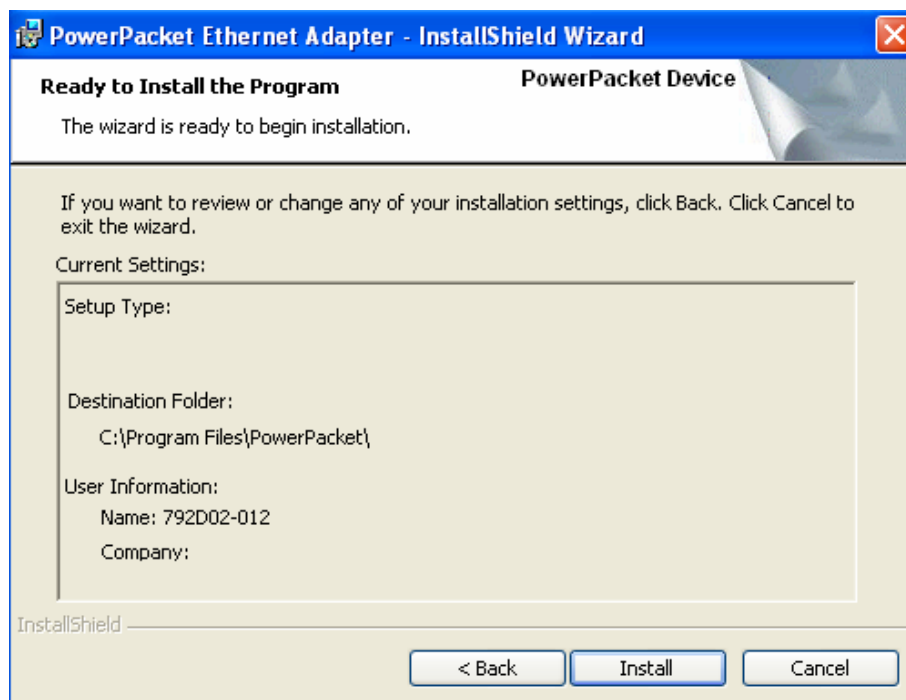
InstallShield

< Back   Next >   Cancel

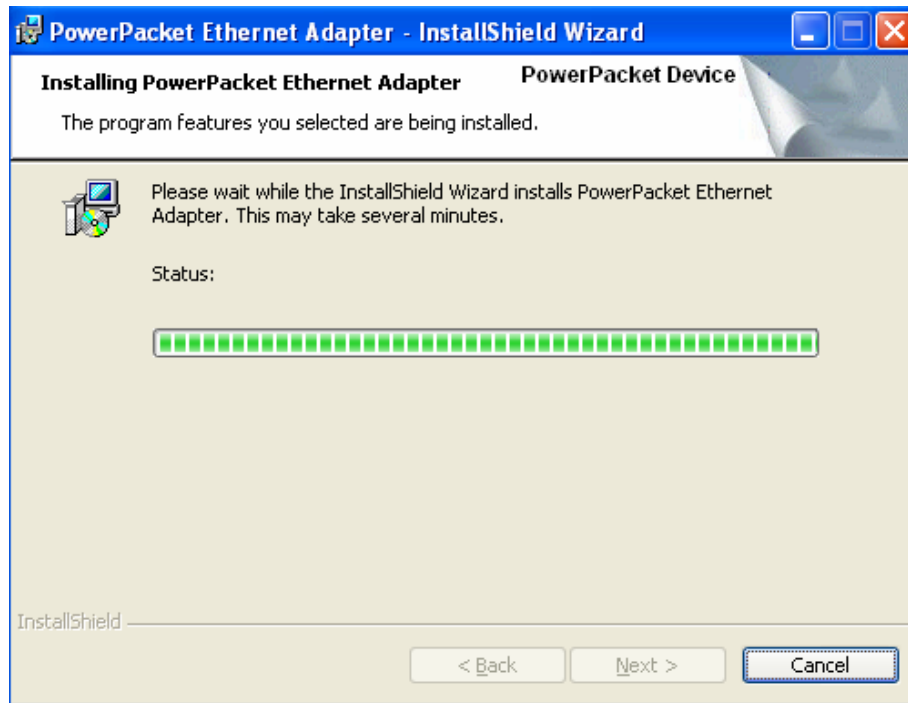
On this screen you will be asked to input the User Name and Organization. It is not crucial to the device itself, so enter it as desired. The **'Install this application for'** will work under the circumstances which multiple logins are applied. For example: If the user wishes only he/she can use the utility with that particular account, then bubble in **'Only for me'**. For those without multiple accounts or wishes to allow all users to access the utility choose **'Anyone who uses this computer (all users)'**. When finished, click the **'Next'** button to continue.



