

NETGEAR®

Connect with Innovation™

Powerline AV 200 Wireless-N Extender Kit XAVNB2001 Installation Guide



© 2011 NETGEAR, Inc. All rights reserved.

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means without the written permission of NETGEAR, Inc.

DO NOT stack equipment, or place equipment in tight spaces or in drawers. Be sure your equipment is surrounded by at least 2 inches of air space.

Technical Support

Thank you for choosing NETGEAR. To register your product, get the latest product updates, or get support online, visit us at <http://support.netgear.com>.
Phone (US & Canada only): 1-888-NETGEAR
Phone (Other Countries):
See http://support.netgear.com/app/answers/detail/a_id/984.

Trademarks

NETGEAR, the NETGEAR logo, and Connect with Innovation are trademarks and/or registered trademarks of NETGEAR, Inc. and/or its subsidiaries in the United States and/or other countries. Information is subject to change without notice. Other brand and product names are registered trademarks or trademarks of their respective holders. © 2011 NETGEAR, Inc. All rights reserved.

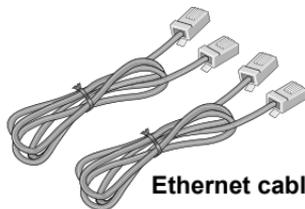
Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, NETGEAR reserves the right to make changes to the products described in this document without notice. NETGEAR does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

Package Contents



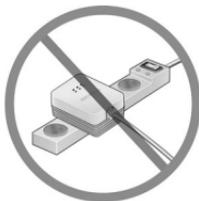
**XAVN2001
and XAV2101
Powerline AV 200
Adapters**



Ethernet cables (2)



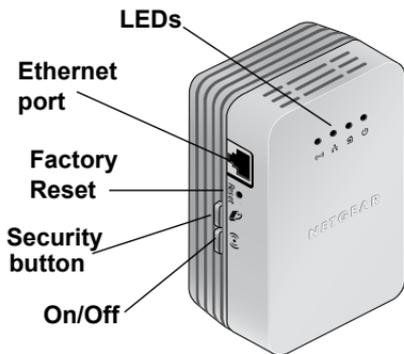
**Resource
CD**



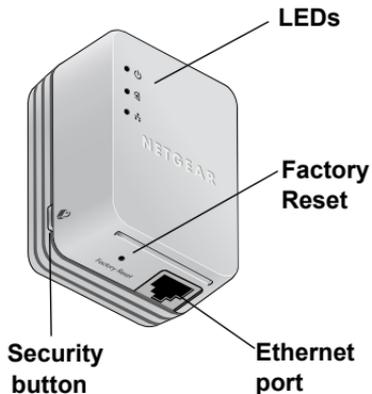
WARNING!!

**DO NOT plug
Powerline devices
into a power strip.**

Hardware Features



**Powerline AV 200
Wireless-N Extender
(XAVN2001)**



**Powerline AV 200
Adapter
(XAV2101)**

LED Descriptions

The LEDs indicate the status of your Powerline adapters.

- When you plug in the adapter, the Power LED  lights up and turns green.
- The adapter is not active when no Ethernet link has occurred for more than 10 minutes. The adapter enters power saving mode and the Power LED turns amber .
- The Ethernet LED  lights up when you connect a powered-on Ethernet device to at least one Ethernet port.
- The Powerline LED turns on when the adapter detects at least one other compatible Powerline device.

The Pick A Plug feature lets you pick the electrical outlet with the strongest link rate, indicated by the color displayed by the Powerline LED:

-  Green: Link rate > 80 Mbps (Best)
-  Amber: Link rate > 50 and < 80 Mbps (Better)
-  Red: Link rate < 50 Mbps (Good)

Button Descriptions

The buttons on your Powerline adapters let you do the following:

- **Factory Reset** — Use the **Factory Reset** button to return your Powerline device to its default factory settings.
 - For the XAVN2001, press the **Factory Reset** button for 2 seconds, and then release it.
 - For the XAV2101, press the **Factory Reset** button for 2 seconds, and then release it.
- **Security button** — Use the **Security** button to set the security:
 - Between your wireless client device and the XAVN2001 wireless extender.
 - Between the Powerline devices.

