

802.11b Wireless CardBus PC Card

Quick Installation

INSTALLATION

Caution: Do not insert the **Wireless PC Card** into your computer until the procedures in **“Install the Driver & Utility”** has been performed.

Install the Device

1. Locate the CardBus slot of your system.
2. Align the Wireless PC Card in the CardBus slot. Push evenly and slowly until it is seated.
3. Once the device has been connected to your computer, Windows will detect the new hardware and then automatically copy all of the files needed for networking.

Install the Driver

In Windows 98

1. In **Add New Hardware Wizard**, click **Next**.
2. Select **Search for the best driver for your device (Recommended)**. Click **Next**.
3. Insert the supplied CD-ROM into the CD-ROM drive. Select **Specify a location:** and click **Browse** to provide the appropriate path (e.g. **D:\WIN98**). Click **Next**.
4. Click **Next**, Windows will copy all the necessary files to your system.
5. If you are asked to insert **Windows 98** CD-ROM, please do so. Click **OK**.
6. Click **Finish** to complete the installation.

7. When Windows prompts you to restart your computer, click **Yes**.

In Windows ME

1. Select **Specify the location of the driver (Advanced)**, click **Next**.
2. Insert the supplied CD-ROM into the CD-ROM drive. Select **Search for the best driver for your device (Recommended)** and click **Browse** to provide the appropriate path (e.g. **D:\WINME**.) Click **Next**.
3. Click **Next**, Windows will copy all the necessary files to your system.
4. Click **Finish** to complete the installation.
5. When Windows prompts you to restart your computer, click **Yes**.

In Windows 2000

1. In **Found New Hardware Wizard**, click **Next**.
2. In **Install Hardware Device Drivers**, select **Search for a suitable driver for my device (recommended)**, click **Next**.
3. Insert the supplied CD-ROM into the CD-ROM drive. Select **Specify a location**, click **Next**.
4. Click **Browse** to provide the appropriate path (e.g. **D:\WIN2000**). Click **OK**.
5. Click **Next**, Windows will copy all the necessary files to your system.
6. In **Digital Signature Not Found** window, click **Yes** to continue.

Click **Finish** to complete the installation.

In Windows XP

1. Select **Install from a list or specific location (Advanced)** and click **Next**.
2. Insert the supplied **CD-ROM** into the CD-ROM drive. Select **Include this location in the search:** and click **Browse** to provide the appropriate path (e.g. **D:\WINXP**). Click **Next**.
3. Click **Continue Anyway** to proceed. Windows will copy all the necessary files to your system.
4. Click **Finish** to complete the installation.

