NETGEAR®

MA521 802.11b Wireless PC Card

Installation Guide

Follow these quick steps to install your PC Card.

Important Note: You must first install the software before you plug the card into your computer.

Estimated Setup time: 10-15 minutes.

1 Install the MA521 Driver and Utility Software

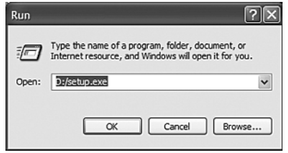
a. Turn on your computer.

b. Insert the *GearBox™ CD for Wireless PC Card* into the CD-ROM drive.

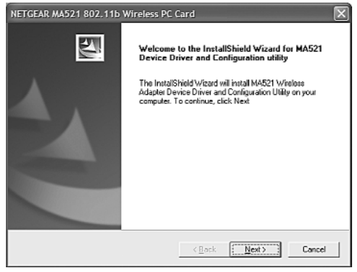
c. The Autostart Wizard screen will appear, as shown here:

d. Click the **Install Driver & Utility** option.

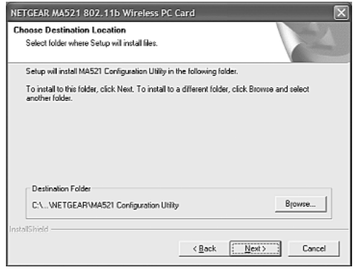
e. If the Autorun wizard does not automatically start, go to your Windows Start menu and choose **Run**, and type **D:/Setup.exe** ("D" represents your CD-ROM drive letter), and click **OK**.



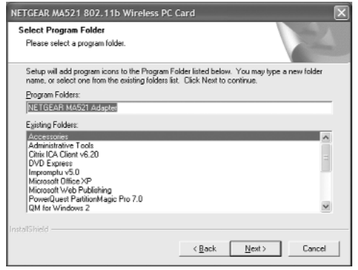
f. The InstallShield Wizard screen will appear. Click **Next** to continue.



g. The Choose Destination Location screen will display the default Destination Folder. If you want to change the default folder, click **Browse** and choose a different destination folder. Then, click **Next** to continue to the next screen.



h. Modify the Program Folders field, if desired. Click **Next** to continue. InstallShield will start copying files onto your system.



i. Click **Finish** to complete installing the Configuration Utility.

2 Install the MA521 Wireless PC Card

a. Insert the **MA521 802.11b Wireless PC Card** into available CardBus slot on your computer as shown here.

b. Windows will automatically detect the MA521 802.11b Wireless PC Card and the Found New Hardware Wizard dialog box will appear.

Notebook PC with MA521 802.11b Wireless PC Card

c. Follow the on-screen instructions to install the driver for the MA521 802.11b Wireless PC Card.

- *For Windows 98/Me users*, once the [Please insert the disk labeled "Windows 98/Me CD-ROM," and then click **OK**] window appears, enter the path corresponding to the appropriate drives and click **OK**. Usually these files can be found at **C:\Windows** or **C:\Windows\System**.
- *For Windows 2000 users*, a Digital Signature Not Found message may appear. Click **Yes** to proceed.
- *For Windows XP users*, a Windows Logo Testing Not Found dialog box may appear. Click **Continue Anyway** to proceed.

d. Click **Finish** to complete the installation.

3 Verify the Driver Installation

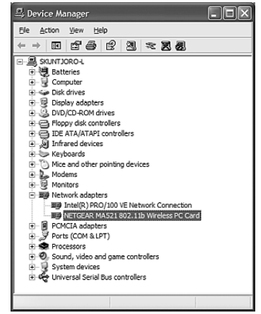
a. From the Windows desktop, right-click **My Computer.**

b. Click **Properties**.

c. Open **Device Manager**:

- *Windows 98/Me users* – Select the Device Manager folder tab.
- *Windows 2000/XP users* – Select the **Hardware** folder tab, and click on the **Device Manager** button.

d. Double-click **Network Adapters**. There should be no yellow exclamation mark or red cross icon on the **NETGEAR MA521 802.11b Wireless PC Card** selection, as shown here.



e. Double-click **NETGEAR MA521 802.11b Wireless PC Card**. On the **General** folder tab, the **Device Status** window should indicate that the device is working properly, as shown here. The installation of the MA521 Wireless PC Card driver is now complete.

