

85M Powerline Ethernet Bridge

PL-201-UK/US

User Manual

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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 b required to take whatever measure are necessary to correct the interference.

CE mark Warning

The 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-UK/US Part No.: 2081-AE0110-000

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Chapter 1: Introduction

<u>Overview</u>

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-UK/US
Standard	HomePlug Powerline Specification 1.0 Turbo
	IEEÉ802.3 10 Base-T
	IEEE802.3u 100 Base-TX
Ports	One RJ-45 port
Speed	UP to 85Mbps
Encryption	56-bits DES encryption
LED	PWR, ETH, PL
Powerline	4.3Mhz to 20.9Mhz
Frequency Band	

Dimension	UK: 69 x 90 x 60 mm
	US: 69 x 90 x 48 mm
Weight	UK: 130g
	US: 120g
Certifications	FCC, CE
Operating Temp.	0~50 degree C
Operating Humidity	10~90% (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 <u>2</u> Powerline devices
- Available Ethernet port each computer or network
- Available empty power outlet
- Standard home power line wiring
- CD-ROM utility

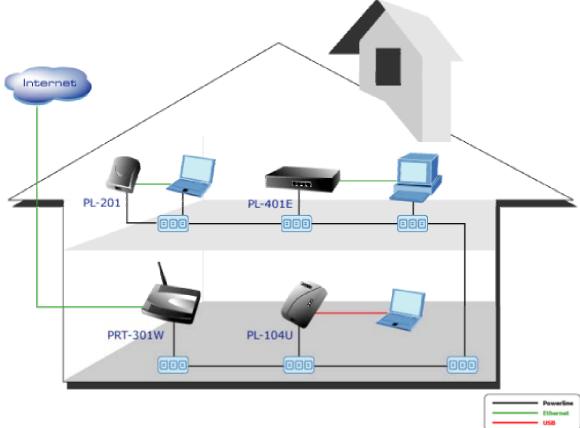
<u>Panel</u>



LED definition

LED	Description
PWR	Steady on indicate the powerline device connect to the power outlet
ЕТН	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
PI	Steady on indicates there exists another powerline device
FL	Blinking indicates the data are transferring

<u>Wire Diagram</u>



Chapter 2: Installation

<u>Overview</u>

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.

🔀 Powerline Bridge 85 - InstallShield	Wizard 🔀
Customer Information Please enter your information.	Powerline Ethernet
User Name:	
792D02-012 Organization:	
Install this application for:	
 Anyone who uses this complete 	uter (all users)
Only for me (792D02-012)	
InstallShield	< Back Next > Cancel

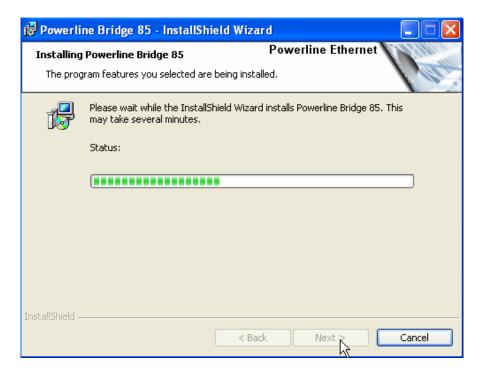
On this screen you will be asked to input the User Name and Organization. It is not crucial to the device itself, so enter it as desired. The 'Install this application for' will work under the circumstances which multiple logins are applied. For example: If the user wishes only he/she can use the utility 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.

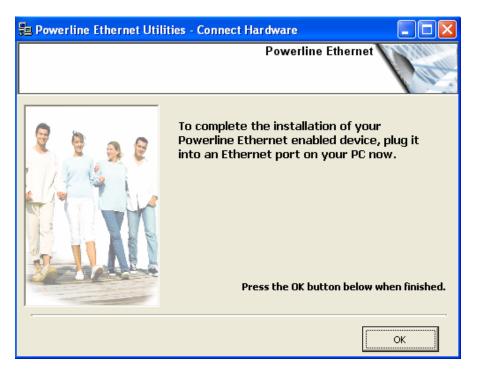
🔀 Powerline Bridge 85 - InstallSh	ield Wizard 🛛 🔀
Destination Folder Click Next to install to this folder, or clic	Powerline Ethernet k Change to install to a different folder.
Install Powerline Bridge 85 to C:\Program Files\Powerline M	
InstallShield	< Back Next > Cancel

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.

🔀 Powerline Bridge 85 - InstallShield Wizar	d 🛛 🔀
Ready to Install the Program The wizard is ready to begin installation.	Powerline Ethernet
If you want to review or change any of your installa exit the wizard. Current Settings:	ation settings, click Back. Click Cancel to
Setup Type:	
Destination Folder:	
C:\Program Files\Powerline Management\	
User Information: Name: 792D02-012 Company:	
InstallShield	
< Bac	Cancel

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

<u>Overview</u>

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 **Powerline Utility** icon on your desktop, and utility screen will show up as below:

Powerline Utility						
Main Privacy Diagnostics	About					
Local Device(s) on your comp	uter:					
Device Type	MAC Address	Connected	d on High Spee	ed. (00:30:4F:52:	:01:46)	
High Speed	00:30:4F:52:01:46	Conn	ect			
0 Powerline Devices detected	: Network Type:	Public		Sca	inning	
Device Name	Password	Quality	Rate (Mbps)	MAC Address		
	_		.1		_	
	Rename	Enter Passv	vord /	Add	Scan	
				Close		Cancel

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.

Powerline Utility					
Main Privacy Diagnostics	About				
Local Device(s) on your comp Device Type High Speed		Connected		ed. (00:30:4F:52:01:46)	A
, 1 Powerline Devices detected	: Network Type:	Public		Scanning	
Device Name	Password	Quality	Rate (Mbps)	MAC Address	
Device 2		Excellent	85.00	00:30:4F:08:E9:C0	
	Rename	Enter Passw	vord 4	Add Scan	
				Close	Cancel

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

Powerline Utility	×
Main Privacy Diagnostics About	
Use this screen to create a Private Network that provides you with extra security. Private Network Name HomePlug 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): Set Local Device Only	
ALL devices whose Password has been entered. (They communicate together but are isolated from devices with a different network name)	
Close Canc	el

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

Powerline Utility	X
Main Privacy Diagnostics About	
Use this screen to create a Private Network that provides you with extra security. Private Network Name HomePlug OR Use Default (Public Network) 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); Set Local Device Only	
ALL devices whose Password has been entered. (They communicate together but are isolated from devices with a different network name)	
Cance	

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.

Set Device Pa	ssword	
Device: Password:		(00:30:4F:08:E9:C0) PR-QSUP-RJNV
Fassword:		The Password typically appears as a number and letter code, in groups of four, separated by dashes or not. (ie XK8Y-GH26-BR1K-LZSA or 20020005B4201234) It is found on the device or packaging.

Powerline Utility					
Main Privacy Diagn	ostics About				
Local Device(s) on your computer: Device Type MAC Address Connected on High Speed. (00:30:4F:52:01:46) Figure Type					
Device Type High Speed	MAC Address 00:30:4F:52:01:46	Conn		(00.00.41.02.01.40	* -
1 Powerline Devices de	······································	,		Autoscan Or	n
Device Name	Password TTRL-UBPR-QSUP-RJNV	Quality	Rate (Mbps) 85.00	MAC Address 00:30:4F:08:E9:C(1
Rename Enter Password Add Scan					
				Close	Cancel

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