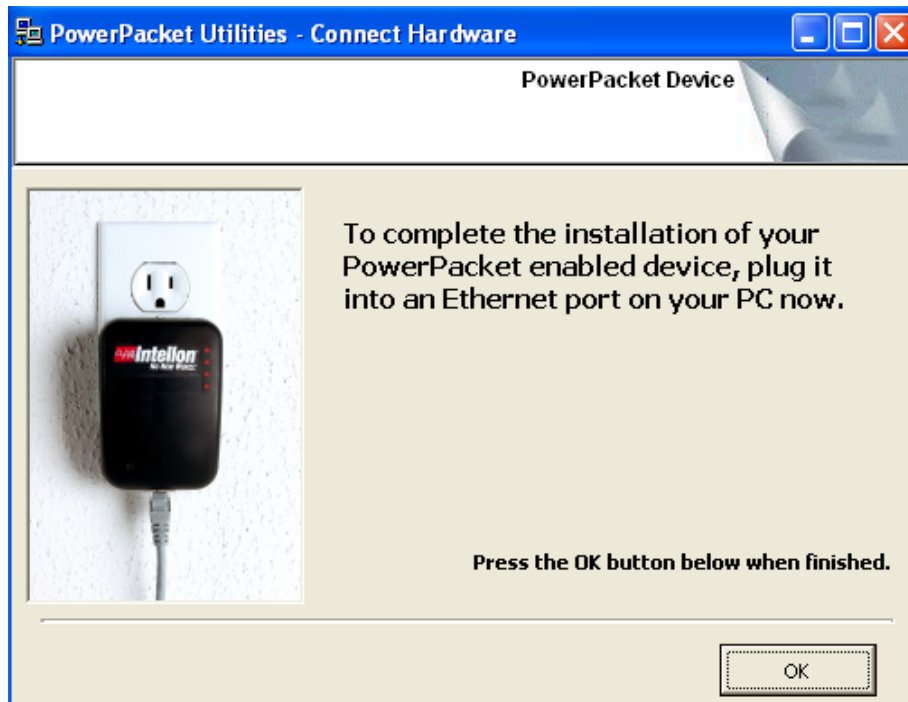
This section allows you to change the default directory where the program is installed. If you don't want to change it, click on **Next** to continue the installation.



This section allows a user to go '**Back**' or '**Install**' the utility. In case if the user wishes to change the previous options then go ahead, click on '**Back**' to change the settings. If not, continue and click the '**Install**' button.



This screen shows the progress of the installation.



This screen shows that the installation was completed successfully. Click on **Finish** to exit the wizard.