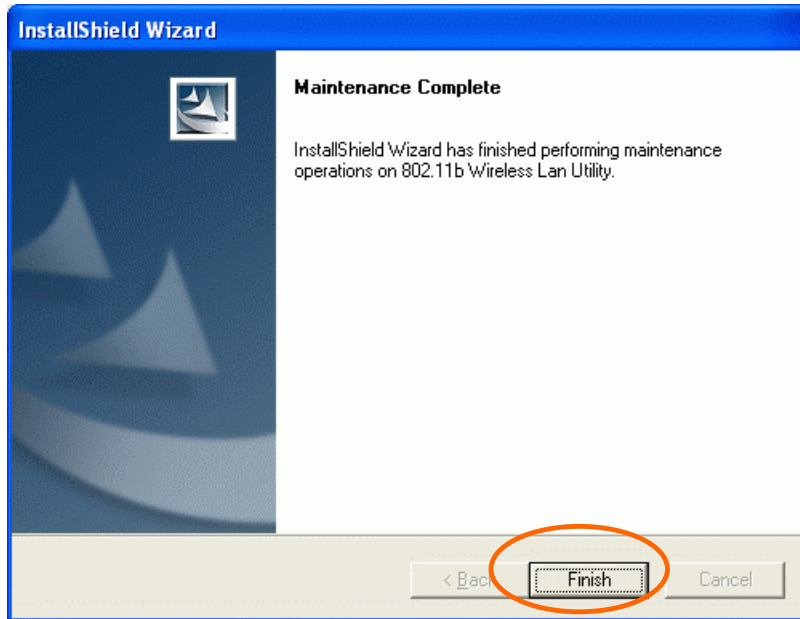
Verify

To verify if the device exists in your computer and is enabled, go to **Start → Settings → Control Panel → System (→ Hardware) → Device Manager**. Expand the **Network adapters** category. If the **802.11b Wireless LAN CardBus (Mini-) PCI NIC** is listed here, it means that your device is properly installed and enabled.

Install the Utility

1. Insert the supplied **CD-ROM** into the CD-ROM drive. Double click on **Setup.exe** to install the **Wireless LAN Utility**.
2. When the **Welcome** screen appears, click **Next** to continue.
2. In **License Agreement**, click **Yes** to accept the terms.

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



NETWORK CONNECTION

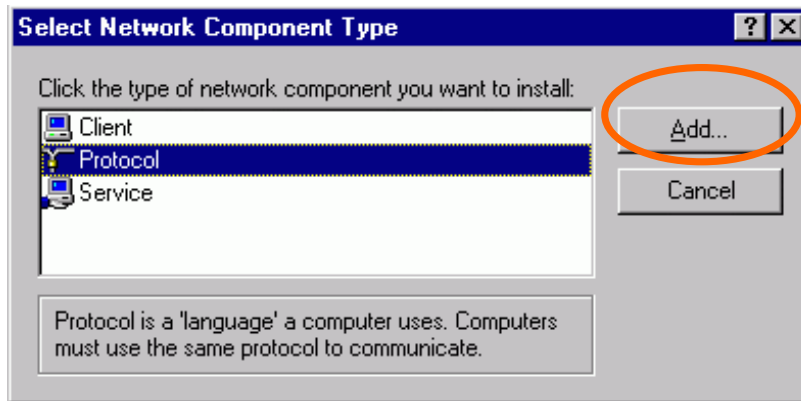
Once the driver has been installed, you must make some changes to your network settings.

In Windows 98/ME

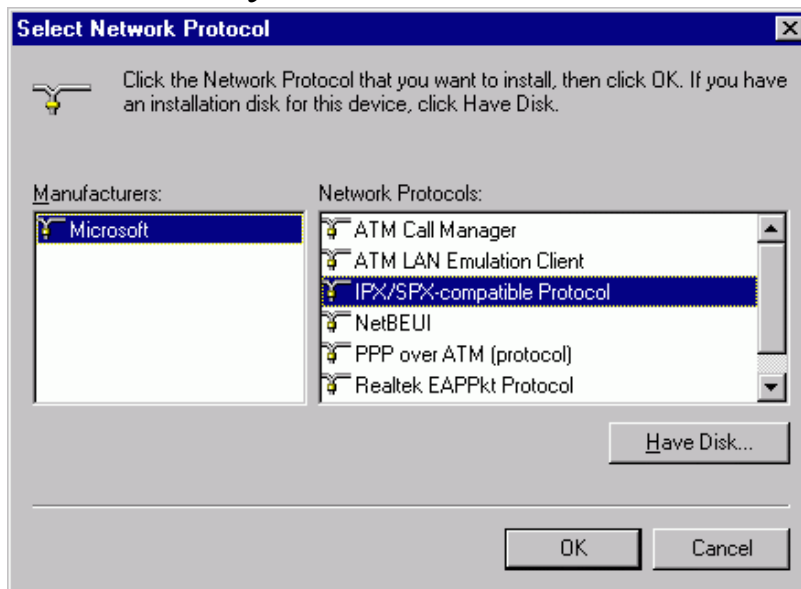
1. Go to **Start → Settings → Control Panel → Network**.
2. Make sure that the following components are installed.
 - **802.11b Wireless LAN CardBus(Mini-) PCI NIC**
 - **IPX/SPX-compatible Protocol**
 - **NetBEUI**
 - **TCP/IP**

If any components are missing, click on the **Add** button to add them in. All the protocols and clients required and listed above are provided by Microsoft.