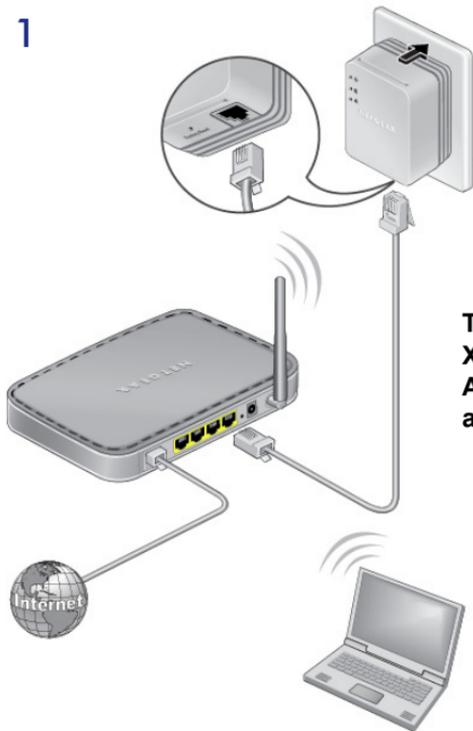
For more on Security settings, see [*Step 2: Set Up Your Powerline Wireless Extender*](#) on page 10.

- **On/Off button** — (XAVN2001 only) The Wireless Extender On/Off button has two functions:
 1. Turn the unit on and off.
 - **To turn off:** Press and hold the **On/Off** button on the XAVN2001 extender until the Power LED turns amber (2+ seconds), and then release it. The device automatically turns off, and all LEDs turn off.
 - **To turn on:** Press the **On/Off** button until the Power LED is green. You can also unplug the XAVN2001, and then plug it back into the wall outlet again.
 2. Perform the auto-configuration for the wireless extender to copy the router settings.

For more information, see *Step 2: Set Up Your Powerline Wireless Extender* on page 10, and *Step 3: Connect Wireless Clients to the Wireless Extender* on page 17.

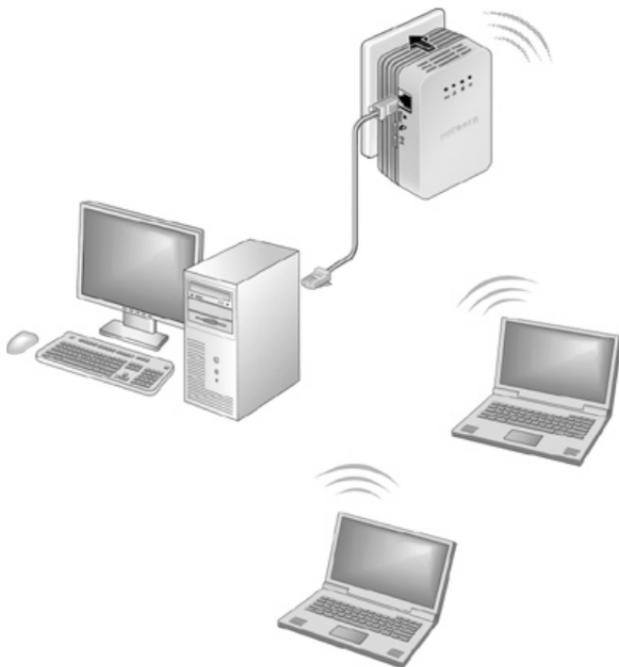
Install Your Powerline Adapters

Room 1



**This room has an
XAV2101 Powerline
Adapter connected to
a router or gateway.**

Room 2 This room has an XAVN2001 Powerline Extender.



Step 1: Write Down the Password

Each Powerline device contains a unique password printed on the product label. To avoid having to unplug the unit so you can read the password—which would interrupt the setup—we suggest that you write down the passwords here before continuing the installation.

XAV2101 Adapter: _____

XAVN2001 Extender: _____

Step 2: Set Up Your Powerline Wireless Extender

- If your router does not have WPS, or you are not sure, use **Method A**.
- If your router does have WPS, use **Method B**.

