NetCommWireless

500Mbps Powerline Kit with Dual Band WiFi

NP508

USER GUIDE

Copyright

Copyright© 2014 NetComm Wireless Limited. All rights reserved.

The information contained herein is proprietary to NetComm Wireless. No part of this document may be translated, transcribed, reproduced, in any form, or by any means without prior written consent of NetComm Wireless.

Save Our Environment

When this equipment has reached the end of its useful life, it must be taken to a recycling centre and processed separately from domestic waste.

The cardboard box, the plastic contained in the packaging, and the parts that make up this device can be recycled in accordance with regionally established regulations. Never dispose of this electronic equipment along with your household waste. You may be subject to penalties or sanctions under the law. Instead, ask for disposal instructions from your municipal government.

Please be responsible and protect our environment.

This manual covers the following products:
NetComm Wireless NP508 500Mbps Powerline Kit with Dual Band WiFi

DOCUMENT VERSION	DATE
1.0- Initial document release	March 2014

Table 1 - Document Revision History

Table of Contents

About the Product

Powerline adapters are ready to use out of the box and do not require the installation of driver software to work. They can be connected to computers, routers, gaming consoles, hubs, IPTV set-top boxes, and other Ethernet devices regardless of operating system.

How Does It Work?

Powerline adapters utilise the existing electrical wiring in the house as a path to create a secured network of computers and Ethernet devices. With a maximum data rate of up to 500 Mbps, Powerline adapters can reliably handle high requirement applications like broadband Internet, high definition video streaming, and Voice over IP.

Powerline adapters convert digital signals to a complex analog signal that traverses along the electrical wires. When receiving the analog signal, the Powerline adapters convert the analog signal back to digital. To make the signal secure, a 128-bit AES encryption is applied.

A Powerline device can only communicate with other Powerline devices that use the same Private Network Password. The Private Network Password can be changed manually using the Powerline adapter utility software on a computer with a Windows operating system. When you use the software, you have to manually type the Private Network Password for the device. Another way to change the Private Network Password is to use the Simple Connect button. Simple Connect automatically creates an encrypted Private Network Password. It can also be used to reset the Private Network Password or to add a device into an existing Powerline network.

Note: Powerline adapters are pre-configured to use a common Private Network Password unique for that pair and are ready to use.

When a Powerline adapter communicates with another device, the Powerline Activity LED colour indicates the connection speed: red means good; amber means better; and green means best.

Direct Connection

For best performance, connect Powerline adapters directly to a wall outlet. Avoid connecting them to a power strip where other electrical devices are connected. Other devices create electrical noise that may affect the performance of Powerline adapters.

AC Passthrough

One of the Powerline adapters in the kit comes with built in AC pass-through. With this unit you are conveniently able to use the same power point to plug in other electrical appliances. All you have to do is connect the electrical appliance into the built-in pass-through socket and it will have power as if it was connected directly into the wall. This will eliminate the need to connect your Powerline adapter to a power board which will improve your networking performance.
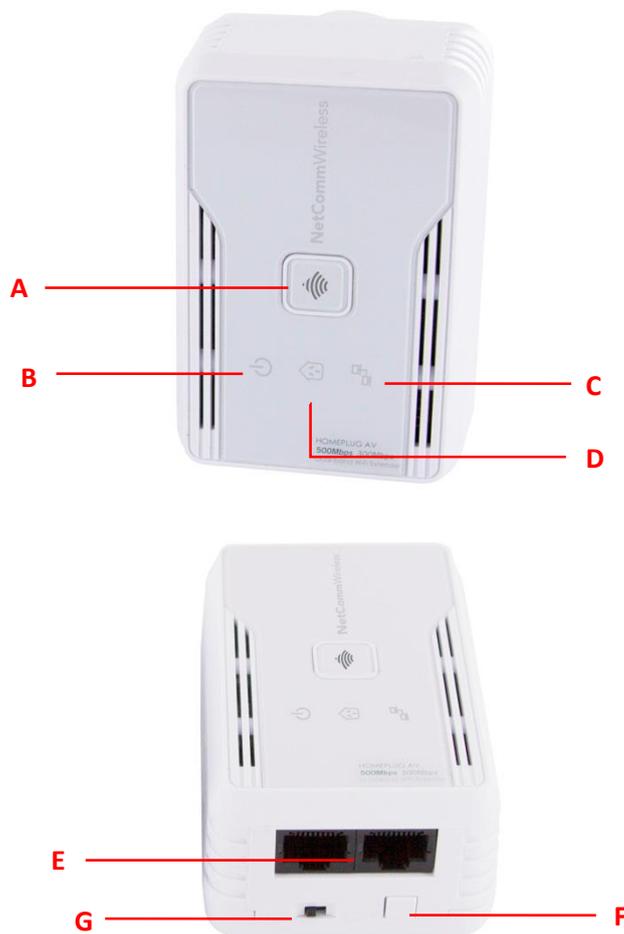
Package Contents

The package contains the following items:

- ≋ 2 x Powerline adapters (1 x WiFi Adapter, 1 x AC Passthrough Adapter)
- ≋ 2 x Ethernet cables
- ≋ Quick Start Guide

If any of these items are missing or damaged, please contact NetComm Wireless Support immediately by visiting the NetComm Wireless Support website at: http://support.netcommwireless.com

Interfaces and Indicators

WiFi Adapter

NetCommWireless

	LABEL	STATUS	DESCRIPTION/FUNCTION
A	WPS Button / Wireless LED	Off	No power
		On	▪ Press for 2 seconds to trigger the WPS function. ▪ Press for more than 5 seconds to reset the device. ▪ When the wireless LED is steady it means that the Wireless Function is enabled.
B	Power LED	Off	No power
		On	▪ When Simple Connect is pressed for more than 10 seconds, this LED turns OFF and turns ON to confirm the Private Network Password reset. ▪ After Simple Connect is pressed for 2 seconds, this LED blinks to confirm the button press.
C	Powerline Activity	Off	An Ethernet device is not connected.
		On	▪ When Simple Connect is pressed for more than 10 seconds and PLC is enabled, this LED turns OFF to confirm the Private Network Password reset. If PLC is disabled, this LED remains off. ▪ This LED is steady in colour when the device is part of a network. ▪ The LED colours represent the connection rate within the network whether it is good (red), better (amber), or best (green).
D	Ethernet Activity	Off	An Ethernet device is not connected.
		On	▪ This LED is steady when an Ethernet device is connected. ▪ The LED flashes to indicate Ethernet activity.
E	Ethernet Port		Accepts either cross or straight Ethernet cable.
F	Simple Connect Button		Press to create or join a network. When Simple Connect is pressed for more than 10 seconds, the Private Network Password is randomized. Then Press for 2 seconds to pair the device.
G	Dual Band Switch (2.4GHz/5GHz)		This allows you to manually switch to either 2.4 Ghz or 5 Ghz frequency band.

AC Passthrough Adapter

LABEL	STATUS	DESCRIPTION/FUNCTION
Power	Off	No power
	On	▪ Powerline adapter is in Power Saving Status when LED is blinking slowly. ▪ When Simple Connect is pressed for 5-8 seconds, this LED will turn OFF and turn ON once to confirm the Private Network Password reset. ▪ After Simple Connect is pressed for 2-4 seconds, this LED will blink to confirm the button press.
Powerline Activity	Off	Device is not connected to a Powerline adapter network.
	On	▪ When Simple Connect is pressed for 5-8 seconds, this LED will turn OFF to confirm the Private Network Password reset. ▪ This LED is steady in color when the device is part of a Powerline adapter network. ▪ The LED colors represents the connection rate within the Powerline adapter network whether it is good (red), better (amber), or best (green).
Ethernet Activity	Off	An Ethernet device is not connected.
	On	▪ When Simple Connect is pressed for 5-8 seconds, this LED will turn OFF to confirm the Private Network Password reset. ▪ This LED is steady in colour when the device is part of a Powerline adapter network. ▪ The LED colours represent the connection rate within the Powerline adapter network whether it is good (red), better (amber), or best (green).
Ethernet Port		Accepts either crossover or straight-through Ethernet cable.
Simple Connect Button / Reset Button		▪ Press to create or join a Powerline adapter network. It can also be used to reset the Private Network Password to a random key. ▪ When Simple Connect is pressed for 5-8 seconds, it will randomize the Private Network Password. ▪ Press for 10-13 seconds to reset to the factory default settings. When you reset to the factory default, all your configuration changes are removed.

