



# User Manual

## PowerLine AV+ 3-Port Passthrough Adapter

DHP-P338AV

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# 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	November 29, 2012	• Initial release for hardware revision A1

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# Package Contents

## DHP-P338AV

- D-Link DHP-P338AV PowerLine AV+ 3-Port Passthrough Adapter
- Ethernet Cable
- Quick Install Guide



# System Requirements

- Ethernet interface (10/100 Mbps)
- PC with 1.5GHz Processor
- 1 GB Memory

# Introduction

D-Link announces a fast, 500Mbps\* PowerLine AV+ 3-Port Passthrough Adapter which allows you to connect your computers, networking devices and gaming devices through the most pervasive medium in your house - the electrical wiring - and share Internet connections, share printers, transfer files, play games, and more.

## Features

- Provides Ethernet to Powerline Connection
- Fast Data Transfer Rate of Up to 500Mbps\*
- Three Ethernet ports
- Plug & Play, Easy Installation
- Push Button Security
- Power Saving mode
- Integrated Passthrough Power Socket with Noise Filtering
- Port-based Traffic Priority

\* Maximum throughput based on theoretical transmission PHY rate. Actual data 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



### 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.

### Ethernet LED

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

### Powerline LED

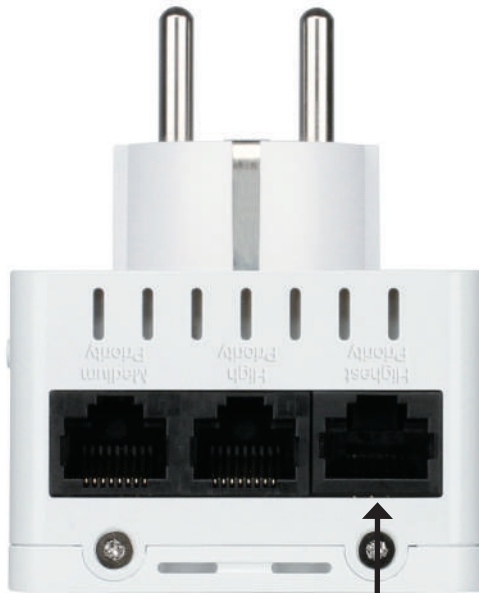
- **Solid.** The device is connected to a Powerline network.
- **Off.** The device has not found any other compatible Powerline devices using the same encryption key.

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



### Ethernet Port

Connect with an Ethernet cable to your PC or Ethernet device.



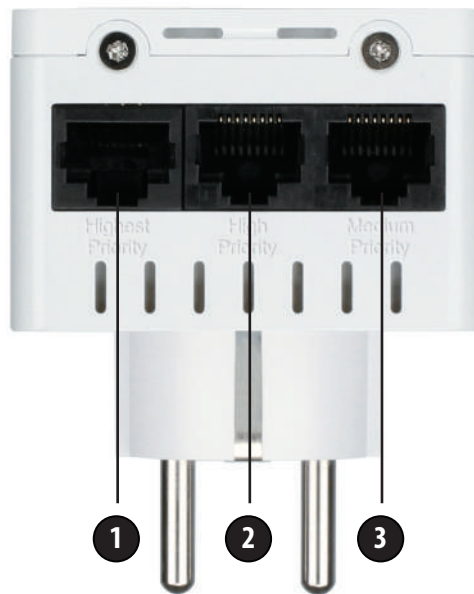
### Simple Connect Button

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

# Hardware Overview

## Ethernet Port-based Traffic Priority

When connecting devices to your ethernet ports, be aware of the Quality of Service (QoS) priorities assigned to each port.



Port	Name	Description
1	<b>Highest Priority</b>	Gives uninterrupted service to the connected devices, gaming consoles, media players or Internet TV.
2	<b>High Priority</b>	You can connect devices such as consoles, media players, or Internet TV.
3	<b>Medium Priority</b>	This port is best for networking data devices such as printers.



# Hardware Installation

## Power

Plug in the DHP-P338AV into an AC wall outlet. Note that it is not recommended to connected the DHP-P338AV to a power strip or UPS.

