D-Link®

User Manual

PowerLine AV Passthrough Mini Adapter Starter Kit

DHP-P309AV

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.0	December 25, 2013	• Initial release for hardware revision C1
1.10	September 11, 2014	• add power usage

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Power Usage

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. If it is not needed during certain periods of time, it can be unplugged to save energy.
Network Standby: 1.93 watts

Table of Contents

Package Contents

- D-Link DHP-P308AV PowerLine AV Passthrough Mini Adapter X2
- Ethernet Cable X2
- Quick Install Guide
- CD-ROM with user manual

System Requirements

- Windows® 7, Windows Vista®, XP (with Service Pack 3)
- Ethernet interface (10/100 Mbps)
- PC with 1.5GHz Processor
- 1 GB Memory

Introduction

D-Link announces a fast PowerLine AV Passthrough Mini Adapter which allows you to connect your home computers, networking devices and gaming devices through the most pervasive medium in your house - the electric powerlines - and share Internet connections, printers, transfer files, play games, and more.

Features

- Provides Ethernet to Powerline Connection

- Up to 200 Mbps*

- One Ethernet port

- Plug & Play, Easy Installation

- Push Button Security

- Power Saving mode

- Integrated Passthrough Power Socket with Noise Filtering

* Maximum throughput based on theoretical transmission PHY rate. Actual date throughput will vary. Network conditions and environmental factors, including volume of traffic and network overhead, may lower actual data throughput rate. Interference from devices that emit electrical noise, such as vacuum cleaners and hair dryers, may adversely affect the performance of this product. This product may interfere with devices such as lighting systems that have a dimmer switch, short wave radios, or other powerline devices that do not follow the HomePlug AV and IEEE1901 standard. Powerline AV products feature a more efficient processor than current 200 Mbps Powerline AV products to provide faster speeds.

Hardware Overview
LEDs

Ethernet LED
• **Solid**. The Ethernet port is linked.
• **Off**. There is no Ethernet connection.

Power LED
• **Solid**. The device is receiving electrical power.
• **Blinking**. The device is setting itself up after reset or simple connect button was pressed or power saving mode enabled.
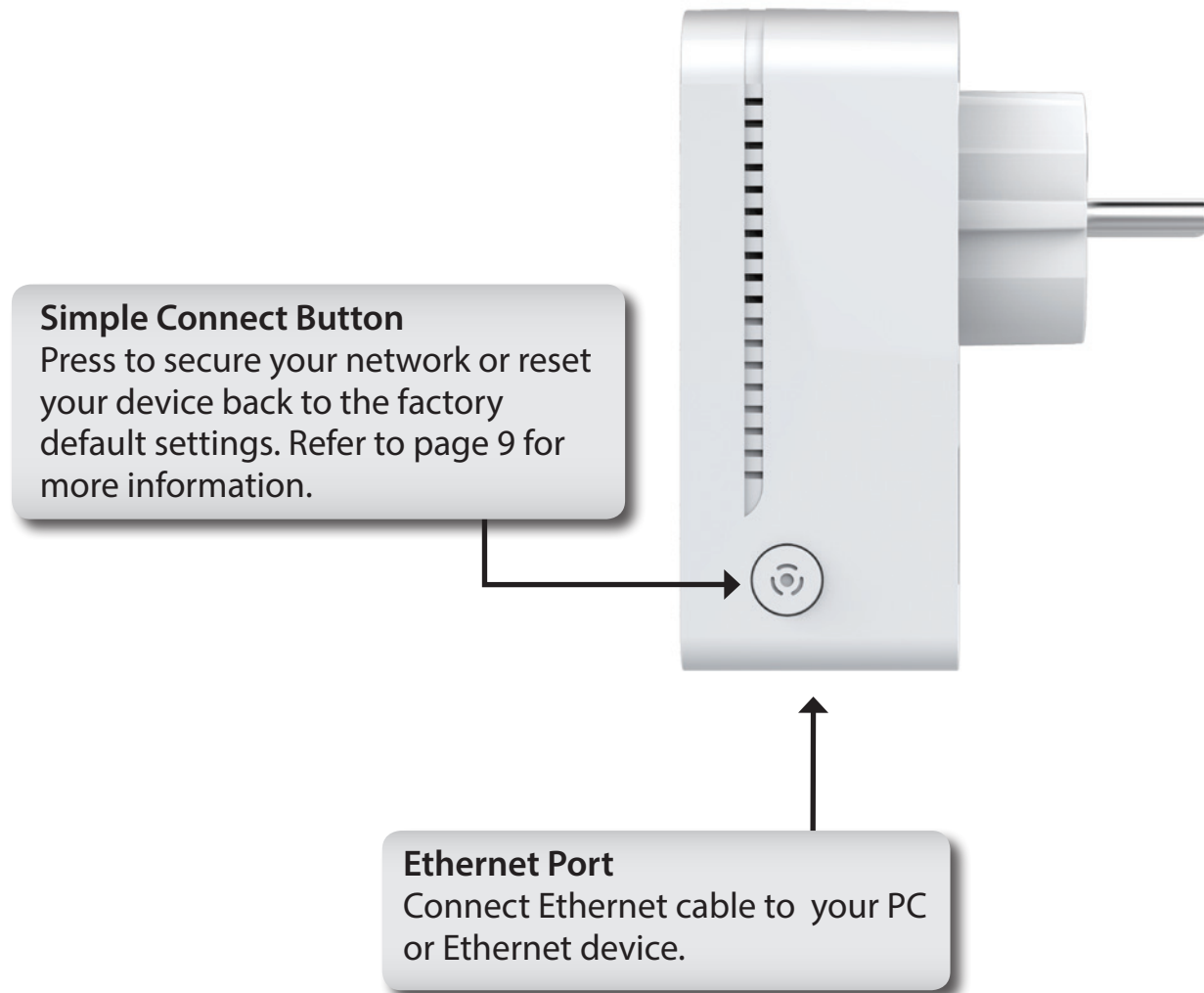• **Off**. The device is not receiving electrical power.