3. After clicking **Add**, highlight the component you need, click **Add**.

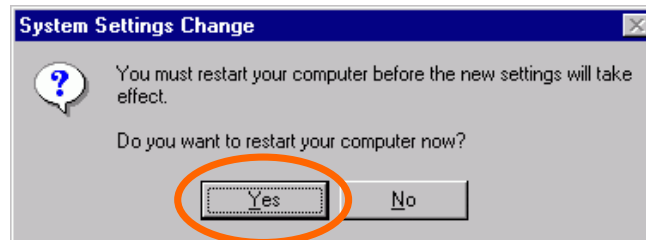


4. Highlight **Microsoft**, and then double click on the item you want to add. Click **OK**.



5. For making your computer visible on the network, enable the **File and Print Sharing**.
6. Click the **Identification** tab. Make up a name that is unique from the other computers' names on the network. Type the name of your workgroup, which should be the same used by all of the other PCs on the network.
7. Click the **Access Control** tab. Make sure that "**Share-level access control**" is selected. If connecting to a Netware server, share level can be set to "**User-level access control.**"

8. When finished, restart your computer to activate the new device.



9. Once the computer has restarted and Windows has booted up, a **Logon** window will appear and require you to enter a username and password. Make up a username and password and click **OK**. Do not click the **Cancel** button, or you won't be able to log onto the network.
10. Double-click the **Network Neighborhood** icon on the windows desktop, and you should see the names of the other PCs on the network.

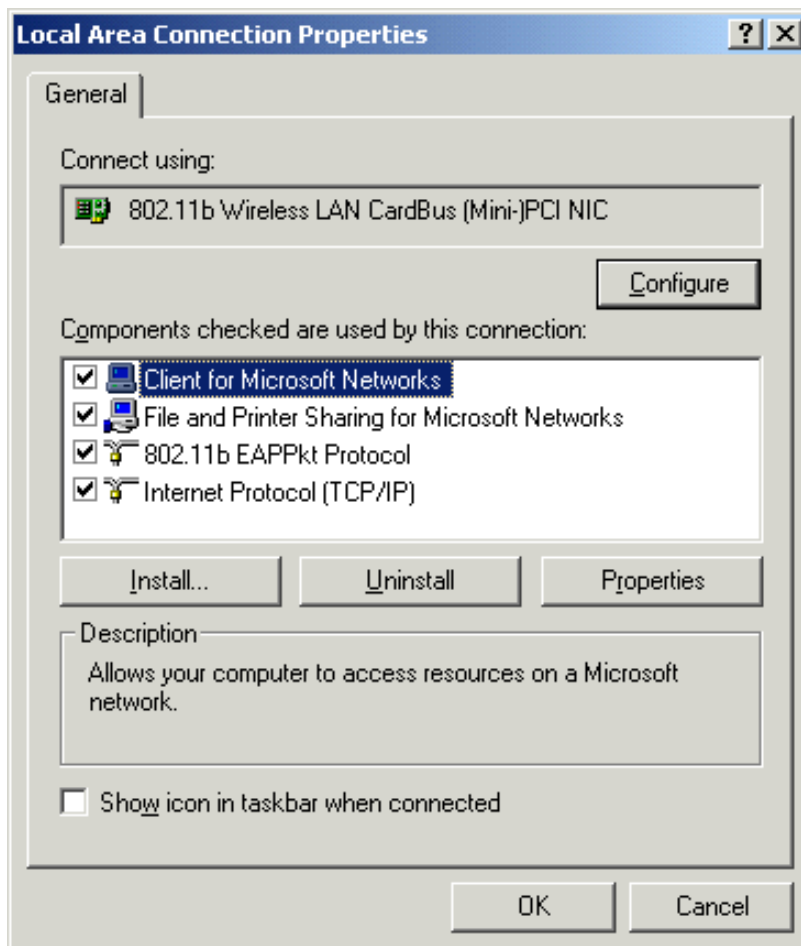
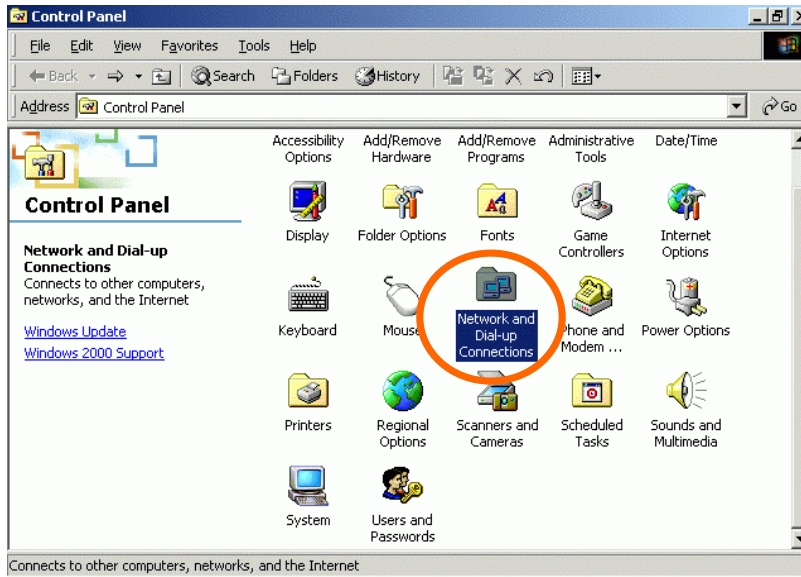
In Windows 2000/XP