How to Use Simple Connect

The Powerline Adapters that you have received are ready for use straight out of the box. They require no initial set-up or configuration. All you need to do is connect them as detailed in the Quick Start Guide. The following instructions about using the Simple Connect button to configure your network are only applicable if you want to change the default private network password or add more adapters on the same Powerline network.

Simple Connect provides a more convenient way of creating your Powerline network without the need to open the Powerline Utility software from a computer. The button has three main functions which include:

- Creating a Powerline Network
- Resetting the Private Network Password
- Joining an existing Powerline Network

Creating a Powerline Network

To create a Powerline network, you need at least two Powerline devices using random Private Network Passwords. When you press Simple Connect on both devices, a common Private Network Password will be automatically generated to enable them to communicate with each other.

> Note: New Powerline adapters can already communicate with each other out of the box. However, if you intend to create a new Private Network Password using Simple Connect for both devices, you must reset their Private Network Passwords to a random key before proceeding.

To create a Powerline network using Simple Connect:

1. Plug your Powerline adapters side-by-side where you can easily observe the LED behaviour. Upon connection, the LEDs will blink simultaneously and then the Power LED remains on steadily.
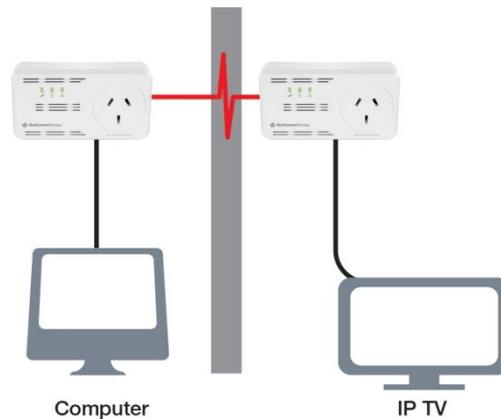

| Adapter X | Adapter Y |

2. Press Simple Connect for two seconds on Adapter X. After you release the button, the Power LED will blink. If the Power LED did not blink, press Simple Connect again for two seconds.

3. Press Simple Connect for two seconds on Adapter Y. After you release the button, the Power LED will blink. If the Power LED did not blink, press Simple Connect again for two seconds. Make sure to press Simple Connect on Adapter Y within

two minutes after you press Simple Connect on Adapter X. The LEDs on both devices will switch off and on twice to signify that they are searching for another device with which to pair.

4. To confirm the connection was established, check the LEDs. If a connection is made successfully the Power LEDs and the Powerline Activity LEDs on both adapters are on. If the Powerline Activity LED on either Adapter X or Adapter Y is off, this means the pairing was not successful. In this case, please repeat the process as outlined from step 1.

5. Unplug the Powerline adapters and then connect them to your Ethernet devices using the Ethernet cables from the product package. After connecting the Ethernet cable, plug the adapters directly to a wall outlet in the room to which you would like to provide network access. Keep in mind that only the WiFi Adapter has a WiFi radio, so choose a location for it that provides WiFi coverage for the desired area.

Note: Powerline adapters work best when connected directly to a wall socket. Avoid plugging them into a power strip or power extension. Other electrical devices in the power strip produce electrical noise that may affect the performance of the adapter.

Resetting the Private Network Password

The Simple Connect button allows you to reset the Powerline adapter's Private Network Password to a random key. When a Powerline adapter is reset to a random key, it will not be able to communicate with any other device.

Note: The Simple Connect button has multiple functions depending on the length of time it is depressed. Resetting the Private Network Password is not the same as restoring factory default settings.

To reset the Private Network Password using the Simple Connect button:

1. On one Powerline adapter, press and hold the Simple Connect button down for 11-13 seconds, wait for the Power LED and Ethernet LED to turn off, and then release. The Powerline Activity LEDs of both units turn OFF.

2. On the second adapter, press the Simple Connect button for 2 seconds and then press the Simple Connect button on the first Powerline adapter to pair the devices. The Power LED blinks to indicate that the button is pressed.

Joining an Existing Powerline Network

The Simple Connect feature enables a new device to join an existing network by copying the Private Network Password of the existing network to the new Powerline adapter.

To join an existing secured Powerline network using the Simple Connect button:

1. Plug Powerline adapter Z beside one of your existing Powerline adapter devices. Make sure you can observe the LED behaviour. Upon connection, Powerline adapter Z's LEDs blink simultaneously and then the Power LED remains on steadily. If there is an Ethernet link, the Ethernet LED will be on.

2. On Powerline adapter Z, press the Simple Connect button for 5-8 seconds. When you release the button, the Power LED and Ethernet LED will turn off and on again.

3. On the existing Powerline device, press the Simple Connect button for 1-3 seconds. When you release the button, the Power LED blinks continuously. If the Power LED did not blink, press the Simple Connect button again for 1-3 seconds.

4. Within the next 2 minutes, press the Simple Connect button on Powerline adapter Z again for 1-3 seconds.

5. Confirm that the connection was established successfully. To do this, check that the Power LEDs and Powerline Activity LEDs on all Powerline adapters are on. If the Powerline Activity LED on adapter Z is off, the pairing was not successful and you must repeat the process.

6. Unplug Powerline adapter Z and then connect it to your Ethernet device using the Ethernet cables from the product package. After connecting the Ethernet cable, plug adapter Z directly to a wall outlet where you intend to use it.

    Note: Powerline adapters work best when connected directly to a wall socket. Avoid plugging them into a power strip or power extension. Other electrical devices in the power strip produce electrical noise that may affect the performance of the adapter.

Determining Connection Rate

Each colour of the Powerline Activity LED represents a connection rating. The connection rating can only be calculated when the device is part of an existing network. The exact connection rate value can also be viewed using Powerline Utility.
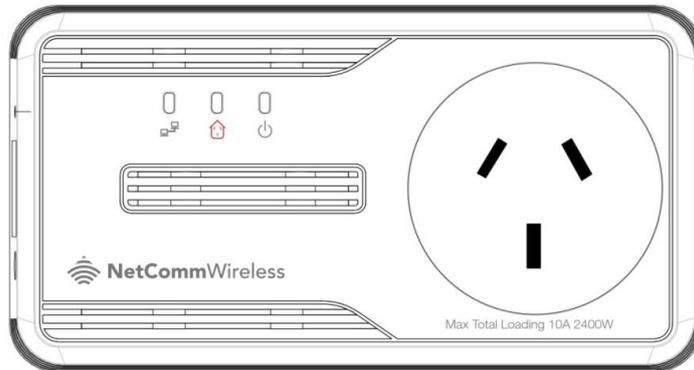
Good (Red) – Connection rate is less than 30 Mbps
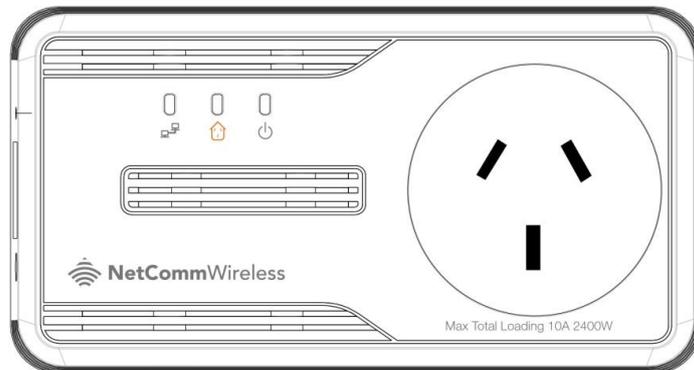
Better (Amber) – Connection rate is between 30 to 80 Mbps
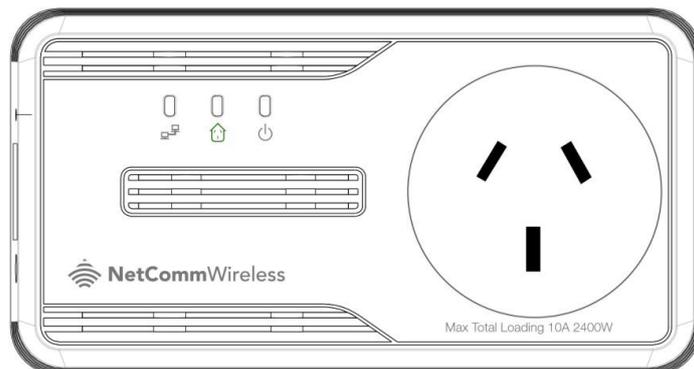
Best (Green) – Connection rate is more than 80 Mbps

Power Saving Mode

After 15 minutes without Ethernet activity, the Power LED blinks slowly indicating that the adapter is in power saving mode.

