# TROUBLESHOOTING GUIDE

## WHAT CAN THE LEDS TELL ME?

The powerline LED changes colour depending on the speed of your data transfer.

| Powerline LED | Network Performance |
|---|---|
| ▮ ⌂ | Fastest |
| ▮ ⌂ | Faster |
| ▮ ⌂ | Fast |
| LED Off | The adapter is not paired or wall socket not turned on. |

## POWER USAGE / ACTIVITY STATUS

If the LEDs on your adapter are not on, or quickly flashing, it could be because they have entered a power saving mode. You do not need to do anything as normal LED activity will resume upon activity.

• When there is no Ethernet activity for 15 minutes, the Powerline Adapters enter an Idle mode.

• When there is no Ethernet link, the Powerline Adapters enter a Standby mode.

• When activity resumes, the Powerline Adapters return to action and the link is re-established

If you are concerned that the Powerline Adapter LEDs are off because they are not working, unplug the adapters, then plug them back in and the LEDs should return to being lit.
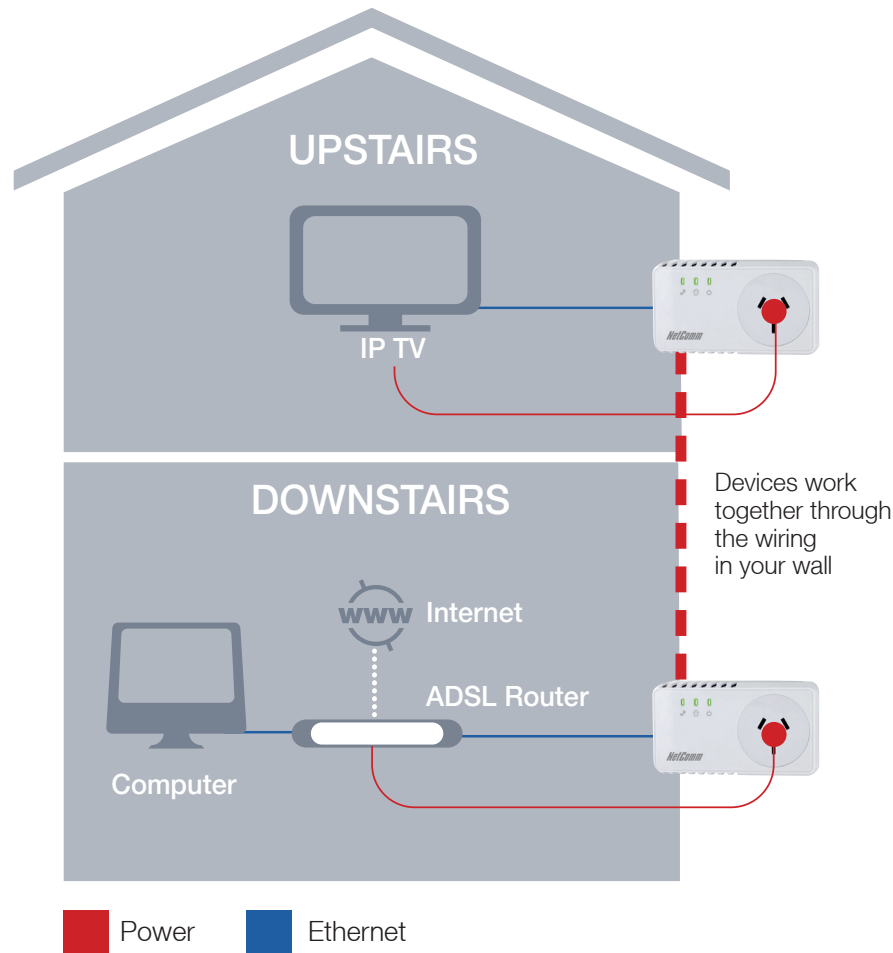
## MY POWERLINE ADAPTERS WILL NOT CONNECT TO EACH OTHER

Press the "SIMPLE CONNECT" button on one of the adapters for less than 3 seconds.

Within 2 minutes, press the "SIMPLE CONNECT" button on the second adapter for less than 3 seconds.

The network password has been reset and both adapters will be able to communicate with each other.

To make this process easier it is recommended that both Adapters are connected to a powerpoint near each other or in the same room.



UPSTAIRS

IP TV

DOWNSTAIRS

Devices work together through the wiring in your wall

www Internet

ADSL Router

Computer

■ Power    ■ Ethernet

## CONNECTING OTHER ADAPTERS INTO THE POWERLINE NETWORK

If you have an existing network of Powerline adapters or would like to build upon your NP204 network this can be quite simple to do.

NOTE: If you want to connect other adapters to the NP204 network they must all be 200Mbps adapters. Another name for this specification is HomePlug AV.

•    Make sure all adapters are compatible. I.e. 200Mbps specification

•    Connect all adapters to power in a location so that they are all in the same room or near each other

### CONNECT INTO AN EXISTING POWERLINE NETWORK

1.    Press the "SIMPLE CONNECT" button on your new NP204 adapters for 10 seconds or until all three LEDs light on and then off

2.    Press the "SIMPLE CONNECT" button on one of your existing adapters for less than 3 seconds. The Power LED will flash

NOTE: The Simple Connect button can have different names depending on model or company. Other names may be the Group or Sync button

3.    Press the "SIMPLE CONNECT" button on your new NP204 adapters for less than 3 seconds. The Power LEDs will flash

NOTE: You need to press the Simple Connect buttons within 2 minutes of each other

4.    When the adapters are paired both the Power and Powerline LEDs will be lit

5.    To add more Powerline adapters to this network, simply repeat steps 1-4

# FREQUENTLY ASKED QUESTIONS

## CAN I USE 200MBPS POWERLINE ADAPTERS WITH OLDER POWERLINE VERSIONS?

All Powerline versions can co-exist with each other. 200Mbps Powerline Adapters, however, are not backward compatible with earlier (85Mbps) Powerline releases.If you will use different versions of 200Mbps Powerline Adapters in a single network, you need to use the Powerline Utility software to create a Private Network Name for all devices. Unlike the new version of 200Mbps Powerline, older versions do not feature the Simple Connect button which enables the device to create a common Private Network Name without using the software.