1. (In **Windows 2000**)

Go to **Start** → **Settings** → **Control Panel** → **Network and Dial-up Connections** → **Local Area Connection** → **Properties**.

(In **Windows XP**)

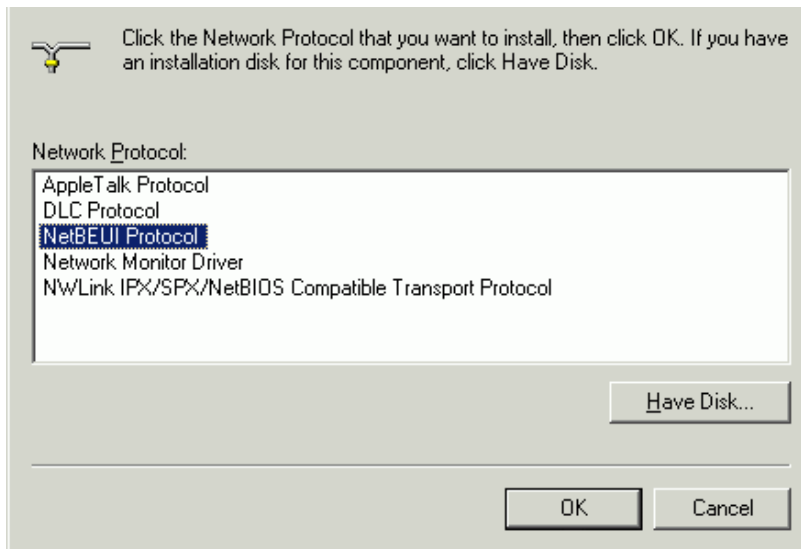
Go to **Start** → **Control Panel** → **Network Connections** → **Wireless Network Connection Enabled 802.11b Wireless LAN CardBus(Mini-) PCI NIC** → **Properties**.