## Chapter 3: Configuration

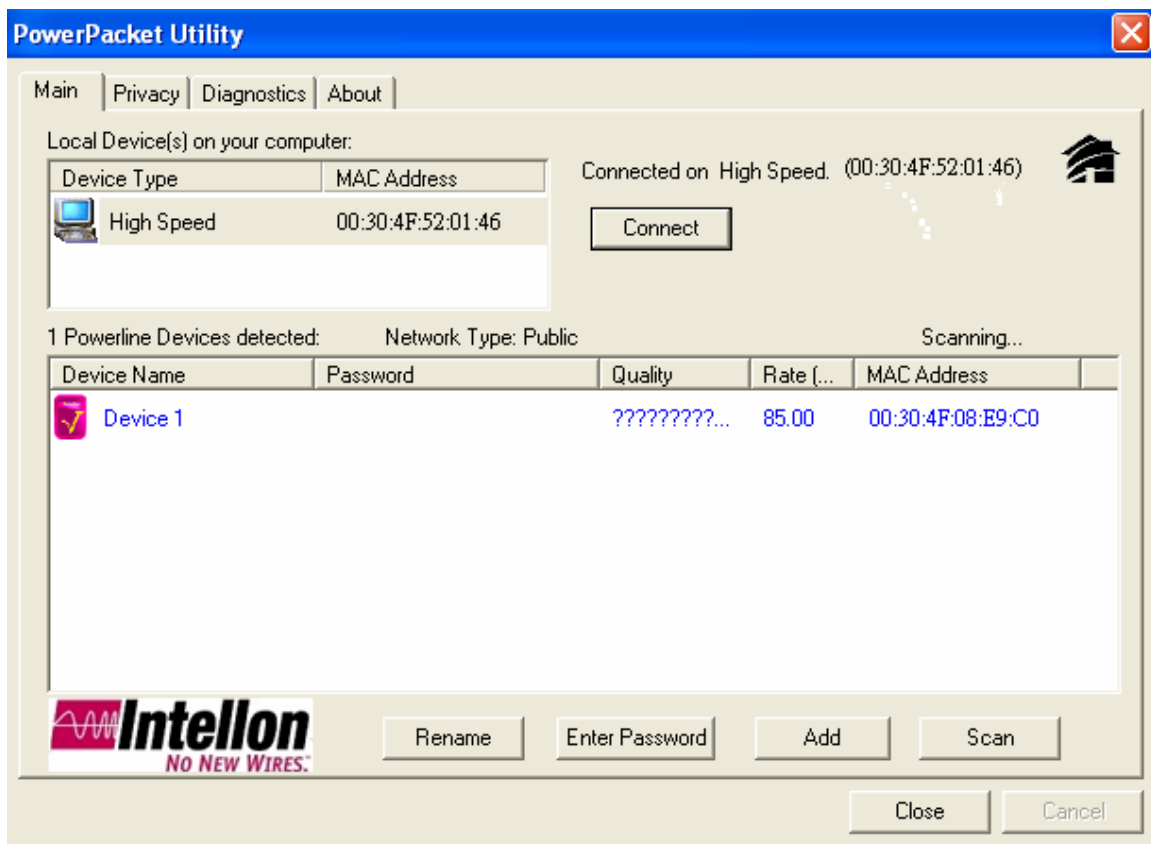
### Overview

The PL-201 uses 56-bit DES encryption to block outside access. The key is set by using the Configuration Utility on the CD. By default, the protection is enabled, however, it is recommended to change the default network password. All your powerline devices must use the same network password in order to be connected together.