## HOW DOES 200MBPS POWERLINE ACHIEVE A HIGHER BANDWIDTH THAN EARLIER POWERLINE RELEASES?

200Mbps Powerline complies with the Powerline standard. It achieves higher data throughput by using a broader frequency spectrum (2-30 MHz rather than 4-21 MHz), by using a better access method (Time Division Multiple Access rather than Carrier Sense Multiple Access/Collision Detection), and by using a better processor with a greater bitload per Hz.

## CAN 200MBPS POWERLINE ADAPTERS BE USED ALONGSIDE 85MBPS POWERLINE DEVICES WITHIN THE NETWORK?

85Mbps and 200Mbps Powerline standards can co-exist but they will not be able to communicate with each other.

## WHICH OPERATING SYSTEM (OS) IS COMPATIBLE WITH 200MBPS POWERLINE?

Powerline is operating system independent. However, the Powerline Utility requires a Windows operating system (98SE/ME/2000/XP/Vista/7) with the .NET Framework installed.

## HOW DIFFICULT IS IT TO SET UP A POWERLINE NETWORK?

Powerline Adapters are plug and play devices. Connect to an Ethernet device, plug it to a wall socket, and it is ready to use. Even the most inexperienced user can set up the network with ease. Installing the Powerline Utility software is only needed if you intend to manually change the Private Network Name or view the connection rate.

## HOW MANY DEVICES DO I NEED TO CREATE A POWERLINE NETWORK?

At least two devices are needed to create a Powerline network.

## IS 200MBPS POWERLINE SUITABLE FOR TRIPLE PLAY I.E. USE OF DATA, VOICE, AND VIDEO APPLICATIONS SIMULTANEOUSLY?

Yes, triple play is supported.

## WHAT DATA TRANSFER RATES DO I NEED FOR HIGH DEFINITION TV?

A variety of HDTV resolutions are available. The following are the most common resolutions opposite the required transfer rate:
720p, mpeg2: 09-10 Mbps , 720p, mpeg4: 06-08 Mbps , 1080i, mpeg2: 12-15 Mbps ,1080i, mpeg4: 08-10 Mbps

## DOES 200MBPS POWERLINE HAVE A SECURITY MECHANISM?

Yes. 200Mbps Powerline uses 128-bit AES encryption.

## ARE GIGABIT ETHERNET ADAPTERS REQUIRED FOR USE WITH 200MBPS POWERLINE ADAPTERS?

No. Under ideal conditions, Powerline has a physical gross data rate of up to 200 Mbps. The effective net data rate is somewhat lower. A 100 Mbps Ethernet adapter is therefore adequate in most cases.

## DOES THE TECHNOLOGY SUPPORT MULTICAST VIDEO SERVER STREAMS (IP-TV)?

Yes.

## DO I NEED AN AUTOMATIC VOLTAGE REGULATOR (AVR) FOR POWERLINE NETWORKING?

No. Powerline can operate in an environment using 100-240V.

## HOW MANY POWERLINE ADAPTERS CAN OPERATE IN ONE HOUSEHOLD?

Up to 15 devices can be used within the household.

## WHAT IS THE MAXIMUM RANGE OF A 200MBPS POWERLINE NETWORK?

The maximum range is 200 meters.

## IF ONE POWERLINE ADAPTER IS CONNECTED TO A LAN SWITCH, IS IT POSSIBLE FOR OTHER COMPUTERS IN THE SWITCH TO COMMUNICATE WITH OTHER POWERLINE DEVICES?

Yes.

## CAN MY NEIGHBOURS ACCESS MY POWERLINE NETWORK?

Your electric meter prevents any signal from going outside your household. However, we strongly suggest that you create your own personalized Private Network Name to prevent unauthorized access into your network.

## HOW MUCH IS THE POWER CONSUMPTION OF 200MBPS POWERLINE ON A 230-VOLT POWER SUPPLY?

Powerline has a power consumption of 3.8 watts when in use.

## CAN I USE POWERLINE ADAPTERS TO CONNECT COMPUTERS LOCATED IN DIFFERENT FLOORS OF THE BUILDING?

Yes, as long as the electric wires are connected and do not exceed 200 meters.

## CAN I USE POWERLINE ADAPTERS IN AN OLD HOUSE WITH OLD POWER SUPPLY LINES (PARTLY WITHOUT SEPARATED GROUND WIRE)?

Yes. However, performance may be affected because of the quality of the wires.

## CAN I PLUG POWERLINE ADAPTERS INTO A MULTIPLE SOCKET SWITCH OR DO I HAVE TO PLUG IT DIRECTLY TO THE WALL SOCKET?

You can plug Powerline Adapters into a multiple socket switch. However, we strongly advise to plug it directly to a wall socket to achieve optimal performance.

## DO I NEED ELECTRICAL GROUNDING FOR THE DEVICE?

Powerline networks do not require electrical grounding.

## AFTER A BLACKOUT, WILL THE POWERLINE ADAPTERS SWITCH ON AUTOMATICALLY?

Yes. If you experience connection issues, unplug the device and plug it back in.

## WHAT WILL HAPPEN IF I CONNECT TWO POWERLINES ADAPTERS TO THE SAME ROUTER?

This will cause collision and slow down the network traffic. To prevent collision, you need to assign different Private Network Names on each Adapter.