4 Configuring the MA521 Wireless PC Card

Now that the MA521 802.11b Wireless PC Card has been installed, you can use the **NETGEAR MA521 Wireless Configuration Utility** to view and customize configuration settings and features.

a. To display the NETGEAR MA521 Wireless Configuration Utility, open the **NETGEAR MA521 Adapter** programs group or double-click the **MA521 icon** that appears in the Windows System Tray, as shown here:

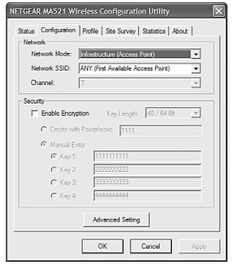
MA521 Wireless Adapter SysTray icon

Configuration Note for Windows XP Users

After installing the MA521 Wireless PC Card on the Windows XP, it will display a **Disable Windows XP Configuration Manager** message, similar to the one shown here:

Click **Yes** to disable the Windows XP configuration utility and use the NETGEAR MA521 Wireless Configuration Utility, or click **No** to use the Windows XP configuration utility to control the MA521 802.11b Wireless PC Card.

b. After choosing item 2, the **Configuration** section, you should see this screen :



c. Select one of the two options on the **Network Mode: Infrastructure (Access Point)** or **802.11 Ad-Hoc (Computer-to-Computer)**. Infrastructure mode will allow you to connect to an Access Point and your existing network, while 802.11b Ad-Hoc will allow you to connect to other stations when you want to set up a network without an Access Point.

d. In the **Network SSID** section, using a pull down menu button to select a Network SSID (which is your network name) for connecting to an Access Point or station that is listed.

e. For 802.11 Ad-Hoc (Computer-to-Computer) mode, please select a **Channel** that you want to use.

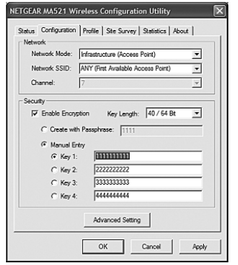
f. Enter a correct **Security** setting that matches your Access Point.

5 Configuring the MA521 for Security

Important Note: The WEP keys must be set up exactly the same on all wireless devices in order to communicate with each other.

To prevent unauthorized wireless stations from accessing data transmitted over the network, the **Security** section of the Configuration Utility offers secure data encryption, known as **WEP**, to better protect your data transmissions.

To activate the WEP Encryption, make sure the **Enable Encryption (WEP Key)** box displays a checkmark (as shown above).



WEP Encryption options will be displayed. You may make changes, as detailed here:

a. Select one of the two options: **Create with Passphrase** or **Manual Entry.** A Passphrase makes it easier to enable WEP because it automatically generates the WEP hexadecimal numbers for the key. If the wireless network Access Point uses a Passphrase, you can also use that here. Otherwise, you will have to manually enter the hexadecimal numbers.

b. **Create with Passphrase** option: pull down the **Key Length** options and select the 64-bit or 128-bit, then type in your Passphrase.

c. **Manual Entry** option:

   1. Pull down the **Key Length** options and select the **64-bit** or **128-bit**, encryption method.
   2. In the **Encryption Keys** fields, specify the WEP keys:

      For 64-bit encryption:

      Hexadecimal: *10 hexadecimal digits* in the range of "A-F", "a-f" and "0-9" (e.g. 11AA22BB33)

      For 128-bit encryption:

      Hexadecimal: *26 hexadecimal digits* in the range of "A-F", "a-f" and "0-9" (e.g. 00112233445566778899AABBCC).

d. When you are done, click the **Apply** button and click **OK** for the changes to take effect.

Note: For additional configuration information, please refer to the *User's Guide* on the *GearBox CD for Wireless PC Card.*

Technical Support

PLEASE REFER TO THE SUPPORT INFORMATION CARD THAT SHIPPED WITH YOUR PRODUCT.

By registering your product at *www.NETGEAR.com/register,* we can provide you with faster expert technical support and timely notices of product and software upgrades.

NETGEAR, INC.

Support Information
Phone: 1-888-NETGEAR (For US & Canada only) - 24 x 7 phone support
See Support information card for other countries.
E-mail: support@NETGEAR.com (24 x 7 online support)
www.NETGEAR.com

M-10078-01

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User Manual additionally:

15.21

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment.

Prohibition of co-location

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

15.105 Federal Communications Commission (FCC) Requirements, Part 15

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:

---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.

Caution Statement of the FCC Radio Frequency Exposure

This Wireless LAN radio device has been evaluated under FCC Bulletin OET 65C and found compliant to the requirements as set forth in CFR 47 Sections 2.1091, 2.1093, and 15.247(b)(4) addressing RF Exposure from radio frequency devices. The radiation output power of this Wireless LAN device is far below the FCC radio frequency exposure limits. Nevertheless, this device shall be used in such a manner that the potential for human contact during normal operation—as a mobile device but use in a body-worn way is strictly prohibit. When using this device, a certain separation distance between antenna and nearby persons has to be kept to ensure RF exposure compliance.

Regulatory information / Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user' s authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

MPE Statement (Safety Information)

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

Safety Information

CAUTION: To maintain compliance with FCC' s RF exposure guidelines, this equipment should be installed and operated with minimum distance 2.5 cm between the radiator and your body. Use on the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.