



NETGEAR
Everybody's connecting.[™]

32 bit PCI Adapter
10/100 Mbps Fast Ethernet **FA311/FA312/FA331**

Installation Guide

NETGEAR

NETGEAR, Inc.
Support Information
Phone: 1-888-NETGEAR
E-mail: support@NETGEAR.com
www.NETGEAR.com

See Support Information Card for for additional phone numbers.
Internet / World Wide Web
 Go to <http://www.NETGEAR.com> for the NETGEAR Web page.
 Defective or damaged merchandise can be returned to your point-of-sale representative.

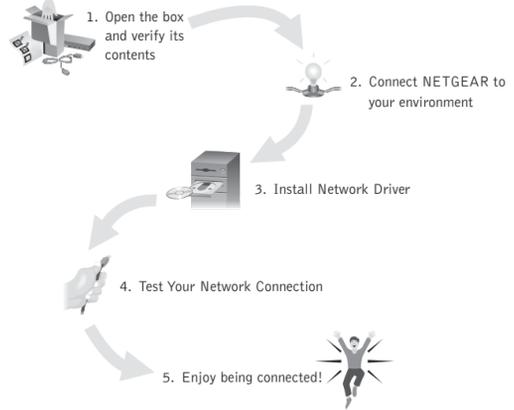
IMPORTANT!
 Please register online. YOU MUST REGISTER TO OBTAIN TECHNICAL SUPPORT. PLEASE RETAIN PROOF OF PURCHASE and this warranty information. To register your product, get product support, or to obtain product information and NETGEAR product documentation, direct your Web browser to the <http://www.NETGEAR.com> Web page.



July 2002

START HERE

Instructions in this guide are for users of Microsoft Windows Operating Systems.

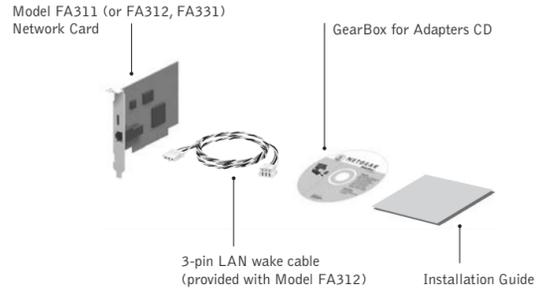


As a last step, be sure to register your Adapter at <http://www.NETGEAR.com>.

Plan Your Time
 Estimated setup time for this product is only **0:10** minutes.

1 VERIFY PACKAGE CONTENTS

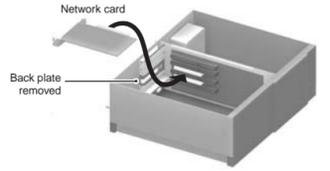
Unpack the contents of the package and make sure that you have everything.



- FA311 (or FA312, FA331) Fast Ethernet PCI Adapter
- GearBox for Adapters CD
- FA311/FA312/FA331 Installation Guide

2 CONNECT NETGEAR TO YOUR ENVIRONMENT

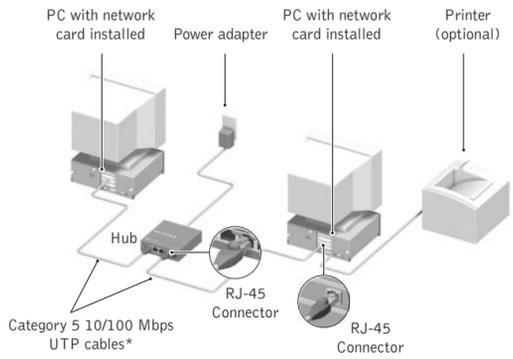
- Install the Card**
- ⚠ **Note:** Touch a grounded metal object to free yourself of static electricity before you handle the card.
1. Turn the power off and unplug the power cord from your computer.
 2. Remove the PC cover.
 3. Choose an available PCI slot and remove the corresponding back plate from the PC chassis.
 4. Insert the card into the PCI expansion slot.
- ⚠ **Caution:** To avoid damaging any components on the card, handle it by the edges, using your thumbs to push it securely into the PCI slot. Make sure the card is fully inserted into the slot to prevent the PC operating system from freezing at startup.



5. Fasten the card to the rear of the computer chassis by tightening the screw that is on the PC.
6. Replace the PC cover and reconnect the power cord to the PC.

Connect the Network Cables

Using the appropriate cable, connect the port on a network hub or switch to the port on the card. The port on the card performs autonegotiation and supports full-duplex operation.



*Use the cables provided or any Category 5 UTP cable. Maximum length = 100 meters (300 feet)

3 INSTALL NETWORK DRIVER

This section explains how to install the Network Driver in various Microsoft Windows Operating Systems. Some versions of Microsoft Windows Operating System may respond with different dialog boxes, or the dialog boxes may open in a different sequence than those shown in this guide, but should prompt you for the same information.