2. Make sure that you have all the following components installed.

- **Client for Microsoft Networks**
 - **NWLink NetBIOS**
 - **802.11b EAPPkt Protocol**
 - **Internet Protocol (TCP/IP)**
3. If any components are missing, click on the **Install...** button to select the **Client/Service/Protocol** required. After selecting the component you need, click **Add...** to add it in.





4. For making your computer visible on the network, make sure you have installed **File and Printer Sharing for Microsoft Networks**.
5. When finished, you must restart your computer to complete the installation.

CONFIGURATION

After successful installation of the Wireless PC Card's Driver and Utility, a **Network Status** icon



will display in the system tray. Meanwhile,

a **Utility Shortcut** icon




will appear on the

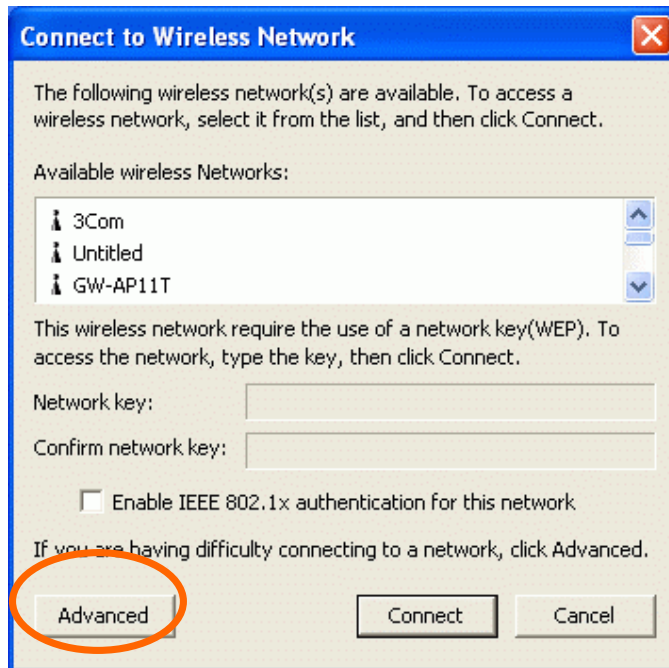
desktop.

Accessing the Configuration Utility



Double-click on  to open the Configuration Utility.

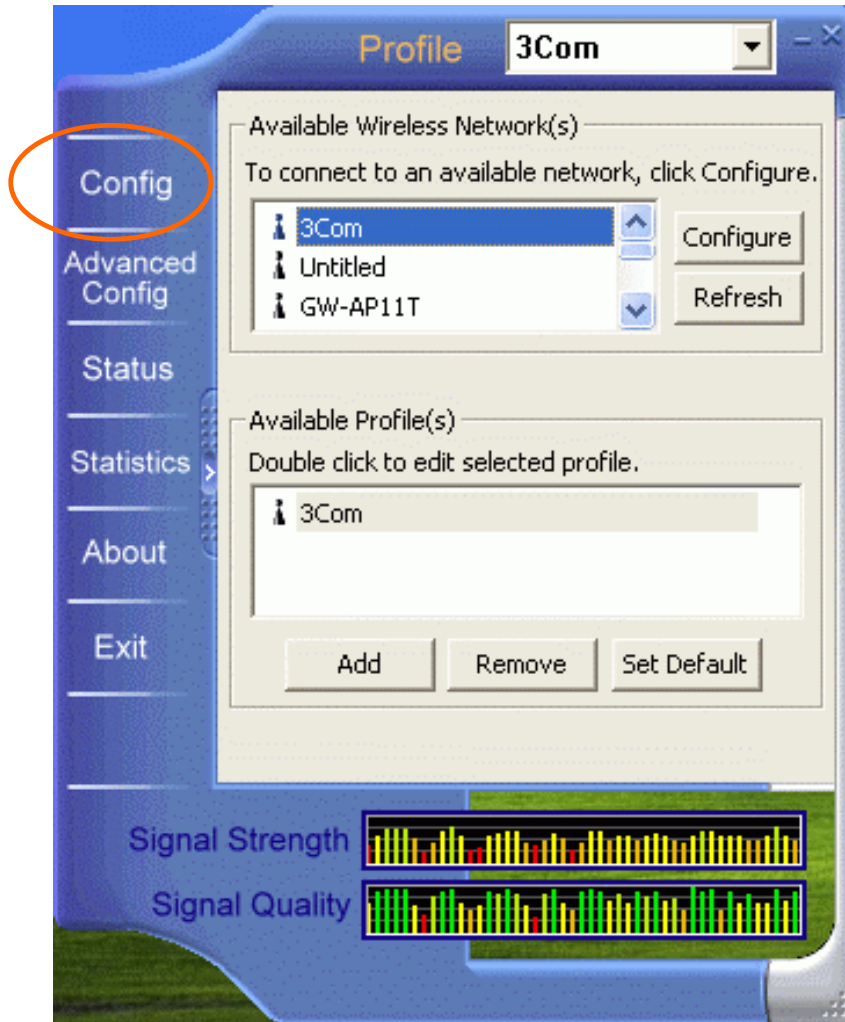
Click **Advanced** to enter the Configuration Window.