Getting Started

Plan Your Network

Here are ideas on how you can plan your Powerline network.

Local Network

Share a high-speed Internet connection with any computer, wherever it is in the house.

Computer   IP TV
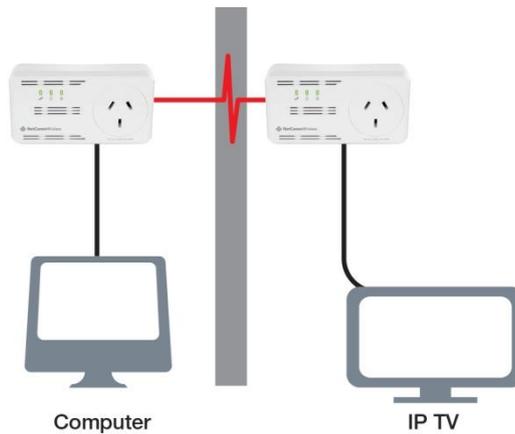
Gaming Network

Connect your gaming console to the Internet and compete with other online players.

Gaming Console   Laptop
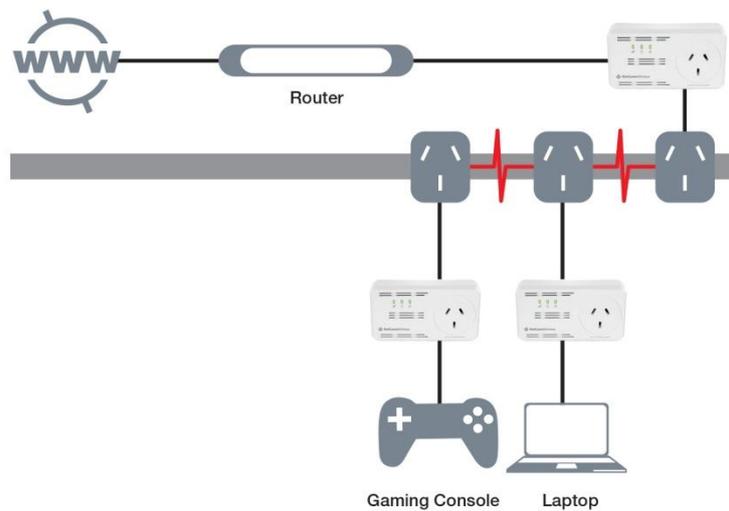
Entertainment Network

Experience IPTV streaming to your home entertainment system.
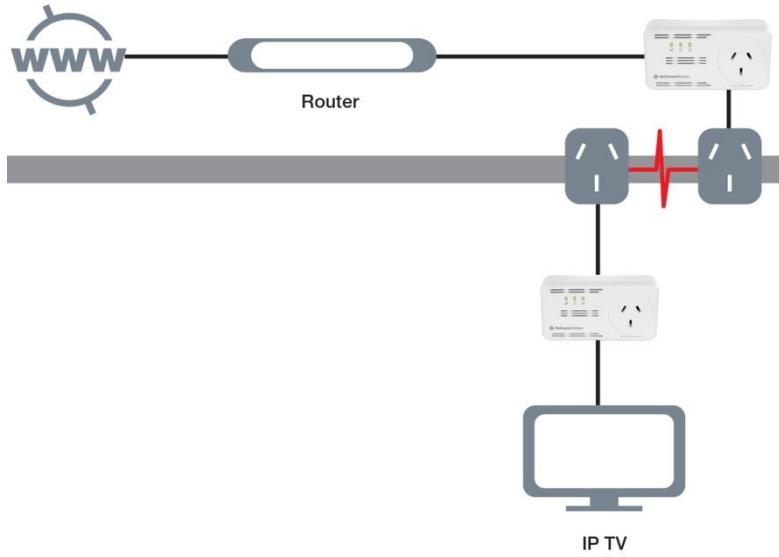
Media Network

Converge all your IP devices onto a single network to enjoy seamless integration.
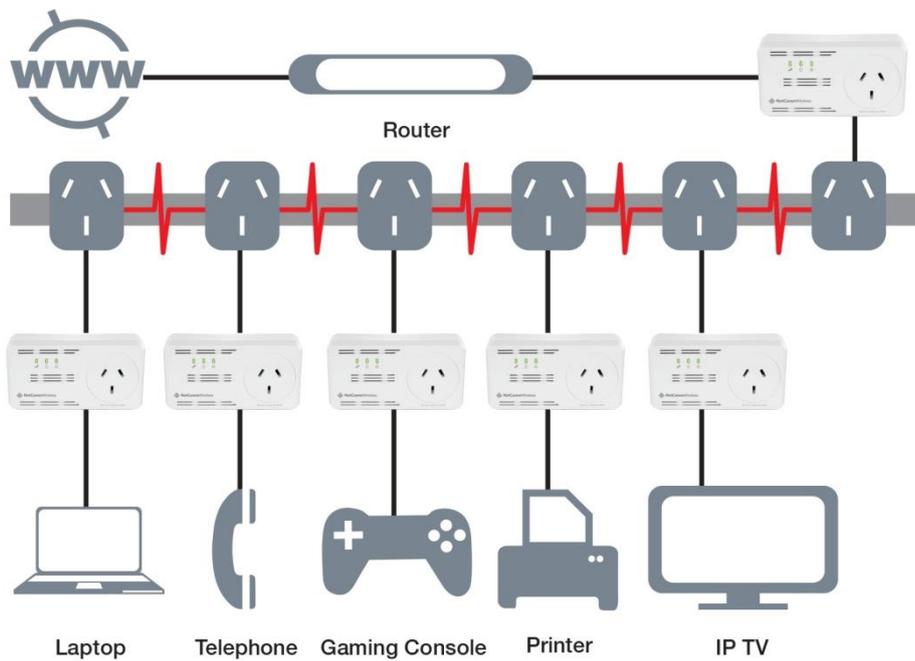
The Web User Interface

The built-in Web User Interface allows you to configure Powerline adapter with WiFi. It is mainly used for Wireless Configuration, Changing the Private Network Password, detecting other Powerline adapters in the network, and measuring the throughput of devices. No software installation is required.

⚠️ Note: The Web User Interface only applies to the WiFi Powerline adapter. To configure the AC Pass-through adapter, please use the Powerline Utility software described here.

ℹ️ Note: To use the Web User Interface, you need a computer using a Windows or Mac OS operating system. The Web interface works with various web browsers such as Internet Explorer, Firefox, Safari, and Google Chrome.

Accessing the Web User Interface

1. Connect an Ethernet cable from a desktop/laptop PC to any of the Ethernet ports on the Powerline adapter with WiFi.

2. On your computer, disable the wireless adapter (if applicable).

3. Open a web browser and enter http://192.168.1.200 in the address bar and press Enter. The login screen is displayed.
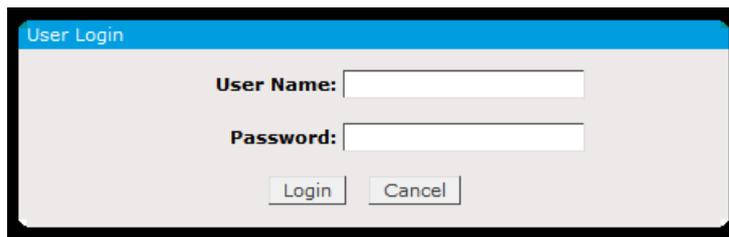
4. In the User Name and Password fields, enter `admin` and click the **Login** button. The Status page is displayed.