Before you proceed with the installation steps, decide on a name for your network and for each PC. The whole network must have the same workgroup name while each PC must have a unique name. These names can be entered by going to Start>Settings>Control Panel>Network and clicking on the Identification tab. You also need to have the Microsoft Windows Operating System CD-ROM and the GearBox for Adapters CD ready to use in the installation process.

The installation screen uses FA311 as example.

Install the Windows XP Network Driver

⚠ **Note:** If the "Insert Disk" window opens and a message prompts you to insert your Windows CD-ROM at any time during the installation process, insert the Windows CD-ROM in Drive D (the CD-ROM drive) and click on "OK". Then follow the next step in the instructions.

For FA311 and FA312 Adapters:

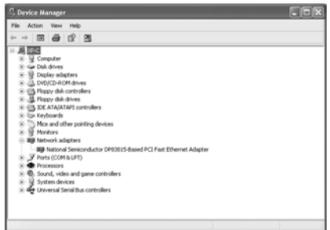
1. After installing the FA311 (or FA312) PCI Adapter, the Win XP will install the driver automatically.
2. You can go directly to section 4. "Test Your Network Connection". Following the steps to check if the driver is well installed.

For FA331 Adapters:

1. Turn on the power to the computer and start Windows XP.
2. Double-click "My Computer" on the desktop, double-click "Control panel" and then double-click "System".
3. Click "Hardware" and click "Device Manager" tab, then double-click "Network adapters".



4. Double-click "National Semiconductor DP83815-Based PCI Fast Ethernet adapter".



5. Click "Driver" and click "Update Driver" tab, then click "OK".



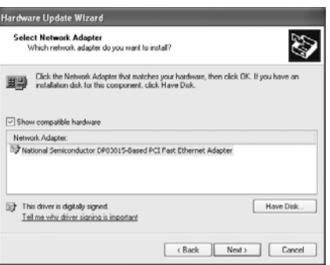
6. A Hardware Update Wizard will appear. Insert the GearBox for Adapters CD (or disk) into your CD-ROM drive. Select "Install from a list or specific location (Advanced)". Click "Next".



7. When the following dialog box opens, select "Don't search. I will choose the driver to install.", then click "Next".



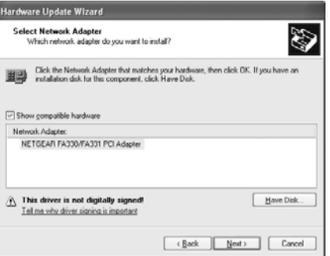
8. When Select Network Adapter box opens, click "Have Disk" then click "Next".



9. The Install From Disk box will open. Type "D:\\" and click "OK".



10. "NETGEAR FA330/FA331 PCI Adapter" will appear in the model list. Click "Next".



11. The next Windows appears with the following adapter name : NETGEAR FA330/FA331 PCI Adapter. Click "Finish".



12. Remove the GearBox for Adapters CD (or disk) from the CD-ROM drive. The Model FA311/FA312/FA331 Adapter driver installation for Windows XP is now complete.

Install the Windows 2000 Network Driver

⚠ **Note:** If the "Insert Disk" window opens and a message prompts you to insert your Windows CD-ROM at any time during the installation process, insert the Windows CD-ROM in Drive D (the CD-ROM drive) and click on "OK". Then follow the next step in the instructions.

1. A Found New Hardware Wizard dialog box will appear, indicating that Windows 2000 has found the adapter. Insert the GearBox for Adapters CD (or disk) into your CD-ROM drive (or disk drive).
2. Click "Next".



- The install hardware device drivers dialog box will appear. Select "Search for a suitable driver for your device (Recommended)". Click "Next".



- The Locate Driver Files dialog box will appear. Select "CD-ROM drives" (or "Floppy disk drives" for disk). Click "Next".



- The Driver File Search Results dialog box will appear. Click "Next".



- Digital Signature Not Found dialog box may appear. Click "Yes".
- The next Windows appears with the following adapter name : NETGEAR FA311/FA312 (or FA330 /FA331) PCI Adapter. Click "Finish".



- Remove the GearBox for Adapters CD (or disk) from the CD-ROM drive (or disk drive). The Model FA311/FA312/FA331 Adapter driver installation for Windows 2000 is now complete.

Install the Windows Me Network Driver

Note: If the "Insert Disk" window opens and a message prompts you to insert your Windows CD-ROM at any time during the installation process, insert the Windows CD-ROM in Drive D (the CD-ROM drive) and click on "OK". Then follow the next step in the instructions.

- Windows Me will automatically detect the new PCI Ethernet Controller hardware. Insert the GearBox for Adapters CD (or disk) into your CD-ROM drive (or disk drive).

- When the following dialog box opens, select "Specify the location of the driver (Advanced)". Click "Next".



- Check "Specify a location" and type "D:\:" (or "A:\:" for disk) then click "Next".



- When Windows returns its search result in the following dialog box, click "Next" to start install the FA311/FA312 (or FA330/FA331) adapter driver.