### Diagnose Powerline network

#### Part 1: Diagnose a Local Powerline device

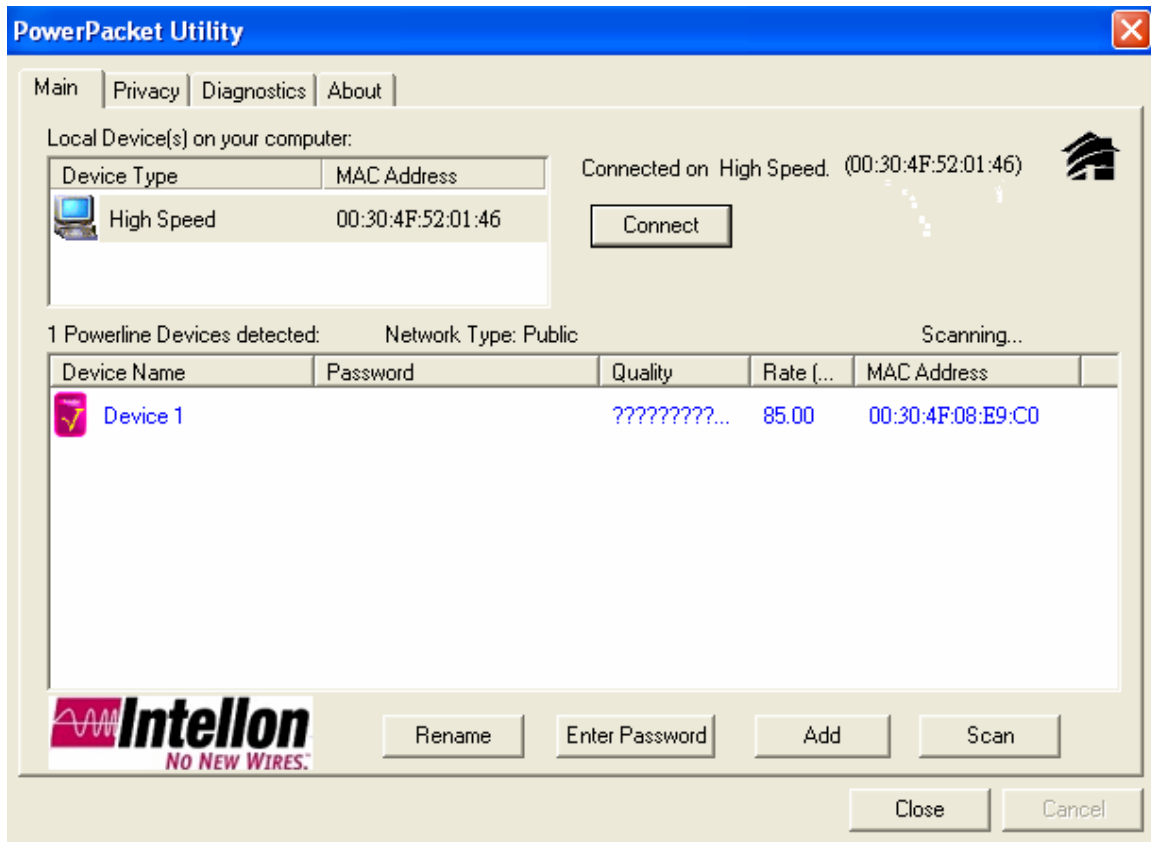
Double click the **PowerPacket Utility** icon on your desktop, and utility screen will show up as below:



The Main tab shows the powerline units that are connected to the current computer and other powerline devices on the home network, and It will also display Mac Address of each device.

\*Note\* If you do not see ANY unit in the device status but the powerline device does exist, try to unplug all devices and plug them back. Meanwhile, please make sure the cable is the right type and working correctly. If all seems to be correct, and you still receive nothing in the **Device** window, try rebooting your computer.

## Part 2: Diagnose a Network Powerline device



The Main tab shows all the other powerline units on your home network. It will represent them by MAC Address, and will also show the available bandwidth to each unit (Units farther away from another powerline device might have a lower Data Rate). If you add or remove units from your home network, click the “**Scan**” button to re-scan the network, and refresh with any changes.