Status page

Device Information
Displays the MAC Address and Software version.
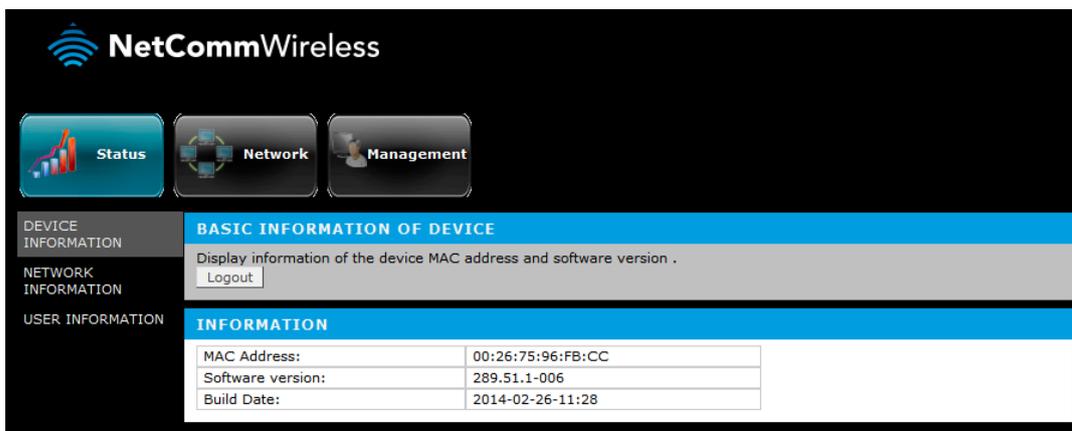
Network Information
Displays the packet information of the Powerline adapter.

User Information

Displays information about the Ethernet connection and the Wireless LAN interface.

Remote Device Information

Displays information about remote Powerline adapters detected in the network. Only Powerline adapters using the same Private Network Password as the local Powerline adapter will appear in the Remote Devices list.

Remote Device Information displays the following information:

- Device MAC Address - Displays the Remote Powerline adapter MAC Address.
- Connection Rate (Tx/Rx) - Displays the Transmit and Receive connection rate for each active Powerline adapter.
- TEI - Displays the Terminal Equipment Identifier.

Network page

WLAN Settings
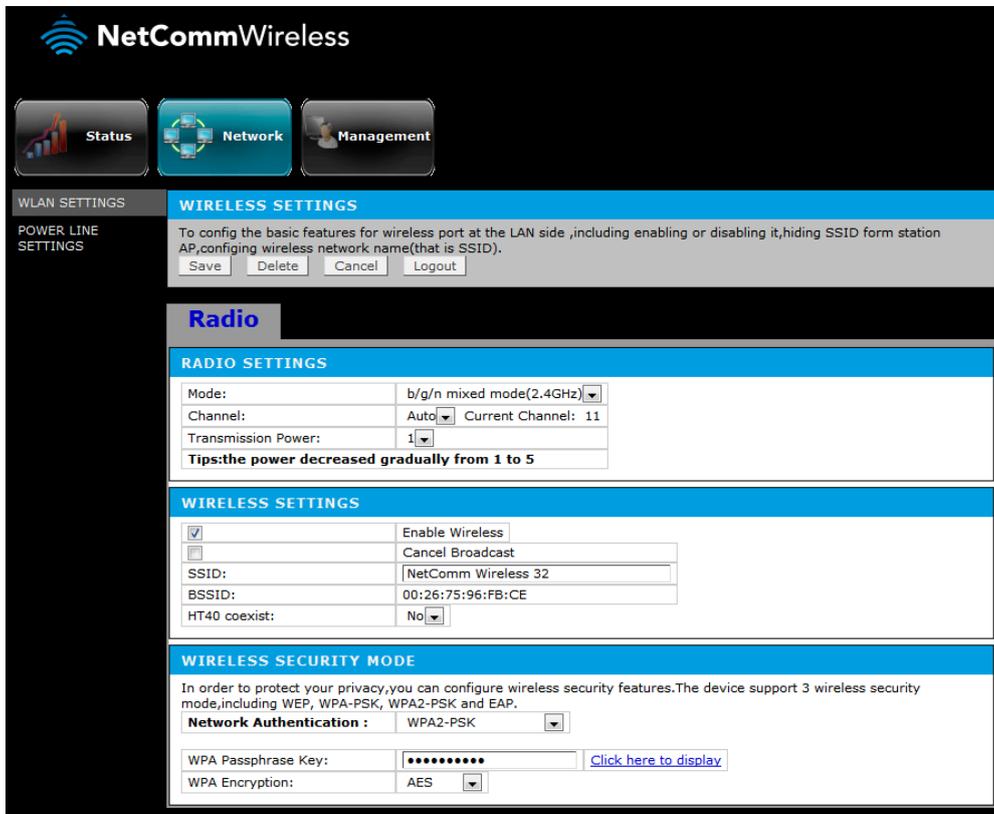
Allows you to modify wireless radio settings.

Radio Settings

ITEM	DESCRIPTION
Mode	Allows you to change the wireless standard implemented in your Powerline adapter.
Channel	Define the Wireless Channel. The channel list can differ depending on the mode selected.
Transmission Power	Sets the value of the transmission power. The highest transmission power setting is 1 while 5 is the lowest setting.

Wireless Settings

ITEM	DESCRIPTION
Enable Wireless	Turns the wireless radio on or off.
Cancel Broadcast	When selected, the broadcast of the SSID is disabled.
SSID	The wireless network name.
BSSID	The MAC address of the wireless interface.

Wireless Security Mode

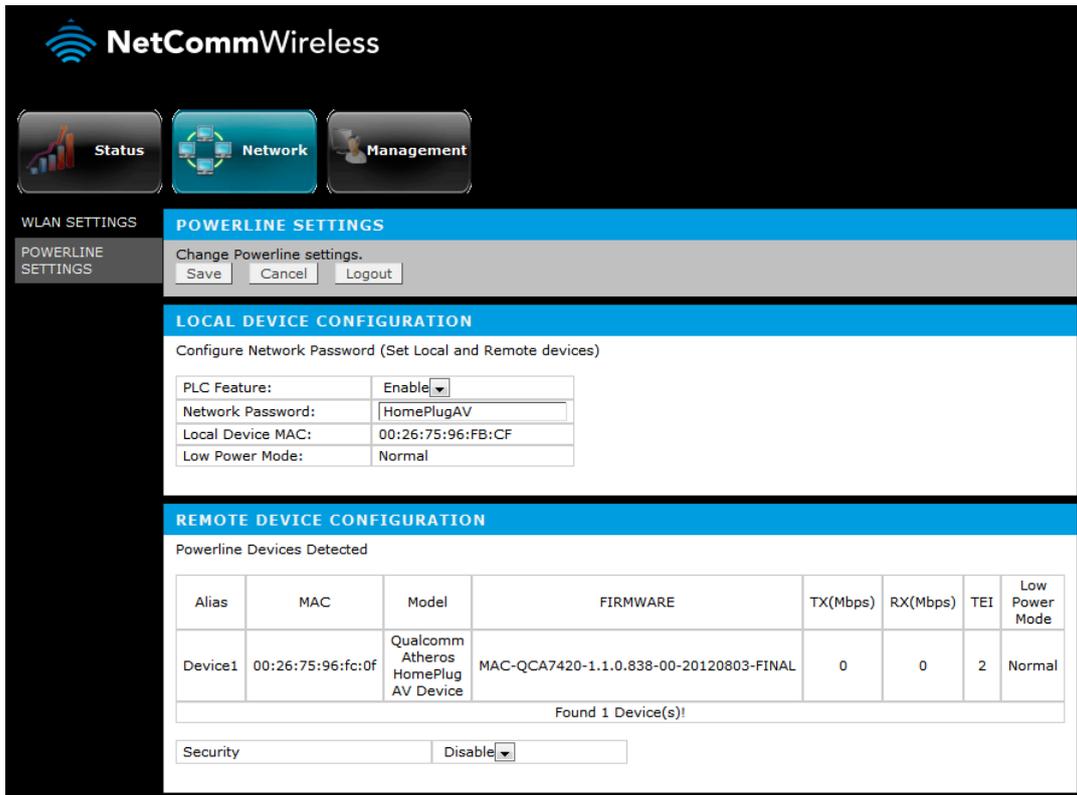| ITEM	DESCRIPTION
Network Authentication	You may configure wireless security features. The Powerline adapter supports 3 Wireless Security Mode including WEP, WPA-PSK, WPA2-PSK and EAP.
WPA Passphrase Key	The security key used to authenticate wireless clients on the network.
WPA Encryption	Select the encryption type. You may select from AES, TKIP or TKIP/AES.

