# **NETGEAR**<sup>®</sup>

HDX101 Powerline HD Ethernet Adapter

### **Start Here**

These instructions explain how to add HDX101 Powerline HD Ethernet Adapters to your existing network. To do this, you complete these two simple steps:

- Connect the first HDX101 device.
- Connect one or more additional HDX101 devices.

## How the HDX101 Powerline HD Ethernet Adapter Fits in Your Network

After you install the Powerline HD Ethernet Adapteres, your network will combine these two elements:

- An Ethernet portion where the devices are connected with cables.
- A Powerline portion where the devices are connected over your electrical power wires.



#### Prepare to Install Your Powerline HD Ethernet Adapter

The Powerline HD Ethernet Adapter is designed for easy installation. Check that these minimum requirements are met:

- Your Ethernet network is set up and an Ethernet port available on your network.
- Each computer that will use the Powerline HD Ethernet Adapter must have an Ethernet port available and configured to work on your network. Usually, the default configuration settings (TCP/IP and DHCP) are fine.

#### HDX101 Port and Status Lights





The encryption of the information you send over the Powerline helps keep it secure. This security feature is especially relevant in settings like apartment buildings.

ESCRIPTION	
り	<ul> <li>Power LED (color green):</li> <li>Solid green when electrical power is on.</li> <li>Off when there is no electrical power.</li> </ul>
	<ul> <li>Link LED—Powerline network status (color blue):</li> <li>Solid on when connected to a Powerline network.</li> <li>Off when no other compatible Powerline devices using the same Powerline Network ID are found.</li> </ul>
-	<ul> <li>Ethernet traffic LED (color green):</li> <li>Solid on when Ethernet port is linked but there is no activity.</li> <li>Blinks on when there is traffic between an Ethernet port and the Powerline.</li> <li>Off when there is no traffic.</li> </ul>
0/100 Ethernet port	

#### **Install the Powerline HD Ethernet Adapter**

Use the following procedure to set up your Powerline HD Ethernet Adapteres.

1. Connect an HDX101 to your network.



Do not connect the HDX101 to a power strip, extension cord, or surge protector as this may prevent them from working properly or degrade the network performance.

- a. Plug the blue Ethernet cable that came in the HDX101 box into a LAN port on your router or switch in your network.
- b. Plug the HDX101 into an electrical outlet. Take care that the electrical outlet is not controlled by a wall switch so as to avoid someone unknowingly turning off the power to the outlet. Check that the HDX101 power light turns on.
- c. Plug the other end of blue Ethernet cable that came in the box into the HDX101.
- 2. Plug the other HDX101 units into power outlets and connect them to computers.

Plug the HDX101 units into electrical outlets near the computers that you want to connect, connect Ethernet cables between the HDX101 units and your computers, turn on your computers, and wait one minute. All three LEDs on the HDX101 light up. Refer to the table on the preceding page for a detailed explanation of the LED behavior.

Note: After plugging a new Powerline HD Ethernet adapter into a power outlet it can take up to a minute to be recognized by the Powerline network. The blue link LED on the new device lights when it has been successfully incorporated into the network.

3. If your power lines carry network traffic for other Ethernet devices (such as the XE102, WGX102, and XE104 HomePlug devices), install and run the NETGEAR HDX101 Configuration Utility on the CD. Refer to the HDX101 User Guide for

details. Note, however, that you get the full bandwidth of the HDX101 only when you use it exclusively with other high-bandwidth Powerline devices like the HDX101. This completes the Powerline installation.

#### Powerline Network ID

HDX101 Powerline HD Ethernet Adapters with a common Powerline network ID can communicate with one another on their own logical network. By default, the network ID is **PowerlineHD**. You can change this ID to prevent unauthorized access to your network, or to split your Powerline devices into two or more self-contained logical networks. Refer to the user guide on your CD for more information on configuring the Powerline network ID.

### **Troubleshooting Tips**

Here are some tips for correcting simple problems that could prevent you from connecting to the Internet or connecting to the HDX101.

Check the green power light on the HDX101.

If the Power light is off, make sure power is supplied to the electrical outlet, and the Powerline device is not plugged into an extension cord, power strip, or surge protector.

Check the blue Powerline Link light on the HDX101.

If this light is off, the devices cannot find each other. Make sure the HDX101 and other Powerline devices are plugged into outlets with power and that they use a common Powerline network ID. If the problem occurred after you changed the ID using the configuration utility on the CD, change the password back to its default setting. If this fixes the problem, refer to the HDX101 User Guide for instructions on setting the network ID.

Check the green data traffic light on the HDX101.

If this light is not blinking there is no data traffic. Make sure your router and modem are switched on and that the blue Ethernet cable that came in the box is connected between an HDX101 port and a router LAN port. Make sure that the computer connected directly to the router can access the Internet.

If your Powerline devices stopped communicating after using the NETGEAR HDX101 Configuration Utility to change the newtork ID, proceed as follows:

1. Open the NETGEAR HDX101 Configuration Utility and select the Security tab.

- Powerline network.
- - network.

For more help with troubleshooting, see the *Reference Manual* on the *Resource CD*.

#### **Technical Support**



#### 2. Click the Use Default button and then the Set All Devices button.

3. Select the Main tab, and check that the utility detects all the HDX101 devices in your

4. If the utility detected all your Powerlin devices in step 3, examine the status of the Configured column in the device list.

a. For each device showing a Configured status of "No", click the device in the Device Name column, and then click the **Configure** button. Repeat this step until the Configured status is set to "Yes" for all the devices in your Powerline

b. Select the Security tab, type the Network ID you want to assign in the "Set Network ID" text box and click the Set All Devices button.

c. Select the Main tab, and check that the utility detects all your Powerline devices. If all devices are displayed, your network is ready to use. If the utility fails to detect all the devices, proceed with step 5 below.

5. If the utility does not detect all the devices, you will need to connect your computer to each Powerline device and set up the network ID one at a time, as follows: a. Select the Security tab in the window displayed by the NETGEAR HDX101 Configuration Utility.

b. Type the Network ID you want to assign in the "Set Network ID" text box and click the Set Local Device button.

c. Select the Main tab and check that the utility detects all the devices that have been individually set to the same network ID.

Thank you for selecting NETGEAR products.

After completing installation, register your product at http://www.NETGEAR.com/register. Registration is required before you can use our telephone support service.

Go to http://kbserver.netgear.com for product updates and Web support.

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