



# Dynex DX-WGPNBC or DX-WGPDTC Wireless LAN Card

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## Introduction

Thank you for purchasing a Dynex Wireless LAN 802.11g2 Enhanced notebook or desktop card. This package contains:

- A Wireless LAN 802.11g2 Enhanced notebook or desktop card
- · A printed user guide
- A CD containing the wireless network card utility and drivers and this user guide
- If anything is missing, contact Dynex at (800) 305-2204.

## Installing the software and hardware

Use the following procedures to set up your wireless network. To install wireless networking on a Windows XP computer:

Caution: Do not insert the notebook or desitop and until instructed to do so.

- Install the access point. For more information, see the access point documentation.
- 2 Turn on your computer.
- 3 Insert the included CD in the optical drive.
- 4 If the installation program does not start automatically, use Windows Explorer or My Computer to browse the CD and locate the file named setup.exe, then double-click setup.exe to start installing the software.
- 5 Follow the on-screen instructions to install the software.

6 If you are installing a desktop card, turn off your computer, install the card, then turn on your computer again. The Found New Hardware Wizard opens.

Contents

-OR-

Insert your notebook card into the appropriate slot in your notebook. The Found New Hardware Wizard opens.



- 7 Click Install the software automatically (Recommended), then click Next.
- 8 If a warning box opens, click Continue Anyway. Your computer copies files to your hard drive.
- 9 Click Finish.

To install wireless networking on a Windows 96, Windows 2000, or Windows ME computer:

Caution: Do not insert the notebook or desistop cant until instructed to do so.

- Install the access point. For more information, see the access point documentation.
- 2 Turn on your computer.
- 3 Insert the included CD in the optical drive.
- 4 If the installation program does not start automatically, use Windows Explorer to browse the CD and locate the file named setup.exe, then double-click setup.exe to start installing the software.
- 5 Follow the on-screen instructions to install the software.
- 6 If you are installing a desktop card, turn off your computer, install the card, then turn on your computer again. The Found New Hardware Wizard opens.

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Insert your notebook card into the appropriate slot in your notebook. The Found New Hardware Wizard opens.

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#### Installing the software and hardware

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7 Right-click on the My Computer desktop icon, click Properties, then click Hardware Device Manager. Make sure that the card is listed as one of the devices in your computer.

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8 If you are using Windows 98, right-dick on the Network Neighborhood desktop icon, then click Properties. The Local Area Connection Properties dialog box opens.

#### -OR-

If you are using Windows ME and Windows 2000, right-click on the Network Neighborhood desktop icon, dick Properties, then dick Local Area Connection's properties. The Local Area Connection Properties dialog box opens.

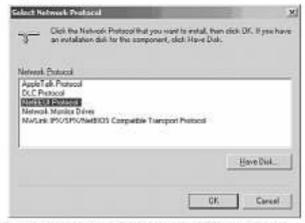
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9 Click on the General tab, then click Install. The Select Network Component Type dialog box opens.

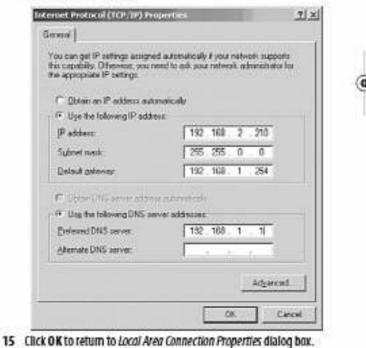
elect Network Component Type	<u>7  x</u>
Dick the type of network component yo	letri of free u
Service	
Description	
A protocol is a language your compu- communicate with other computers.	ter uses to

10 Click Protocol, then click Add. The Select Network Protocols dialog box opens.

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- 11 From the network protocols list, select NetBEUI, then click OK. The NetBEUI protocol is installed.
- 12 Click OK to return to the Select Network Component Type dialog box.
- 13 Repeat steps 10 through 12 to add the IPX/SPX protocol.
- 14 Click TCP/IP to set the IP address for your computer. Select either Obtain an IP address automatically or Use the following IP address setting. If you choose to specify an IP address, then enter the IP value, subnet mask, DNS, Domain/ Workgroup name, and Gateway Address values.



- 16 Select the File and Printer Sharing options and sharing for your computer's resources, then dick OK.
- 17 Click Yes when a pop up appears asking if you want to restart your computer. Your computer turns off and turns on again.

