NETGEAR® Installation Guide

WNDAP330 ProSafe 802.11n Dual Band Wireless Access Point

Start Here

Follow these instructions to set up your wireless access point. Before proceeding with the WNDAP330 installation, familiarize yourself with the contents of the *Resource CD*. Please refer to the Reference Manual on your *Resource CD* for instructions on advanced configuration options.

Estimated Completion Time: 30 minutes.

Tip: Before mounting the WNDAP330 in a high location, first set up and test the WNDAP330 to verify wireless network connectivity.

First, Verify the Package Contents

Unpack the box and verify the contents:

- WNDAP330 ProSafe 802.11n Dual Band Wireless Access Point
- Straight through Category 5 Ethernet cable
- Power adapter and cord (12V, 1.5A)
- Three dual-band antennas: 2 dipole (long); 1 patch (square)
- Installation Guide
- Resource CD which includes a link to the Reference Manual
- Warranty/Support Information Card

Then, Set Up the WNDAP330

1. Connect the wireless access point to your computer.

a. Prepare a PC with an Ethernet adapter. If this PC is already part of your network, record its TCP/IP configuration settings. Configure the PC with a static IP address of 192.168.0.210 and 255.255.255.0 as the subnet mask.

- Attach the three antennas to your wireless access point. The antennas are interchangeable and can be attached in any configuration.
- c. Connect an Ethernet cable from the WNDAP330 to the PC (point A in the illustration).
- d. Securely insert the other end of the cable into the WNDAP330
 Ethernet port (point B in the illustration).
- e. Connect the power adapter to the WNDAP330 and verify the following:



NETGEAR cable

Ethernet

port

• **Power.** The power light should be lit. If the power light is not lit, check the connections and check to see if the power outlet is controlled by a wall switch that is turned off.

A

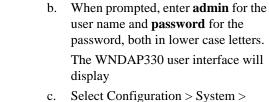
- **Test.** The test light blinks when the WNDAP330 is first turned on.
- LAN. The LAN light on the WNDAP330 should be lit (no light for a 10 Mbps connection, amber for a 100 Mbps connection, and green for a 1000 Mbps connection). If not, make sure the Ethernet cable is securely attached at both ends.
- Wireless. The 802.11ng WLAN light should be lit.

2. Configure LAN and Wireless Access

a. From your PC, configure the WNDAP330 Ethernet port for LAN access.
 Connect to the WNDAP330 by opening your browser and entering http://192.168.0.235 in the address field.



A login window will display.





- c. Select Configuration > System >
 Basic > General from the menu and
 configure the **Access Point Name** and select the appropriate **Country/Region** of operation from the pull-down menu.
- d. Select Configuration > IP > Basic from the menu and configure the IP settings for your network.
- e. Select Configuration > Wireless > Basic > Wireless Settings from the menu and configure the wireless interface for wireless access.
- f. Then, select Configuration > Security > Basic from the menu and and click **Edit** to configure the level of data encryption security for your network.
 See the online help or the Reference Manual for full instructions. (A link to the online Reference Manual is on your *Resource CD*.)

3. Test Wireless Connectivity

Using a PC with a wireless adapter configured according to the wireless settings you just set in the WNDAP330, establish a wireless connection to the WNDAP330.

Now that you have finished the setup steps, you are ready to deploy the WNDAP330 in your network. If needed, you can now reconfigure the PC you used in step 1 back to its original TCP/IP settings.

Now, Deploy the WNDAP330

- Disconnect the WNDAP330 and position it where you will deploy it. The best location is elevated, such as wall mounted or on the top of a cubicle, at the center of your wireless coverage area, and within line of sight of all the mobile devices.
- 2. Position the antenna. Vertical positioning provides best side-to-side coverage. Horizontal positioning provides best top-to-bottom coverage.
- 3. Connect an Ethernet cable from your WNDAP330 Access Point to a LAN port on your router, switch, or hub.
- 4. Connect the power adapter to the wireless access point and plug the power adapter in to a power outlet. The PWR, LAN, and Wireless LAN lights should light up.