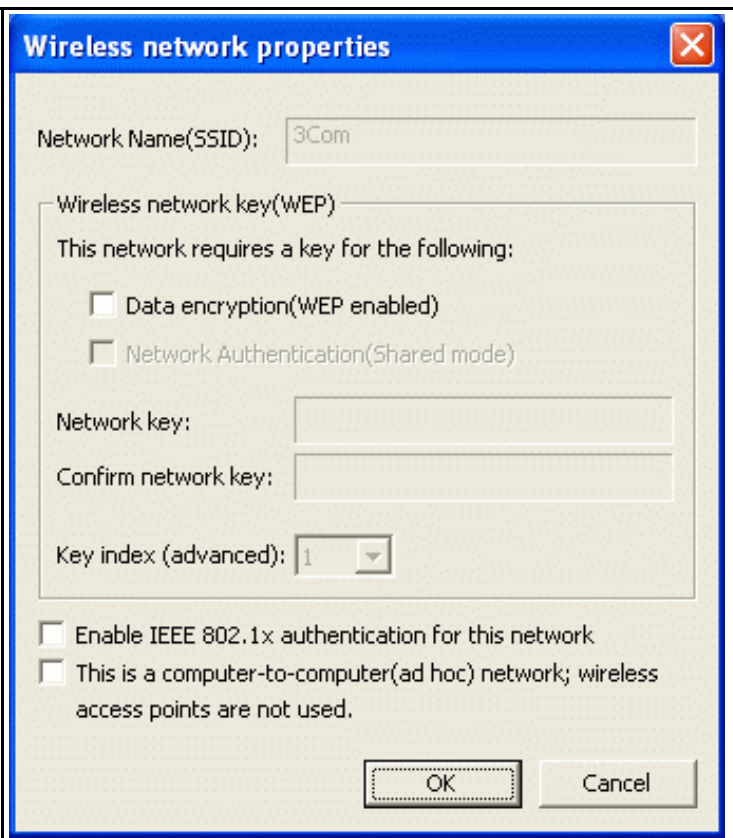
All settings are categorized into 6 Tabs:

Config Tab

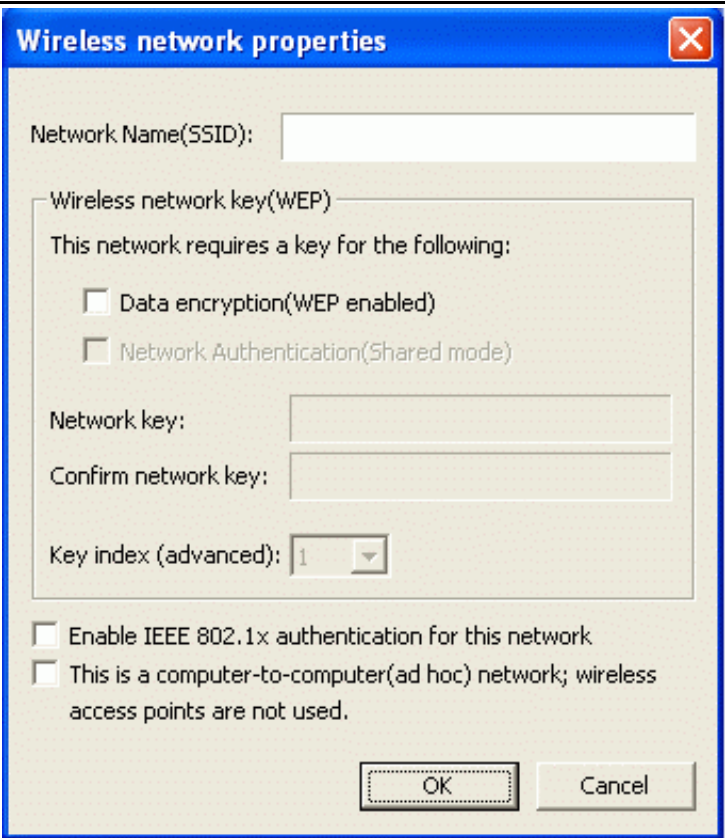
The **Config** tab allows you to configure WEP encryption and add/remove Profile(s).



Item	Description
Available Wireless Network(s)	Displays all available networks.
Configure	Highlight an available network, click Configure to set up WEP encryption (see diagram below).

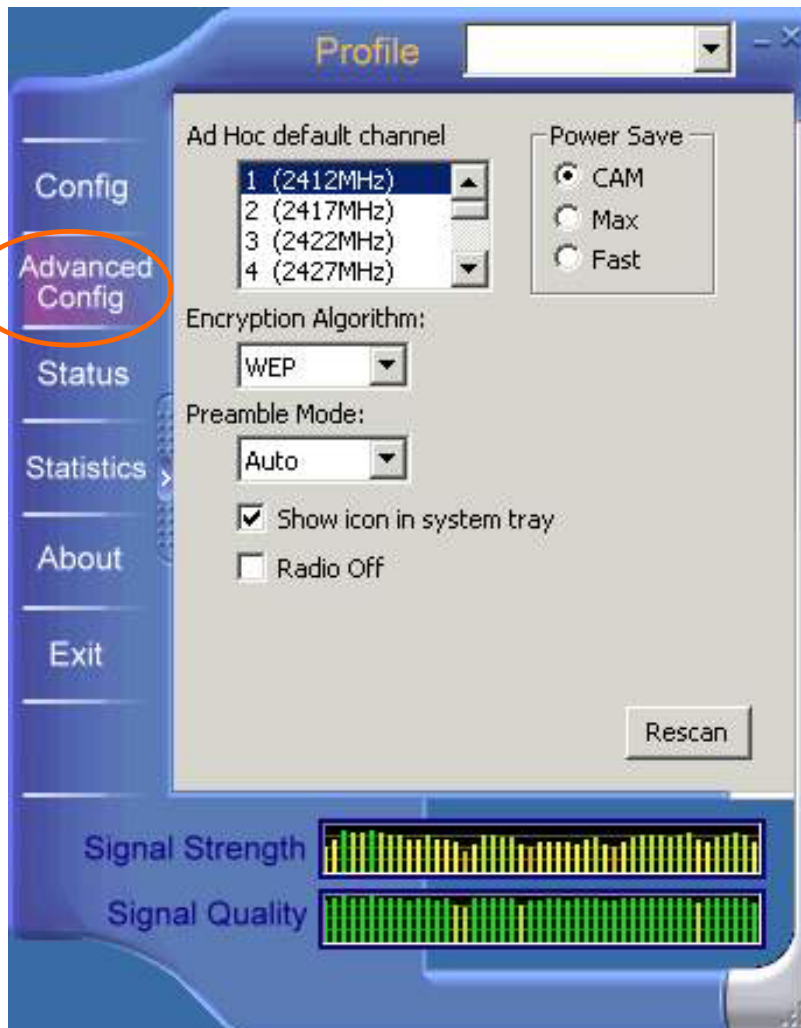
	
<p>Refresh</p>	<p>Click the button to refresh and search for all available networks.</p>