#### Uninstalling the software and hardware

#### To uninstall the software and hardware:

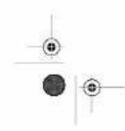
1 Click Start, All Programs or Programs, Dynex Wireless LAN



Card Utility, then click Uninstall.

- 2 Remove the card.
- 3 Restart your computer.







# **Configuring the wireless network**

Your Wireless LAN 802.11g2 Enhanced card uses its own management software. All functions are controlled by this utility. To make it easier to move from one network environment to another, the utility uses profiles that you create.

To use the wireless utility:

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 Click Start, All Programs or Programs, Dynex DX-WNB2G Wireless LAN Card Utility, then Dynex DX-WNB2G Wireless LAN Card Utility.

Note: The wireless utility icon 🚆 should appear in your icon tray. If the icon is red, it means that the Wireless LAN 802, 11g2 Enhanced NIC configuration is invalid or incomplete.



Select the profile you want to use for your network connection.
 -OR-

Click on the following:

- The tabs to navigate through the different settings.
- The X button to minimize the window.
- The More... button to get more information.

#### Link Information tab



Fields on the Link Information tab include:

Connected To Network—This field displays the current status of the connection. Possible status messages include:

- Connected to Network—Indicates normal flow of operation in Infrastructure mode. The computer is connected to an access point and networking is available.
- Scanning—Indicates the computer is searching for an available access point within range.

Note: This field also displays error messages if the driver fails to initialize. Network Type—Possible network types include:

- Infrastructure Mode—The driver scans all available channels continuously until it finds one or more access points that match its SSID (network name). At that point it tries to authenticate and associate with the access point.
- Peer to Peer Mode—The driver scans for five seconds looking for an existing Ad Hoc network using the same SSID.

Channel—Displays the channel the network is on.

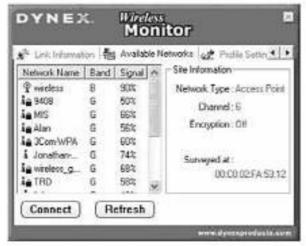
Encryption—Displays Off when encryption is turned off, WEP when either 64-bit or 128-bit is turned on, or WPA when WPA is turned on. Link Speed —Displays the current connection data rate.

Signal Strength—The Signal Strength bar graph is only active when the network is in infrastructure mode. The bar graph displays normalized signal strength as reported by the radio, averaged over all frames over 100 bytes long that are received from the access point.

Link Quality—The Link Quality bar graph is only active when the network is in infrastructure mode. The bar graph displays the quality of the link between the computer and access point.

#### Available Networks tab

The Available Networks tab shows the current status of available access points within the network and lets you select which access point you want to connect to.

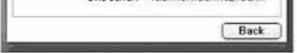


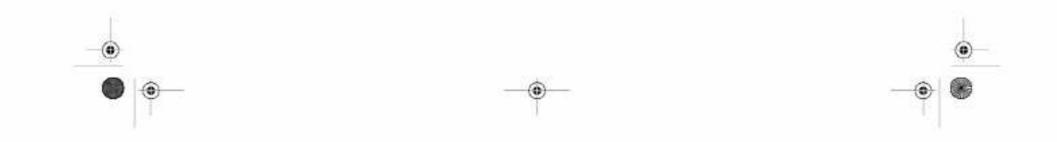
To connect to an access point:

- Select an access point from list.
- 2 Click Connect to connect to the access point.

If the access point you want to connect to is not listed, click Refresh to rescan the network and list all available access points within network.

Configuring the wireless network





#### Configuring the wireless network

#### Connecting to a network

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#### To connect to a network:

1 Click Connect on the Available Networks tab. The following screen opens.

Network Name :	Setting Twos	-
Network Type :	1 Access Point	
Transfer Bate :	Automatic	
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- 2 Set the values of the following fields:
- Network Name—Type a name for the new profile.
   Network Type —Select from the list of supported network types. Supported types include:
  - Peer to Peer—This is the 802.11g2 Enhanced peer-to-peer mode (also known as Ad Hoc). Only one wireless cell is supported for each different SSID. All communication is done from client to client without the use of an access point. 802.11g2 Enhanced Ad Hoc networking uses the same SSID for establishing the wireless connection.
  - Access Point—This mode requires an 802.11g2 Enhanced or 802.11b access point. All communication is done through the access point, which relays packets of information to other wireless computers as well as to computers on a wired network (such as Ethernet).
- Transfer Rate—The transmission rate at which the access point transmits the data packets. You may set this to:
  - fixed 1 Mbps, fixed 2 Mbps, fixed 5.5 Mbps, fixed 11 Mbps, or Automatic if you are using an 802.11b access point.
  - fixed 6 Mbps, fixed 9 Mbps, fixed 12 Mbps, fixed 18 Mbps, fixed 24 Mbps, fixed 36 Mbps, fixed 48 Mbps, fixed 54 Mbps, or Automatic If you are using an 802.11g2 Enhanced access point.
- 3 Click Next. The following screen opens.