Powerline Settings

Local Device Configuration

This function allows you to enable/disable the PLC feature of your device. It also allows you to change the Network Password or the Private Network Password.

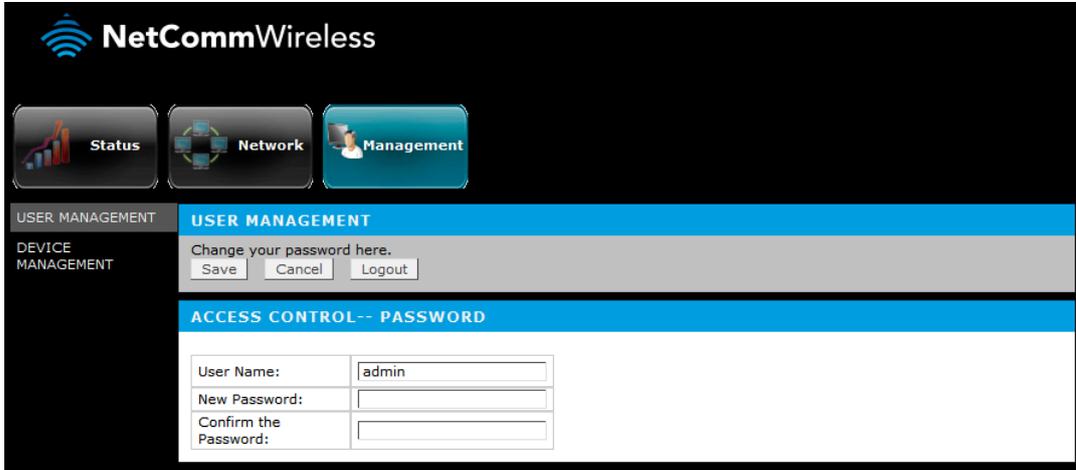| ITEM	DESCRIPTION
PLC Feature	Enables or disables the powerline network.
Network Password	Use this field to set the network password. Each unit must have the same password in order to make a Powerline connection.
Local Device MAC	Displays the MAC address of the local Powerline unit.
Low Power Mode	Displays the current power mode of the adapter.

Remote Device Configuration

Allows you to add additional remote devices to your network. You can only enter the Remote MAC Address and respective Password of your other Powerline adapters.

Management page

User Management

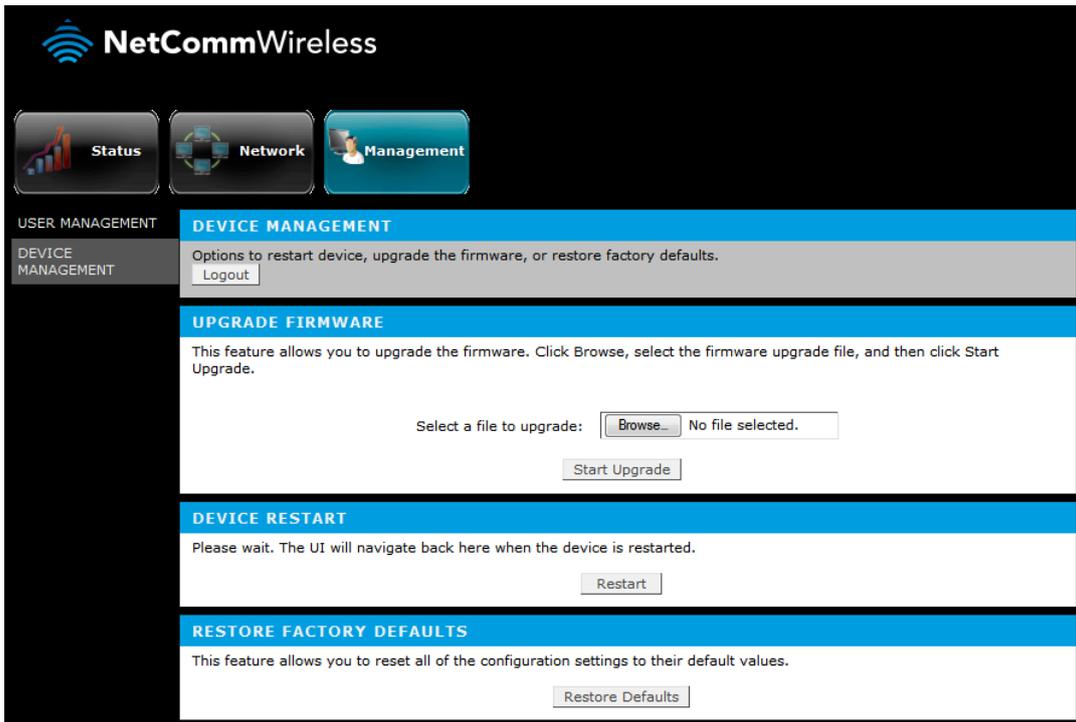Use this page to change the administrator password used to access the web user interface of the unit.

Device Management

This page allows you to upgrade the firmware of the Powerline adapter, restart the device or restore the factory default settings.

![NetCommWireless logo]

Upgrading the firmware of the Powerline adapter

Use the Upgrade Firmware section to upgrade the firmware of the Powerline adapter with WiFi. After upgrading the firmware, the Powerline adapter retains the same Private Network Password and MAC address settings. Before you proceed with the upgrade, please visit the product's page on the NetComm Wireless website (http://www.netcommwireless.com) to download the upgrade files.

To upgrade the WiFi Powerline adapter's firmware:

1. Go to the Management page and click on Device Management.
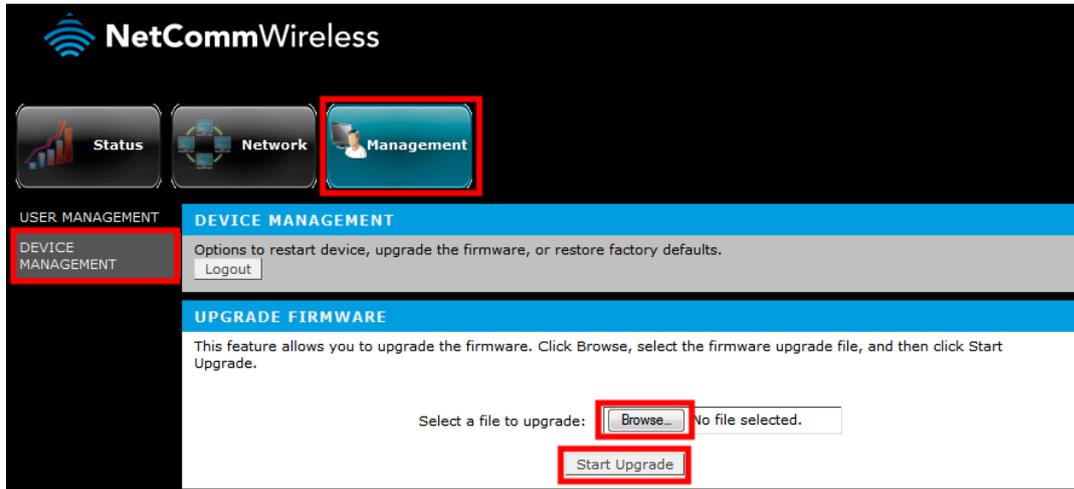
2. Click the **Browse** button, select the firmware upgrade file that you downloaded, then click the **Start Upgrade** button. The firmware Upgrade will take about 3-5 minutes to complete.

   IMPORTANT: After Firmware Upgrade, please restore to Factory Default Settings to ensure correct operation.

Restarting the Powerline adapter

You can manually trigger the adapter to restart without having to remove it from the power socket.