Method A: Using the Powerline Utility CD

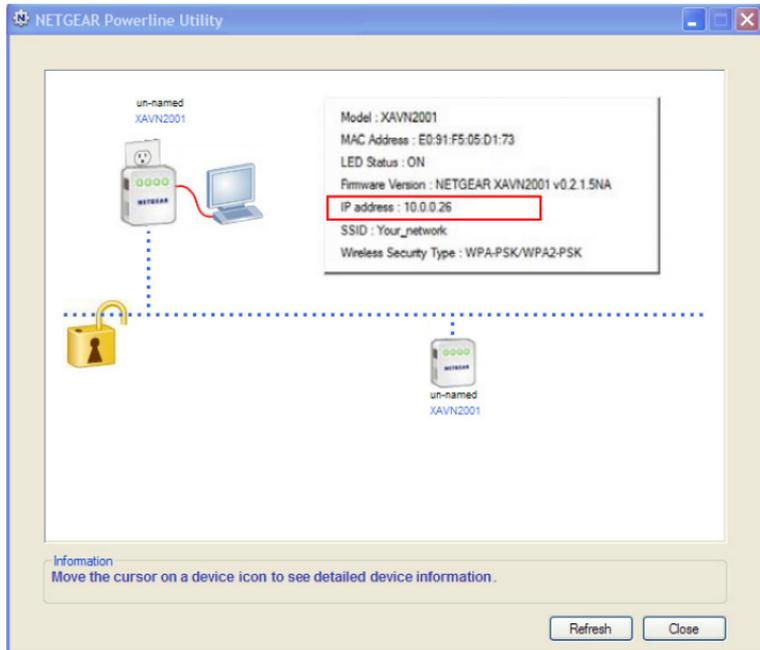
1. Plug the Powerline AV 200 Adapter (XAV2101) into a wall outlet near your router, and connect it to the LAN port on your router using an Ethernet cable. See Room 1 illustration.

2. Plug the Powerline Extender (XAVN2001) into a wall outlet near your computer, and use the supplied Ethernet cable to connect it directly to the LAN port on your computer. See Room 2 illustration.
3. Ensure that both the XAV2101 and XAVN2001 are connected by checking the Powerline LEDs. If the LEDs are green or amber, the devices are successfully connected. A red LED indicates a weak link rate. In this case, move the adapter to another plug with a better connection.
4. Insert the *Resource CD*, and install the Powerline Utility on the computer that is connected directly to the Powerline Extender (XAVN2001).
5. Follow the on-screen prompts:
 - a. If you have a NETGEAR router, the utility automatically finds the router, retrieves the wireless settings, and then prompts you to confirm the settings.
 - b. If the router is *not* a NETGEAR router, or the NETGEAR router is not detected, manually enter the wireless settings.

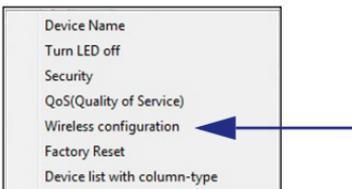
6. While you are in the Powerline Utility, you can see the IP address of the Powerline Extender and navigate to the XAVN2001 Wireless Settings screen.

For Windows:

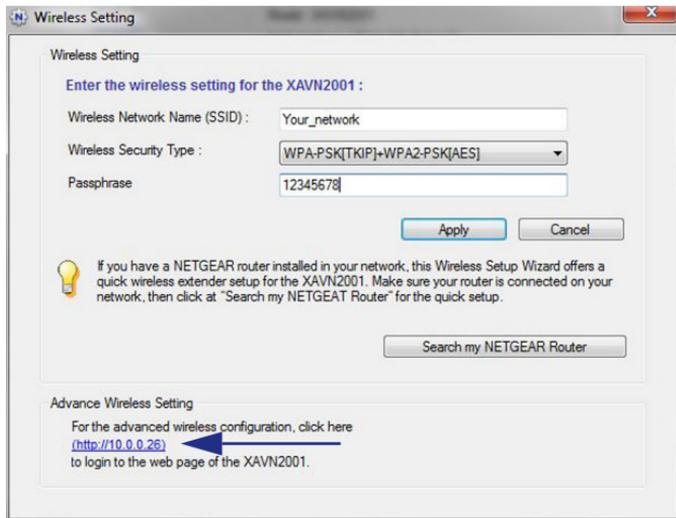
7. On the Powerline Utility screen, click the XAVN2001 icon.



- a. The following pop-up menu displays:



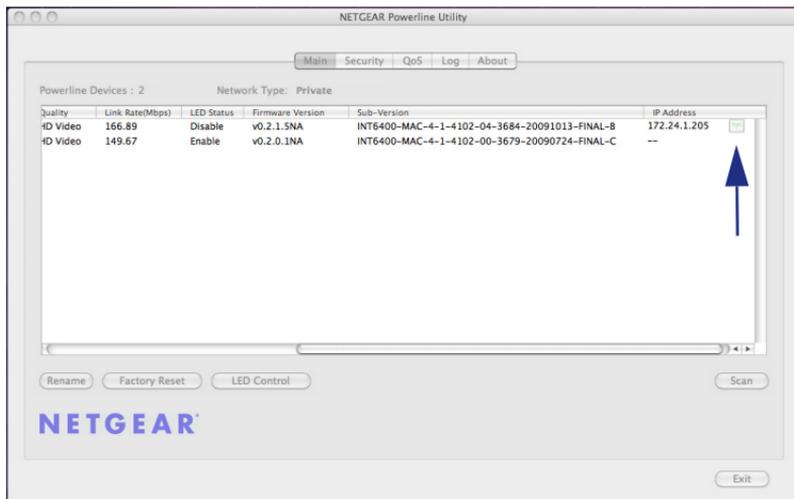
- b. Select **Wireless configuration** from the pop-up menu, and the advanced Wireless Setting screen appears.