Tip: The WNDAP330 supports Power Over Ethernet (PoE). If you have a switch that provides PoE, you will not need to use the power adapter to power the WNDAP330. This can be especially convenient when the WNDAP330 is installed in a high location far away from a power outlet.

Finally, Verify Wireless Connectivity

Using a computer with an 802.11a/g wireless adapter, verify connectivity by using a browser such as Netscape® or Microsoft® Internet Explorer to connect to the Internet, or check for file and printer access on your network.

Note: If you cannot connect, see to Troubleshooting Tips in this guide or the Reference Manual on the *Resource CD*.

Troubleshooting Tips

Here are some tips for correcting simple problems you may have.

No lights are lit on the access point.

The wireless access point has no power.

- Make sure the power cord is connected to the wireless access point and plugged in to a working power outlet or power strip.
- Make sure you are using the correct NETGEAR power adapter supplied with your wireless access point.

The Ethernet light is not lit.

There is a hardware connection problem.

- Make sure the cable connectors are securely plugged in to the wireless access point and to the network device (hub, switch, or router).
- Make sure the connected device is turned on. (if the Ethernet link is a 10 Mbps link, then the Ethernet LED will be off, but the Link/Act LED will be blinking if traffic is present.



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The WLAN lights are not lit.

The wireless access point antennas are not working.

- If both Wireless LAN activity lights stay off, disconnect the adapter from its power source and then plug it in again. (Only one WLAN LED will be on since the AP does not support concurrent 2.4Ghz (b/g band) and 5Ghz (a band) activity.)
- Log in to the wireless access point and verify that the radio is turned on.
- Make sure the antennas are tightly connected to the WNDAP330.
- Contact NETGEAR if the Wireless LAN lights remain off.

I cannot configure the access point from a browser.

Check these items:

- The WNDAP330 is properly installed, LAN connections are OK, and it is powered
 on. Check that the LAN port LED is green to verify that the Ethernet connection is
 OK.
- If you are using the NetBIOS name of the WNDAP330 to connect, ensure that your PC and the WNDAP330 are on the same network segment or that there is a WINS server on your network.
- If your PC uses a Fixed (Static) IP address, ensure that it is using an IP Address in the range of the WNDAP330. The WNDAP330 default IP Address is 192.168.0.235 and the default Subnet Mask is 255.255.255.0. The WNDAP330 default setting is for a static IP address. If the network where you are connecting it is using DHCP, configure it accordingly. See the Reference Manual on the *Resource CD* for the ProSafe Wireless Access Point for more details.

I cannot access the Internet or the LAN with a wireless capable computer.

There is a configuration problem. Check these items:

- You may not have restarted the computer with the wireless adapter to have TCP/IP changes take effect. Restart the computer.
- The computer with the wireless adapter may not have the correct TCP/IP settings to communicate with the network. Restart the computer and check that TCP/IP is set up properly for that network. The usual setting for Windows on the Network Properties is set to "Obtain an IP address automatically."
- The wireless access point's default values may not work with your network. Check
 the wireless access point default configuration against the configuration of other
 devices in your network.

For full instructions on changing the default values of the wireless access point, see
the Reference Manual on the Resource CD for the ProSafe Wireless Access Point.

Technical Support

Thank you for selecting NETGEAR products.

After completing setup and configuration, locate the serial number on the bottom label of the wireless access point and use it to register your product at http://www.netgear.com/register.

Registration on the web site or over the phone is required before you can use our telephone support service. The phone numbers for worldwide regional customer support centers are on the Warranty and Support Information card that came with your product.

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



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.

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FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment marketed in USA is restricted by firmware to only operate on 2.4G channel 1-11

CANADA STATEMENT

Operation is subject to the following two conditions:

- (1) this device may not cause interference and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding.

Note:

This device has been designed to operate with an antenna having a maximum gain of 2 dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The require antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the EIRP is not more than required for successful communication.