1. Go to the Management page and click on Device Management.

2. Under the Device Restart section, click the **Restart** button.
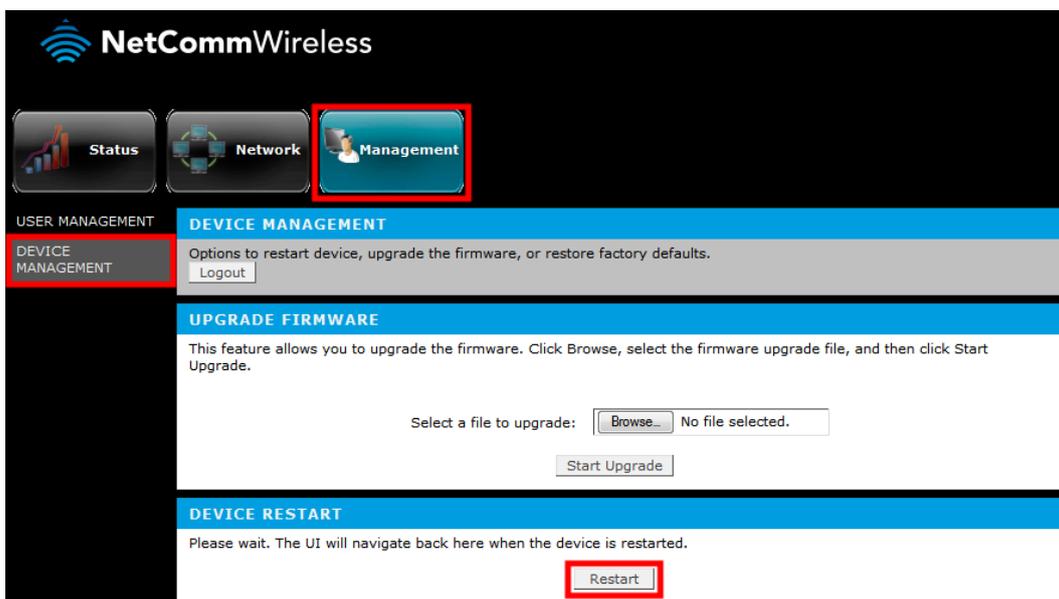
Restoring factory defaults

You can force the adapter to restart with the factory default settings.

1. Go to the Management page and click on Device Management.

2. Under the Restore Factory Defaults section, click the **Restore Defaults** button.
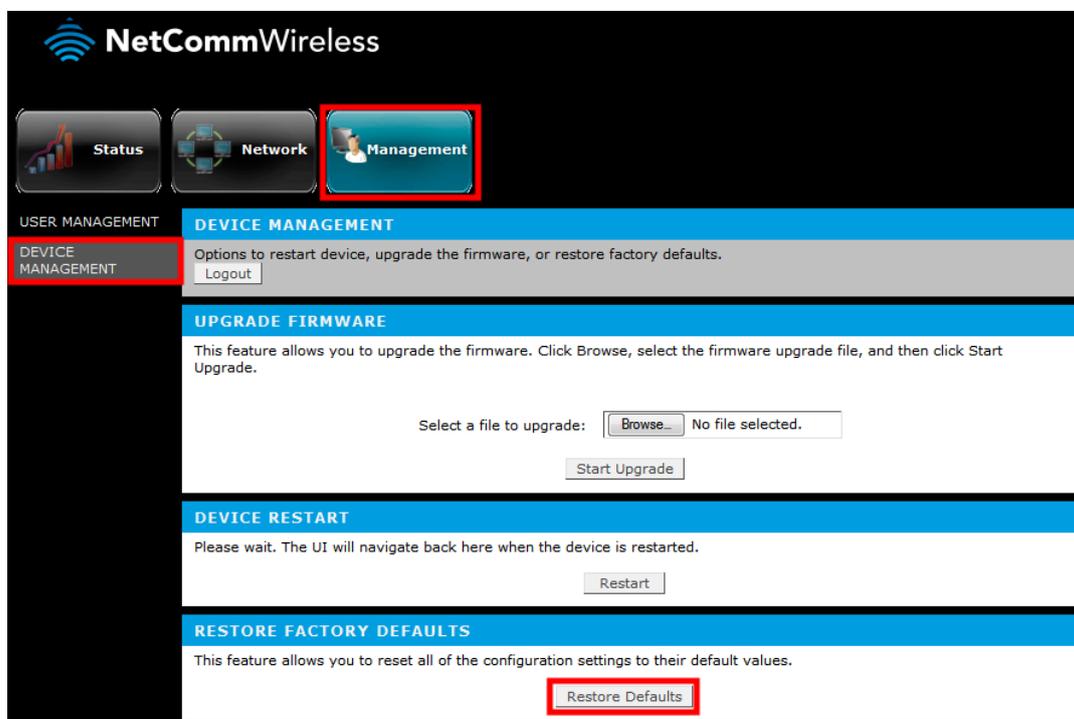
To change the Private Network Password

The Network Password field provides the function to manually change the Private Network Password of the local Powerline adapter. A Private Network Password is a string of 8 to 64 characters enables Powerline devices to communicate with each other.

If you intend to create multiple networks, you can assign different Private Network Passwords among your devices. You have to, however, make sure that at least two Powerline adapters have the same Private Network Password. A Powerline adapter that uses a unique or random Private Network Password will not be able to communicate with other devices under a different Private Network Password.
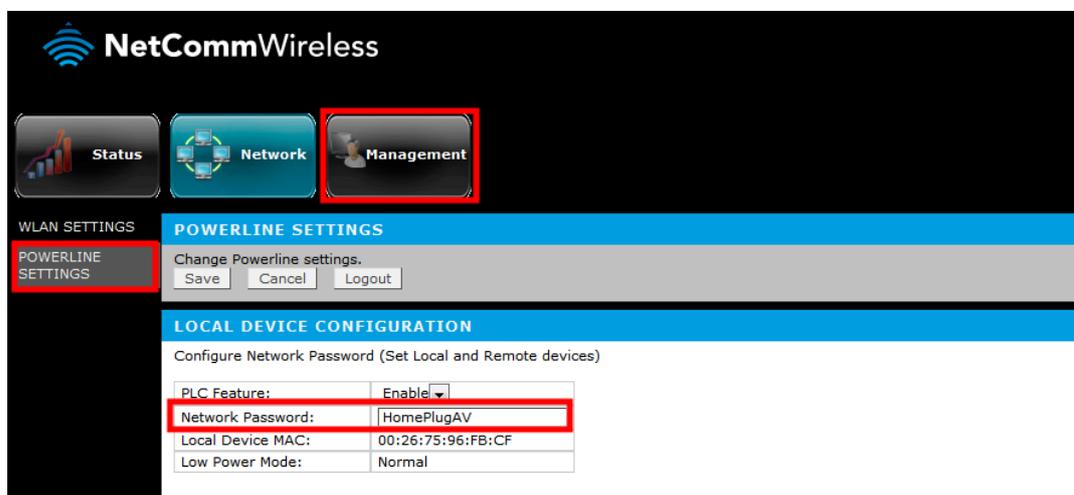
Note: In case you cannot connect into the network after changing the Private Network Password, please power cycle the device. To power cycle, disconnect and then reconnect the Powerline adapter from the power outlet.

Changing the Remote Private Network Password

Without leaving your computer, you can change the Private Network Password of remote Powerline devices, provided they are using the same Private Network Password as your local Powerline adapter. You cannot change the Private Network Password of remote devices that is not currently networked with your local Powerline adapter.

Note: When changing the Private Network Password of remote devices, you will need the Device ID that appears on the label pasted on the device. It is a good idea to list the Device ID of all your Powerline adapters to enable you to remotely change their settings using the Powerline Web User Interface.

To change the Private Network Password of a remote Powerline adapter:

1. Open the Web User Interface, Under Network Tab, Powerline Settings

2. Go to Remote Device Configuration.

3. Enable Security

4. Type the Device Name (If any).

5. Enter the MAC Address of the other remote Powerline adapter.

6. Enter the Device Password. The Device Password can be found on the label on each respective device.

7. Click Save. When the process is complete, the message "Settings Applied" appears.

   After changing the Private Network Password of the remote Powerline adapter, it will no longer be able to communicate with your local Powerline adapter, unless you use the same Private Network Password for your local Powerline adapter.