Powerline LED
• **Solid**. The device is connected to a Powerline network.
• **Off**. The device has not found any other compatible Powerline devices using the same encryption key.

The color indicates the Powerline link rate:
• **Green**. The Powerline link rate is best.
• **Amber**. The Powerline link rate is better.
• **Red**. The Powerline link rate is good.

Hardware Overview
Connection

Simple Connect Button
Press to secure your network or reset your device back to the factory default settings. Refer to page 9 for more information.

Ethernet Port
Connect Ethernet cable to your PC or Ethernet device.

Hardware Installation

Power

Plug in the DHP-P308AV into an AC wall outlet or power strip.

*Note:* Power source is confirmed when the Power LED on the DHP-P308AV is illuminated.

Connect the Ethernet Cable

Connect the included Ethernet cable to the network cable connector located on the DHP-P308AV and attach the other end of the Ethernet cable to the network or PC. Network Connectivity is confirmed when the Ethernet LED on the DHP-P308AV are illuminated.

Power Saving Mode Enabled

When you click the Simple Connect button quickly twice, the DHP-P308AV will go into power saving mode. To wake the device up, just click the Simple Connect button again.

WARNING! D-Link powerline devices cannot be configured while in Power Saving Mode enabled.
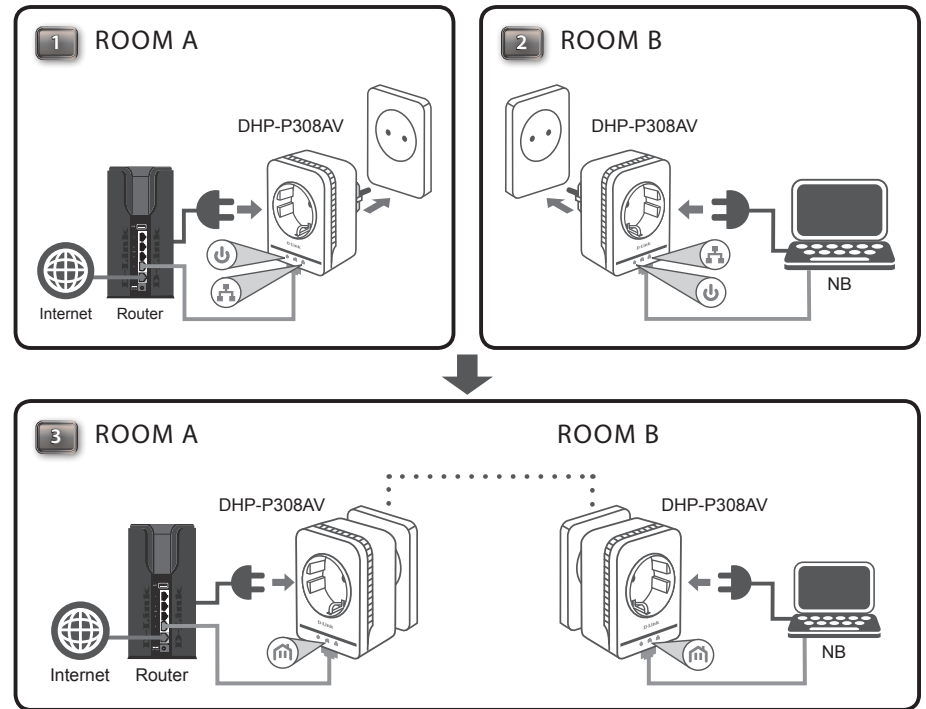
Push Button Security

Understanding PowerLine AV Passthrough Mini Adapter Security

The PowerLine AV Passthrough Mini Adapters on the same network must use an identical encryption key. The default encryption key of each PowerLine AV Passthrough Mini Adapter is **HomePlug AV**. All PowerLine AV Passthrough Mini Adapters with default encryption key can communicate with each other.

It's recommended to create a private encryption key for network security purpose. The private encryption key allows you to protect your network from unauthorized access via the Powerline network. To create a private encryption key instead of the default encryption key, please follow below steps:

1. All Adapters

Plug in all the adapters to be configured and make sure each device's encryption key is set to **HomePlug AV** (default value). If the encryption key is not set to the default value, press the Simple connect button for 10 seconds for resetting it to the default value.