- c. The IP address is shown at the bottom of the screen. Click the IP address to go to the advanced Wireless Settings screen of the XAVN2001 user interface. For more information on this screen, see the *XAVN2001 User Manual*.

For Mac:

- a. On the Powerline Utility screen, click the wireless icon next to the IP address.



This takes you to the XAVN2001 user interface.

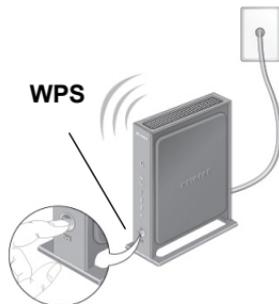
- When you are finished using the Powerline Utility, disconnect the Ethernet cable from the Powerline Extender (XAVN2001), and move the Powerline Extender to the area (or dead zone), where you want to extend wireless coverage, and plug it into an electrical outlet.

Method B: Using the WPS Button

Use this method if you have a wireless router, or modem router with a WPS (Wi-Fi Protected Setup™) Push 'N' Connect button:

- Plug the XAVN2001 into a wall outlet close to your router to ensure that it is within the router's wireless coverage area.
- Press the WPS button on the router.

Note: The WPS button may be labeled WPS, or may look similar to  or .



3. Within two (2) minutes, press and hold the XAVN2001 **On/Off** button for about 7+ seconds until the wireless LED starts blinking.

This activates the auto configuration on the XAVN2001. The LED stops flashing when setup is successful.

4. Move the XAVN2001 to the area (or dead zone), where you want to extend the wireless coverage.
5. Plug the Powerline AV 200 Adapter (XAV2101) into a wall outlet near your router, and use an Ethernet cable to connect it to the LAN port on the router. See Room 1 illustration.
6. Ensure that both the XAV2101 and XAVN2001 are connected by checking the Powerline LEDs. If the LEDs are green or amber, the devices are successfully connected. A red LED indicates a weak link rate of 50 Mbps or less. In this case, move the adapter to another plug with a better connection.

Wireless devices in that “dead” area can now connect to your network through the Powerline Adapter and Wireless Extender.



Step 3: Connect Wireless Clients to the Wireless Extender

Use of one these methods to connect other wireless devices (such as a laptop, game console, and so on), to your network through the wireless extender.

1. If your wireless client device has a WPS button:
 - a. Push the WPS button on the wireless client.
 - b. Push the **Security** button on the wireless extender (about 2+ seconds), until the Wireless LED starts flashing, then release it.

When the wireless LED stops flashing, the wireless pairing is done and the wireless device is securely connected to the XAVN2001 Wireless Extender.

2. If your wireless client does not have a WPS button, you need to access the user interface of your client device to manually enter the wireless settings to connect to the extender.

For more information, see the *XAVN2001 User Manual*. A link is located on the *Resource CD*.

Technical Support

Thank you for selecting NETGEAR products.

After installing your device, locate the serial number on the label of your product and use it to register your product at <https://my.netgear.com>.

Registration is required before you can use the telephone support service. Registration through the NETGEAR website is strongly recommended.

Go to <http://support.netgear.com> for product updates and web support.

For additional information about setting up, configuring, and using your Powerline AV 200 Wireless-N Extender Kit, see the *User Manual*.

For complete DoC please visit the NETGEAR EU Declarations of Conformity website at: http://support.netgear.com/app/answers/detail/a_id/11621/

For GNU General Public License (GPL) related information, please visit the NETGEAR support site at: http://support.netgear.com/app/answers/detail/a_id/2649

Compatible NETGEAR Powerline Devices

Your Powerline adapter can share a Powerline network with these compatible NETGEAR devices: XAV101, XAV1004, XAV2001, XAV1101, XAV1301, XAV1601, XAV2501, XAV2602, XAV5001, XAV5501, XAV5601, and XAV5004.

For a complete list of HomePlug AV certified devices, go to www.homeplug.org/certified_products.

Safety Information:

AC input: 100-240V~, 250mA or 0.25A (Max)

Operating temperature: 0C~40C

Compliance

This symbol was placed in accordance with the European Union Directive 2002/96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposed of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.

NETGEAR, Inc.

350 East Plumeria Drive
San Jose, CA 95134 USA



201-13757-01



August 2011