Autho	ntication Mode :	Open System	
	Encryption :		
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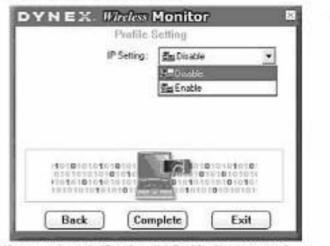
5 Click Next. The following screen opens.



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When encrypted information is received it is only accepted if it decrypts correctly. This happens only if the computer has the WEP Key used by the access point. This screen lets you enter the WEP key.

- 6 Set the values of the following fields:
- Input Method Select the input method that matches the input method used by the access point.
- Key—Enter the WEP Key. This key must be the same as the key used by the access point. It must be between 8 and 63 characters long.
  - Note: Use only the digits 0-9 and letters A-F for the key.
- Key Index—Select the key index that matches the key index used by the access point.
- 7 Click Next. The following screen opens.

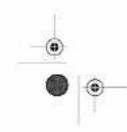


8 If you want to set the IP setting, dick Enable, then go to step 9. -0R-

If you want the IP setting to be set up automatically, click Disable, then dick Complete. You are finished.



- 4 Set the values of the following fields:
- Authentication Mode—Use the default authentication mode.
- Encryption—Use the default encryption.





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#### 9 Click Next. The following screen opens.

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DHCP Status	© Enable		3
IP Address :	@ Enable	-	
Subnet Mark	Disable	ũ.,	
Default Gaterray:		13	-
DNS Server:			
IP:8.x.x.N Submet Mank:8.x.x.s DNS:8.x.x.x	12		

The purpose of this screen is to configure the TCP/IP setting of each wireless connection. You must define if the current profile's IP setting is assigned by a DHCP server or assigned by a fixed IP that is determinate by the Network Administrator.

- 10 Set the values of the following fields:
- DHCP Status—Select Enable if the TCP/IP information is assigned by a DHCP Server. Select Disable if you would like to specify the IP address manually.
- IP Address—Enter the IP address for the network card.
- Subnet Mask—Enter the subnet mask for the network card. The default is 255.255.255.0
- Default Gateway—Enter your network's default gateway's IP address.
- DNS Server—Enter the domain name system server's address.
- 11 Click Complete. You are finished.

### Profile Setting tab

The Profile Setting tab lets you create profiles for different network environments.



#### On this tab, you can click the following buttons:

- Add to create new profile.
- Edit to edit the currently highlighted profile.
- Delete to delete the currently highlighted profile.
- Connect to connect to a network using the currently highlighted

## About tab

The About tab shows the product version including details of the driver, application, and firmware versions. You must use this version number when reporting problems to Dynex.



# Troubleshooting

### Windows 98

To make sure that the WLAN 802.11g2 Enhanced device is installed properly:

1 Click Start, Settings, Control Panel, then Network. Click the Configuration tab. If you find the WLAN 802.11g2 Enhanced card listed. It means the card is installed properly. If you see a yellow question mark, it means there is a resource conflict. -OR-

Right-click on the My Computer desktop icon, then select Properties. Click Device Manager, then click on Network Adapter. If you find the WLAN 802.11g2 Enhanced card listed, it means the card is installed properly. If you see a yellow question mark, it means there is a resource conflict.

- 2 Click on the card and then on the card service. You will see the status of the card. If there is a yellow sign either on the card, check the following:
  - Check to see if your computer has a free IRQ. Free an IRQ by assigning the same IRQ to some devices. For example COM 1 and COM 2 can be assigned the same IRQ values.
  - Make sure that you have inserted the correct card and have installed the correct driver.