Powerline Utility

Powerline Utility is a software application that allows you to configure the AC Passthrough Powerline adapter. It is mainly used for changing the Private Network Password, detecting other Powerline adapters in the network, and measuring the throughput of devices. Installation is straightforward and the user interface is easy to use.

The Powerline Utility is downloadable from the NetComm Wireless website. Please visit www.netcommwireless.com and locate the product page to download.

> Note: To use Powerline Utility, you need a computer using a Windows operating system with the .NET Framework installed. If you do not have .NET installed, the Powerline installer will install it for you.

Requirements

Your computer must meet the following requirements:

- Windows 98SE, ME, 2000, XP (32 and 64 bit), Vista (32 and 64 bit) or 7 (32 and 64 bit)
- 300 MHz Processor
- 128 MB of RAM
- .NET Framework
- Network Interface Card
- 128 MB of free hard disk space

Installation

To install the Powerline Utility:

1. Go to www.netcommwireless.com and locate the product page and download link for the Powerline Utility software.
2. Double-click the installation setup file and follow the on-screen instructions to complete the installation of the software.

The .NET Framework will also be installed as it is required for the Powerline Utility to function. The installer detects if the required version of the .NET Framework is already on your computer. If the .NET Framework is not installed, a dialog box opens to ask if you would like to install .NET Framework. Click Yes. The .NET Framework will not be installed if the required version is already in your computer.

Opening Powerline Utility

There are two ways to open Powerline Utility:

- Double-click the **NetComm Powerline Adapters** desktop shortcut.
- From the Start menu by clicking the **Start** button, then **Programs** and navigating to the **NetComm Powerline Adapters** folder. Click the **NetComm Powerline Adapters** icon.

Powerline Utility User Interface

The Powerline Utility user interface is divided into tabs. These tabs include:

- 🛜 Home
- 🛜 Private Network Name
- 🛜 Quality of Service
- 🛜 Devices
- 🛜 Firmware Upgrade

Home
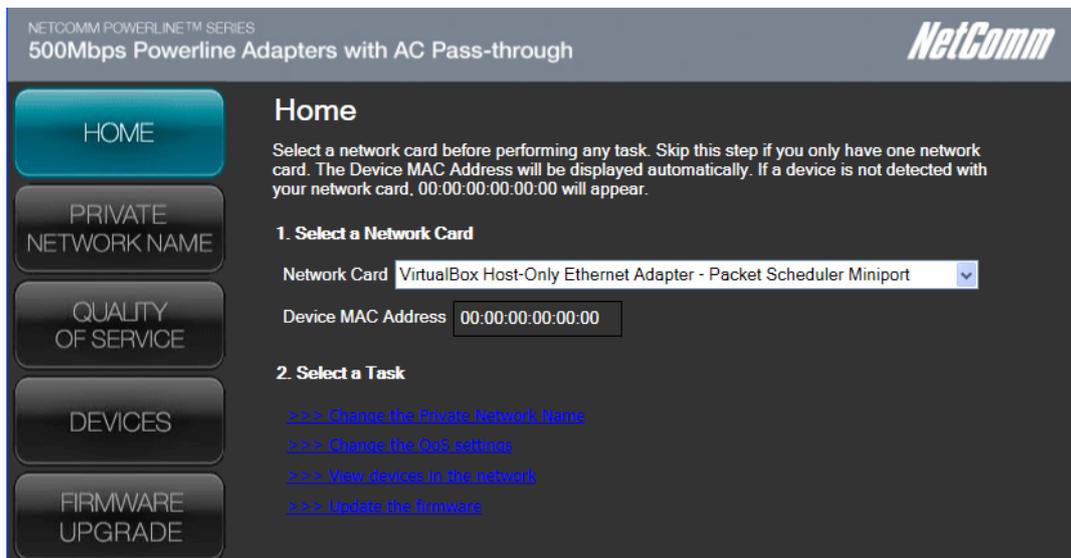
The Home tab provides a list of all the possible tasks you can perform in the Powerline Utility. To start a task, you first need to select the network card connected to your Powerline adapter. This is most helpful when you have more than one network card in your computer. When you select a network card, the MAC Address of the Powerline adapter connected to your computer appears. If there is no Powerline adapter connected to your computer, no MAC address will appear.

After selecting the network card, there are four possible tasks you can perform. These tasks include:

- 🔷 Change the Private Network Name
- 🔷 Change the QoS settings
- 🔷 View devices in the network
- 🔷 Update the firmware

Private Network Name

Private Network Name provides the ability to manually change the Private Network Name of local and remote Powerline adapters. A Private Network Name is a string of 8 to 64 characters that enables Powerline devices to communicate with each other.

If you intend to create multiple networks, you can assign different Private Network Names among your devices. You have to make sure that at least two Powerline adapters have a similar Private Network Name. A Powerline adapter that uses a unique or random Private Network Name will not be able to communicate with other devices.

> Note: In case you cannot connect to the network after changing the Private Network Name, please power cycle the device. To power cycle, disconnect and then reconnect the Powerline adapters from the power outlet.

> Note: You must change the Private Network Name (PNN) on the remote Powerline adapters before changing your local PNN. If you change the local PNN first you will lose connectivity to the remote.

Local Private Network Name

Local Private Network Name refers to the Private Network Name of the Powerline adapter that is directly connected to the computer where you are using the Powerline Utility.

To change the local Private Network Name:

1. Open Powerline Utility.
2. Click Private Network Name.
3. Type the new Private Network Name. This field is case sensitive. It accepts 8 to 64 alphanumeric characters including punctuation marks but no spaces.
4. Click Apply. When the process is complete, the message "Settings Applied" appears.

Remote Private Network Name

Without leaving your computer, you can change the Private Network Name of remote Powerline devices, provided they are using the same Private Network Name as your local Powerline adapter. You cannot change the Private Network Name of remote devices that are not currently networked with your local Powerline adapter.

Note: When changing the Private Network Name of remote devices, you will need the Device ID that appears on the label affixed to the device. It is helpful to make a list of the Device Password (P/W) of all your Powerline adapters to enable you to remotely change their settings using the Powerline Utility software.

To change the Private Network Name of a remote Powerline adapter:

1. Open Powerline Utility.

2. Click Private Network Name.

3. Type the new Private Network Name. This field is case sensitive. It accepts 8 to 64 alphanumeric characters including punctuation marks but no spaces.

4. Select Change Private Network Name of remote device.

5. Type the Device Password (P/W) of the remote device. This can be found on the device label.

6. Click Apply. When the process is complete, the message "Settings Applied" appears.

After changing the Private Network Name of the remote Powerline Adapter, it will no longer be able to communicate with your local Powerline adapter, unless you use the same Private Network Name for your local Powerline adapter.

Simulate Push Button

Simulate Simple Connect Button allows you to perform functions of the Simple Connect button without manually pressing the physical button on a Powerline device. This function only works on local devices.

FUNCTION	DESCRIPTION
Simple Connect	Select to search and pair with another device, or search and join an existing Powerline network.
NMK Randomize	Select to reset to a random Private Network Name. A Powerline adapter using a random Private Network Name will be disconnected from the Powerline network and will not be able to communicate with other devices until it forms a new network or joins an existing network.
AVLN Status	Displays the Powerline adapters Logical Network membership status number.

To simulate a Simple Connect function:

1. Connect the Powerline adapter to your computer.
2. Select a Simulate Simple Connect Button action:
   a) Simple Connect
   b) NMK Randomize
   c) AVLN Status
3. Click Simulate Button Push.

![NetCommWireless]

Quality of Service

Quality of Service (QoS) gives you the capability to prioritise particular applications within your network. QoS is not enabled by default.

QoS Modes:

- Online Game/Internet – prioritises data streaming

- Audio or Video – Prioritises data and multimedia streaming

- Voice over IP – Prioritises voice applications

To enable QoS:

1. Open Powerline Utility.
2. Click Quality of Service.
3. Check Enable QoS.
4. Select a QoS mode.
5. Click Apply. When the process is complete, the message "Settings Applied" appears.