**\*\*Note\*\*** Only units with the same **Network Password** will be shown, (Password case sensitive).

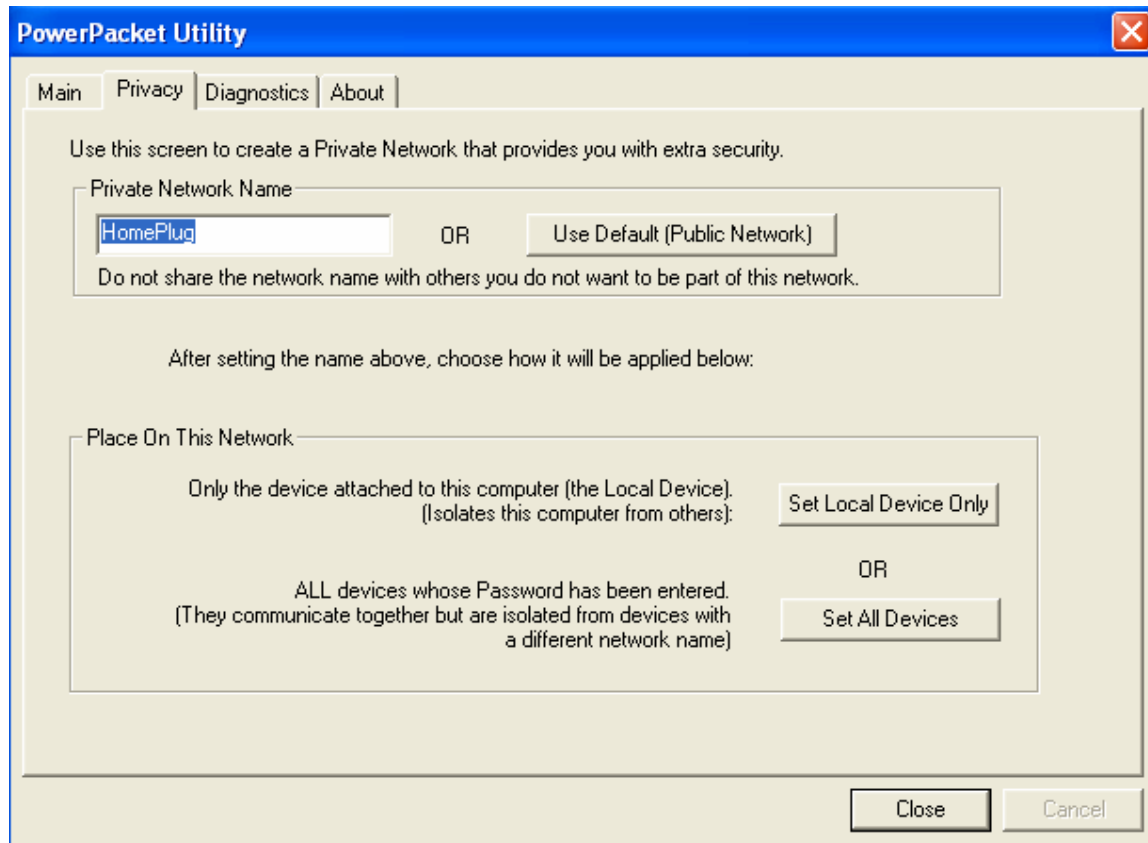
**\*\*Note\*\*** If a unit shows MAC Address of all 0's, this unit might not have a solid connection, or might not connect at all.

**\*\*Note\*\*** If there are units in the home network, but nothing displays in this Network scan, try to unplug all devices, and plug them back (Only do this

with the units that you do not view in the network screen, you don't have to do this with all units.)

If the problem persists, try to move the unit closer to this current unit (adjacent plugs on the same wall socket is most preferable). If the problem still persists and that unit is still not shown on the network, then the unit might be defective please contact technical support. Otherwise if you view the unit working, distance might be the only issue.

### **Setting Up Security on a Local Powerline device**



The **Privacy** tab will allow you to change the **Network Password** to the unit that is currently connected to this computer. This network password encrypts all data that is sent from this unit using 56-bit data encryption standard (DES).

**\*\*Note\*\*** Every unit on your home network **MUST** have the same **Network Password** for connectivity to be established throughout your home. The default network password is "**HomePlug**".

## Setting Up Security on a Network Powerline device

The screenshot shows the 'PowerPacket Utility' window with the 'Privacy' tab selected. The window title bar includes 'PowerPacket Utility' and a close button. The 'Privacy' tab is active, with other tabs 'Main', 'Diagnostics', and 'About' visible. The main content area contains the following text and controls:

Use this screen to create a Private Network that provides you with extra security.

Private Network Name

OR

Do not share the network name with others you do not want to be part of this network.