**Note:** Power source is confirmed when the Power LED on the DHP-P338AV is illuminated.

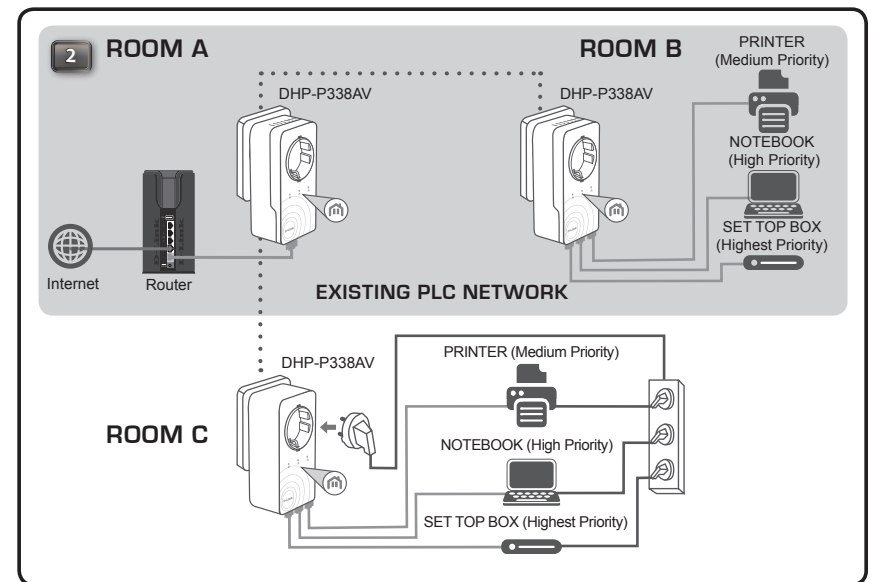
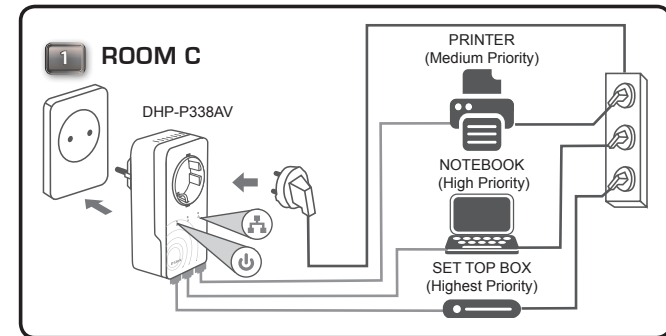
## Connect the Ethernet Cable

Connect the included Ethernet cable to the Ethernet port located on the DHP-P338AV and attach the other end of the Ethernet cable to your PC or Ethernet device. Network Connectivity is confirmed when the Ethernet LED on the DHP-P338AV is illuminated.

## Power Saving Mode Enabled

When the Ethernet link activity has been down for 5 minutes, the DHP-P338AV will automatically go into power saving mode. The Power LED will blink intermittently.

**WARNING!** D-Link powerline devices cannot be configured while in Power Saving Mode.



# Push Button Security

## Understanding PowerLine AV+ 3-Port Passthrough Adapter Security

The PowerLine AV+ 3-Port Passthrough Adapters must use the same encryption key in order to be on the same network. The default encryption key of each PowerLine AV+ 3-Port Passthrough Adapter is **HomePlug AV**. All PowerLine AV+ 3-Port Passthrough Adapters with default encryption key can communicate with each other.

It's recommended to create a private encryption key for network security purposes. The private encryption key allows you to protect your network from unauthorized access via the Powerline network. To create a private 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 to reset it to the default value.

### 2. First Adapter

Press the 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+ 3-Port Passthrough Adapter will use.

### 3. Second Adapter

Within two minutes of pushing the Simple connect button of the first adapter, Press the 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.

Your Powerline network is now securely configured with the same network encryption key. The adapters will remember 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 seconds and then follow the security setup procedure above.

### 4. Adding More Adapters

If you would like to add more than two adapters, press the Simple connect 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 Simple connect 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.

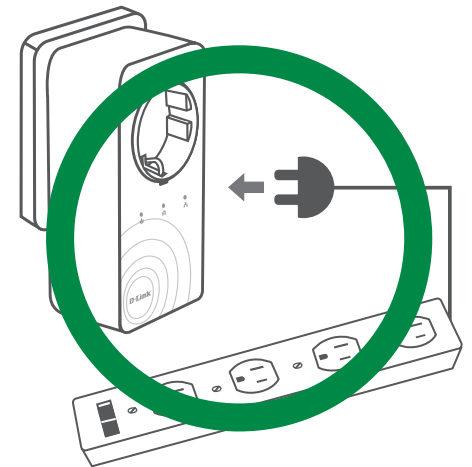
Note: Both Simple connect buttons must be pressed within two minutes.

Now your new adapter will be able to connect to your existing Powerline network.

# 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 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, microwave, 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. Use the device in a dry location, and avoid placing it in humid environments.
5. 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.
6. Keep the device out of direct sunlight.
7. Do not cover or block the vents on the device.
8. Make sure that the device has adequate room for ventilation.
9. Avoid placing the device near a heater or radiator.
10. The device should be located only where sufficient ventilation can be ensured.

# Troubleshooting

- **I can't configure the PowerLine AV+ 3-Port Passthrough Adapter, an error is shown when I try to configure it:**  
Please make sure you have not unplugged the PowerLine AV+ 3-Port Passthrough Adapter while configuring it.
- **I changed the Ethernet cable to another Network adapter and now the utility does not work correctly:**  
Please restart the utility each time you disconnect the Ethernet cable.
- **I'm having problems configuring my network:**  
If you are having problems configuring the network with two or more PowerLine AV+ 3-Port Passthrough Adapters, please reset all of the Network adapters and start configuring the adapters again. See page 10 for instructions.

# Technical Specifications

## Network Ports

- Three Ethernet ports

## Passthrough Power Socket

### EU Type

- 250V/16A maximum

### UK Type

- 250V/13A maximum

### FR Type

- 250V/16A maximum

### US Type

- 125V/12A maximum

## AC Input

### EU Type

- 100-250V AC, 50/60Hz, 16A

### UK Type

- 100-250V AC, 50/60Hz, 13A

### FR Type

- 100-250V AC, 50/60Hz, 16A

### US Type

- 100-125V AC, 50/60Hz, 12A

## 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