Devices
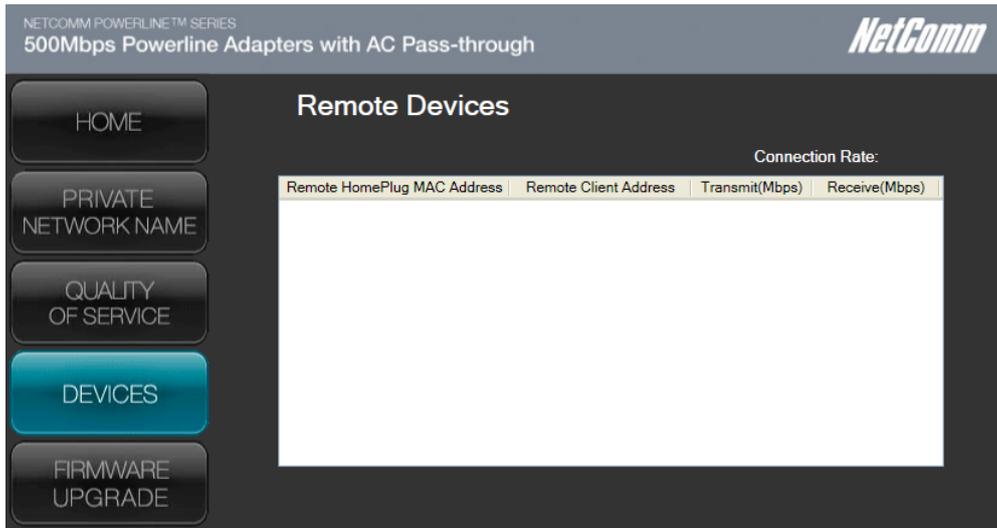
The Devices tab displays information about remote Powerline adapters detected on the network. Only Powerline Adapters using the same Private Network Name as the local Powerline Adapter will appear in the Remote Devices list.

Devices displays the following information:

FIELD	DESCRIPTION
Remote HomePlug MAC Address	Displays the MAC address of the remote Powerline adapter on the network.
Transmit(Mbps)	Displays the current transmit speed in Mbps i.e. the speed that data is being sent in an outbound direction from the adapter.
Receive(Mbps)	Displays the current receive speed in Mbps i.e. the speed that data is being received in an inbound direction from the adapter

![NetCommWireless logo]
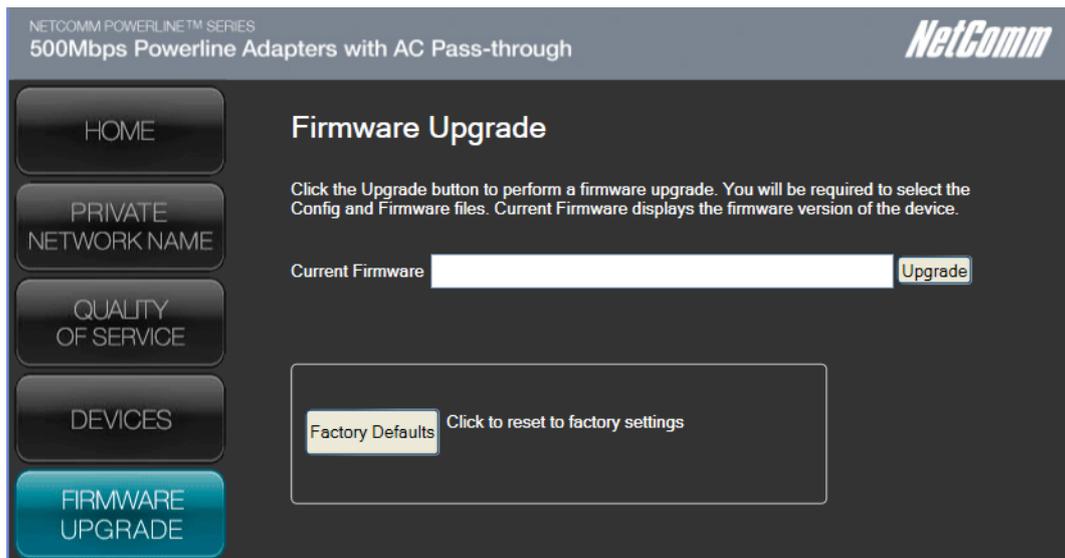
Firmware Upgrade

Use this to upgrade the firmware of your Powerline adapter. After upgrading, the Powerline Adapter will retain the same Private Network Name and MAC address settings. To upgrade, you need to have both the configuration file (.PIB extension) and firmware file (.NVM extension). Firmware upgrades can be downloaded from www.netcomm.com.au.

To upgrade the firmware of a Powerline adapter:

1. Connect Powerline Adapter to the computer where you are using Powerline Utility.

2. Open Powerline Utility.

3. Click Firmware Upgrade.

4. Click Browse to select the location of the configuration and firmware files. The configuration file has a PIB extension while the firmware file has an NVM extension. After you select the location of the configuration and firmware files, the upgrade will immediately start.

To reset to factory default settings:

1. Connect the Powerline Adapter to the computer where you are using Powerline Utility.

2. Open Powerline Utility.

3. Click Firmware Upgrade.

4. Click Factory Default.

Note: You can also perform a reset to the factory default settings when you press the Simple Connect / Reset button on the device for 11-13 seconds.

NetCommWireless

Legal & Regulatory Information

This manual is copyright. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced, stored in a retrieval system or transmitted in any form, by any means, be it electronic, mechanical, recording or otherwise, without the prior written permission of NetComm Limited. NetComm Limited accepts no liability or responsibility, for consequences arising from the use of this product. NetComm Limited reserves the right to change the specifications and operating details of this product without notice. NetComm is a registered trademark of NetComm Limited. All other trademarks are acknowledged the property of their respective owners.

Product Warranty

The warranty is granted on the following conditions:

1. This warranty extends to the original purchaser (you) and is not transferable;
2. This warranty shall not apply to software programs, batteries, power supplies, cables or other accessories supplied in or with the product;
3. The customer complies with all of the terms of any relevant agreement with NetComm and any other reasonable requirements of NetComm including producing such evidence of purchase as NetComm may require;
4. The cost of transporting product to and from NetComm's nominated premises is your responsibility;- and,
5. NetComm does not have any liability or responsibility under this warranty where any cost, loss, injury or damage of any kind, whether direct, indirect, consequential, incidental or otherwise arises out of events beyond NetComm's reasonable control. This includes but is not limited to: acts of God, war, riot, embargoes, acts of civil or military authorities, fire, floods, electricity outages, lightning, power surges, or shortages of materials or labour.
6. The customer is responsible for the security of their computer and network at all times. Security features may be disabled within the factory default settings. NetComm recommends that you enable these features to enhance your security.

The warranty is automatically voided if:

1. You, or someone else, use the product, or attempts to use it, other than as specified by NetComm;-
2. The fault or defect in your product is the result of a voltage surge subjected to the product either by the way of power supply or communication line, whether caused by thunderstorm activity or any other cause(s);
3. The fault is the result of accidental damage or damage in transit, including but not limited to liquid spillage;
4. Your product has been used for any purposes other than that for which it is sold, or in any way other than in strict accordance with the user manual supplied;
5. Your product has been repaired or modified or attempted to be repaired or modified, other than by a qualified person at a service centre authorised by NetComm; and, 6. The serial number has been defaced or altered in any way or if the serial number plate has been removed.

Limitations of Warranty

The Trade Practices Act 1974 and corresponding State and Territory Fair Trading Acts or legalisation of another Government ("the relevant acts") in certain circumstances imply mandatory conditions and warranties which cannot be excluded. This warranty is in addition to and not in replacement for such conditions and warranties.

To the extent permitted by the Relevant Acts, in relation to your product and any other materials provided with the product ("the Goods") the liability of NetComm under the Relevant Acts is limited at the option of NetComm to:

- Replacement of the Goods; or

- Repair of the Goods; or

- Payment of the cost of replacing the Goods; or

- Payment of the cost of having the Goods repaired.

All NetComm ACN 002 490 486 products have a standard 12 months warranty from date of purchase. However some products have an extended warranty option (refer to packaging). To be eligible for the extended warranty you must supply the requested warranty information to NetComm within 30 days of the original purchase by registering on-line via the NetComm web site at http://www.netcommwireless.com