After setting the name above, choose how it will be applied below:

Place On This Network

Only the device attached to this computer (the Local Device).  
(Isolates this computer from others):

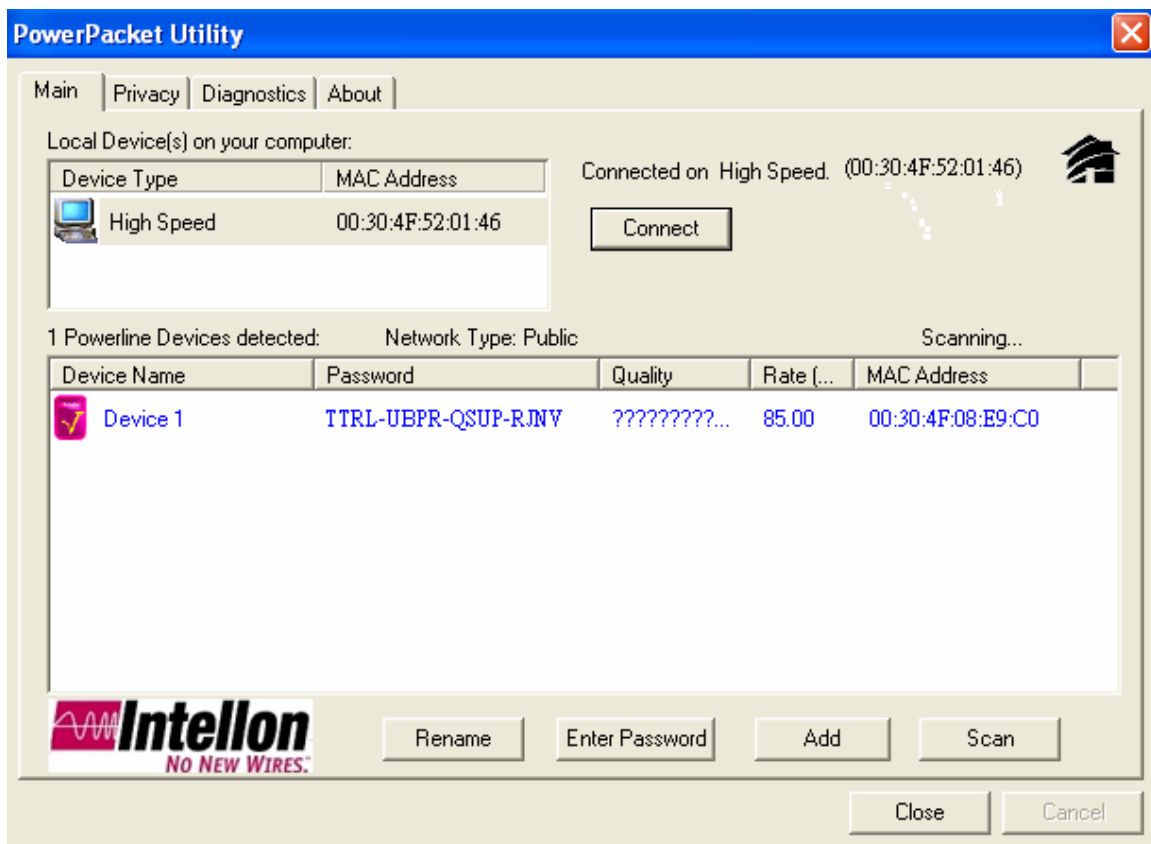
OR

ALL devices whose Password has been entered.  
(They communicate together but are isolated from devices with a different network name)

At the bottom right, there are 'Close' and 'Cancel' buttons.

The **Privacy** Tab will allow users to use one primary computer to control the **Network Password** of all units on the home network.

You will have to go back to the **Main Tab** first then find the DEK (Device Encryption Key) Key located on the bottom of each device. Enter this Key into the **Device Password** area. Click **Add**. This Device Key will then appear in the bottom window. Add all the DEK Keys for each unit in your house. You can now go back to the **Main Tab** then change the password remotely from one computer. This will allow you to change the password from one computer, instead of changing the password individually.



**\*\*Note\*\* The DEK is unique for EACH Powerline device. To use this you will need to input the DEK for each unit.**