#### Windows 2000

To make sure that the WLAN 802.11g2 Enhanced device is installed properly:

- Use Windows 2000 Diagnostics to see if there is any conflict in the 1 resource allocation of the I/O Address or IRQ allocations. If you find that the IRQ or I/O Addresses are already assigned to other devices, you must change that value. The I/O Address must be 40h bytes long.
- 2 Go to the Control Panel. Double-dick on the card and view the WLAN card. Double-dicking on the card shows you the card information, driver name, and the driver file. If you do not find the names, there are some problems and the driver is not installed



correctly. Reinstall the driver.

3 Check the PnP BIOS setup menu, then click No.



## Federal Communication Commission Interference 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.

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

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.

## **IMPORTANT NOTE:**

## FCC & IC Radiation Exposure Statement:

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

SAR compliance has been established in typical laptop computer(s) with CardBus slot, and product could be used in typical laptop computer with CardBus slot. Other application like handheld PC or similar device has not been verified and may not compliance with related RF exposure rule and such use shall be prohibited.

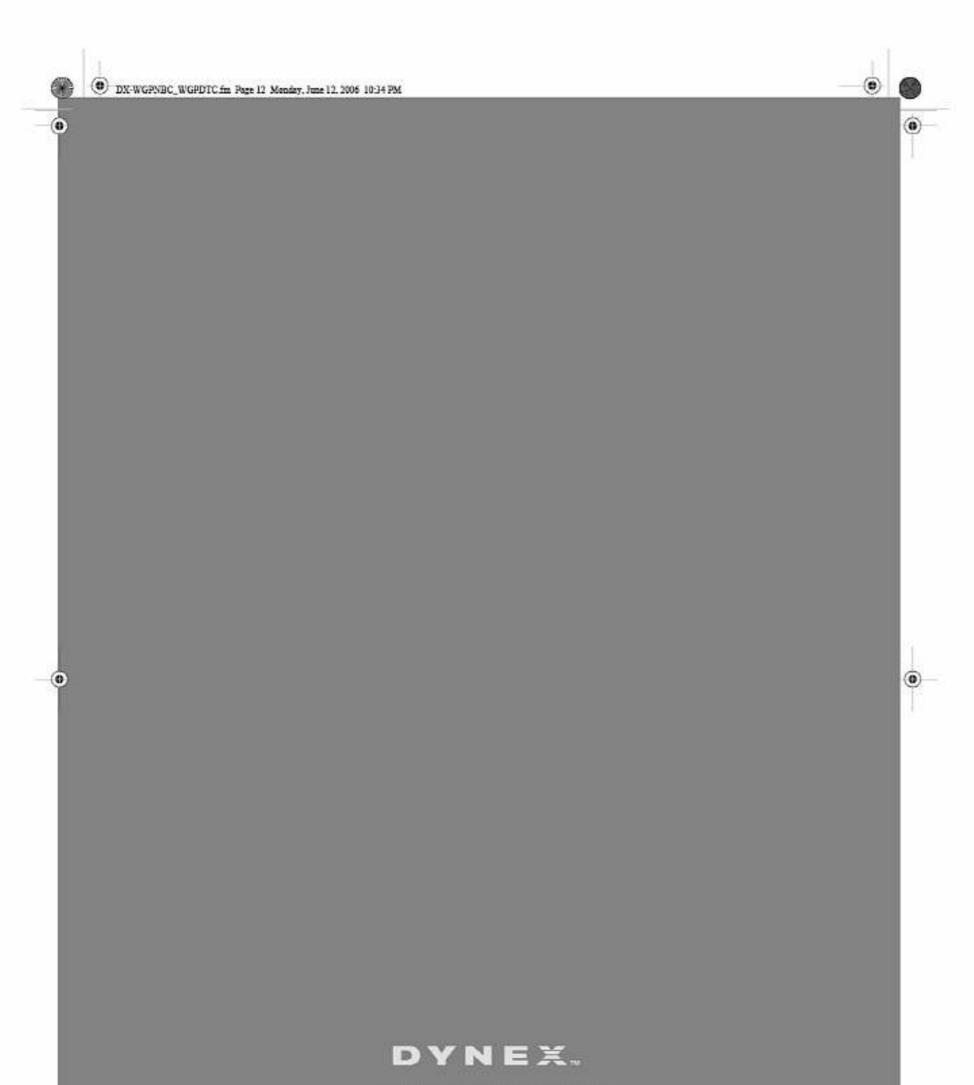
Dynex declares that DX-WGPNBC (FCC ID: MXF-P950602G) is limited in CH1~CH11 for 2.4 GHz by specified firmware controlled in U.S.A.

# **IC statement**

### IC 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.



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