- The driver is copied onto your system. The next Windows appears with the following adapter name: NETGEAR FA311/FA312 (or FA330/FA331) PCI Adapter. Click "Finish".



- Once the driver is installed, Windows Me will ask if you want to restart your PC. Remove the GearBox for Adapters CD (or disk) from the CD-ROM (or disk drive) drive and click "Yes" to reboot. The Model FA311/FA312/FA331 Adapter driver installation for Windows Me is now complete.

Install the Windows 98 Network Driver

Note: If the "Insert Disk" window opens and a message prompts you to insert your Windows CD-ROM at any time during the installation process, insert the Windows CD-ROM in Drive D (the CD-ROM drive) and click on "OK". Then follow the next step in the instructions.

- Windows 98 will automatically detect the new PCI Ethernet Controller hardware and opens a Found New Hardware Wizard dialog boxes. Insert the GearBox for Adapters CD (or disk) into your CD-ROM drive (or disk drive).

- Click "Next".



- When the following dialog box opens, select "Search for the best driver for your device (Recommended)". Click "Next".



- When the next dialog box opens, check the "CD-ROM drive" (or "Floppy disk drives" for disk), and then click "Next".



- When Windows returns its search results in the following dialog box, click "Next" to start install the FA311/FA312/FA331 adapter driver.



- The driver is copied onto your system. The next Windows appears with the following adapter name: NETGEAR FA311/FA312 (or FA330/FA331) PCI Adapter. Click "Finish".



- Once the driver is installed, Windows 98 will ask if you want to restart your PC. Remove the GearBox for Adapters CD (or disk) from the CD-ROM (or disk drive) drive and click "Yes" to reboot. The Model FA311/FA312/FA331 Adapter driver installation for Windows 98 is now complete.

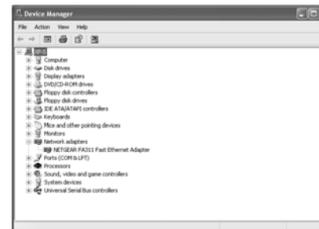
4 TEST YOUR NETWORK CONNECTION

To verify your installation (this example uses Windows XP, but the process is similar for the other Windows OS):

- Double-click "My Computer" on the desktop, click "Control Panel", and then double-click "System".



- Click "Hardware" and click "Device Manager" tab, then double-click "Network adapters".



- Double-click "NETGEAR FA311/FA312 Fast Ethernet Adapter (or FA330/FA331 PCI Adapter)". A message will appear describing the status of the device.



If there is a problem with the installation of the driver, an exclamation point will appear next to the "NETGEAR FA311/FA312 Fast Ethernet Adapter (or FA330/FA331 PCI Adapter)". Try rebooting your computer. If the problem persists, call 1-888-NETGEAR for technical support.

TECHNICAL SPECIFICATIONS

Standards Compatibility	IEEE 802.3u Fast Ethernet IEEE 802.3 Ethernet IEEE 802.3u Auto Negotiation Auto-Sensing PCI Plug and Play 2.1 or 2.2 Compatible
Interface Options	RJ-45 connector
Power Consumption	3 W max.
DC Operating Voltage	+5 +/- 5% @ 630 mA maximum
Physical Specifications	
Dimensions	5.7 by 3.7 in (14.4 by 9.3cm)
Weight	0.20 lb (90g)
Environmental Specifications	
Operating temperature	0 to 40° C
Operating humidity	10% to 90% noncondensing
Agency Compliance	CE mark, FCC, Part 15, Class B
	EN 55 022 (CISPR 22), Class B
	Canada ICES-003, Class B
	VCCI Class B

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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.

Certificate of the Manufacturer/Importer

It is hereby certified that the FA311/FA312/FA331 Network Card have been suppressed in accordance with the conditions set out in the BMPT-AmtsblVfg 243/1991 and Vfg 46/1992. The operation of some equipment (for example, test transmitters) in accordance with the regulations may, however, be subject to certain restrictions. Please refer to the notes in the operating instructions.

Federal Office for Telecommunications Approvals has been notified of the placing of this equipment on the market and has been granted the right to test the series for compliance with the regulations.

VCCI Statement

This equipment is in the Class B category (information equipment to be used in a residential area or an adjacent area thereto) and conforms to the standards set by the Voluntary Control Council for Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in such residential areas.

When used near a radio or TV receiver, it may become the cause of radio interference.

Read instructions for correct handling.

Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

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

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Note: 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 or more of the following measures: (1) Reorient or relocate the receiving antenna, (2) Increase the separation between the equipment and receiver, (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected, (4) Consult the dealer or an experienced radio/TV technician for help.



EN 55 022 Statement

This is to certify that the Model FA311/FA312/FA331 Network Card are shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN 55 022 Class B (CISPR 22).

Compliance is dependent upon the use of shielded data cables.

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Model FA311/FA312/FA331 Network Card) does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Model FA311/FA312/FA331 Network Card) respecte les limites de bruits radioélectriques visant les appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.