2. First Adapter

Press Simple connect button of the first adapter for no more than three seconds.

The Power LED will start blinking after you release the button. The adapter will create a private, randomly generated encryption key that each PowerLine AV Passthrough Mini Adapter will use.

3. Second Adapter

Within two minutes of pushing the Simple connect button of the first adapter, press Simple connect button of second adapter in your Powerline network for no more than three seconds. The Power LED will start blinking after you release the button.

Note: Both Simple connect buttons must be pressed within two minutes.

After above network security setup steps, your Powerline network will be securely configured with the same network encryption key. The adapters will memorize the security settings even if they are unplugged.

Note: To change the private encryption key, please reset the adapter back to its default value by pressing the Simple Connect button for 10 second and then follow the security setup procedure above.

4. Adding More Adapters

If you would like to add more than two adapters, press the button of the additional adapter for no more than three seconds. The Power LED will start blinking after you release the button.

Then press the button of any adapter in your existing Powerline network for no more than three seconds. The Power LED will start blinking after you release the button.

Note: Both Simple connect buttons must be pressed within two minutes.

After above network security setup steps, your Powerline network will be securely configured with the same network encryption key.

Powerline Installation Considerations

Plan the location of your Powerline devices:

1. Connect Powerline devices to electrical outlets that are not controlled by a wall switch to avoid accidentally turning off power to the device.

2. Do not connect the Powerline devices to an extension cord, surge protector, or power strip as this might prevent it from working correctly, or reduce the network performance.

3. Avoid using the Powerline devices in an electrical outlet that is located near an appliance that uses a lot of power, such as a washer or dryer, or a refrigerator. This may prevent the adapter from working correctly, or negatively impact network performance.

4. Verify that your Powerline devices are electrically rated to operate with the power available in your location.

5. To help prevent against electrical shock, be sure to plug the power cables into properly grounded electrical outlets.

6. The Powerline device is equipped with a three-pronged plug to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from the cable.
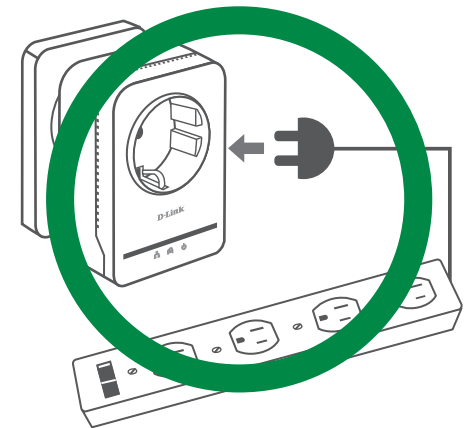
7. Important safety instructions

Please read all of the safety and operating instructions before using your device:

1. Do not open the device or attempt to repair or service the device.

2. Only use the included power adapter to power your device.

3. Ensure that the device is plugged into the wall in a vertical position, with the ports facing down.

4. The AC socket-outlet of equipment was intended to be connected with AC power supply cord only, and no any direct plug-in equipment can be plugged.

5. Use the device in a dry location, and avoid placing it in humid environments.

6. Do not submerge the device in liquid or attempt to clean it with liquids or solvents. To clean the device, disconnect it from the power outlet and use a damp towel.

7. Keep the device out of direct sunlight.

8. Do not cover or block the vents on the device.

9. Make sure that the device has adequate room for ventilation.

10. Avoid placing the device near a heater or radiator.

11. The device should be located only where sufficient ventilation can be ensured.

Troubleshooting

- **I can't configure any parameter of the PowerLine AV Passthrough Mini Adapter, an error is shown when I try to configure it:**
  Please make sure you have not unplugged the PowerLine AV Passthrough Mini Adapter while configuring it.

- **I changed the connection cable to another Network adapter and now the utility does not work correctly:**
  Please restart the utility each time you disconnect the connection cable.

- **I'm having a lot of problems configuring my network:**
  If you are having many problems configuring the network with two or more PowerLine AV Passthrough Mini Adapter, please make a reset to all of the Network adapters and start configuring the adapters again.

Technical Specifications

Network Ports
• One Ethernet port

Passthrough Power Socket

EU Type
    • 250V/16A maximum

UK Type
    • 250V/13A maximum

FR Type
    • 250V/16A maximum
US Type
    • 125V/12A maximum
AU Type
    • 250V/10A maximum

AC Input

EU Type
    • 100-240Vac, 50/60Hz, 16A

UK Type
    • 100-240Vac, 50/60Hz, 13A

FR Type
    • 100-240Vac, 50/60Hz, 16A
US Type
    • 100-125V AC, 50/60Hz, 12A
AU Type
    • 100-250V AC, 50/60Hz, 10A

Standard
• Compatible with IEEE1901
• Homeplug AV

EMC
• CE Class B

Safety
• CE LVD

Encryption
• 128-bit AES

Operation Temperature
• 0°C ~ 40°C

Storage Temperature
• -10°C ~ 70°C

Humidity
• Operation: 10% ~ 90% RH
• Storage: 5% ~ 90% RH