Item	Description
<p>Available Profile(s)</p>	<p>Displays all available profiles.</p>
<p>Add</p>	<p>Click the button and the Wireless Network Properties window will appear. In the Network Name (SSID) field, enter your desired network name listed in the above Available Wireless Network(s) box, and click OK.</p>

	
<p>Remove</p>	<p>Highlight the unwanted profile listed in the Available profile(s) box, and click the button to remove it.</p>
<p>Set Default</p>	<p>Highlight a profile, click the button to set it as a default profile.</p>

Advanced Config Tab

The **Advanced Config** Tab allows you to change advanced configuration settings, such as the **Ad Hoc default channel**, **Power Save** and **Radio Off**.



Item	Description
Ad Hoc default channel	Select the appropriate channel from the list provided to correspond with your network settings. All devices

	in the wireless LAN must be configured to share the same radio channel in order to function properly.
Power Save CAM (Constantly Awake Mode)	<p>Keeps the PC card powered up continuously so there is little lag in message response time.</p> <p>Consumes the most power but offers the highest throughput. Is recommended for desktop computers and devices that use AC power.</p>
Max (Power Save Mode)	<p>Causes the access point to buffer incoming messages for the client adapter, which wakes up periodically and polls the access point to see if any buffered messages are waiting for it. The PC card can request each message and then go back to sleep.</p> <p>Conserves the most power but offers the lowest throughput. Is recommended for devices which power consumption is the ultimate concern (such as small battery-powered devices).</p>
Fast (Power Save Mode)	<p>Switched between PSP mode and CAM mode, depending on network traffic. This mode switched to CAM when retrieving a large number of packets and switches back to PSP after the packets have been retrieved.</p> <p>It is recommended when power consumption is a concern but you need greater throughput than that allowed by Max PSP.</p>
Encryption Algorithm	<p>WEP (Wired Equivalent Privacy)</p> <p>AES (Advanced Encryption Standard)</p>

	<p>TKIP (Temporal Key Integrity Protocol)</p> <p>Select one from the list to ensure the security of your wireless network.</p>
Preamble Mode	<p>A preamble is a signal used in wireless environment to synchronize the transmitting timing including Synchronization and Start frame delimiter. (Note: Please check the setting of AP first.)</p>
<input checked="" type="radio"/> Auto	<p>Select Auto for the USB adapter to select the Preamble type automatically depending on the Access Point Preamble type.</p>
<input checked="" type="radio"/> Long	<p>In a "noisy" network environment, the Preamble Type should be set to Long Preamble.</p>
<input checked="" type="radio"/> Short	<p>The Short Preamble is intended for applications where minimum overhead and maximum performance is desired. In a "noisy" network environment, the performance would be decreased.</p>
<input type="checkbox"/> Show icon in System Tray	<p>Check this box to show icon in system tray.</p>
<input type="checkbox"/> Radio Off	<p>Check/Uncheck this box to disable/enable the radio module function of the Wireless PC Card.</p>
<input type="button" value="Rescan"/>	<p>Searches for all available networks. Click this button to rescan and issue an updated list of all available sites.</p>

Status Tab

The **Status** Tab displays basic link information, including **Channel Set**, **MAC Address**, **Network Type** and **Power Save Mode**.

The screenshot shows a network utility window with a sidebar on the left containing menu items: Config, Advanced Config, Status (circled in orange), Statistics, About, and Exit. The main area displays the following information:

Manufacturer	= CardBus
NDIS Driver Version	= 5.130.0313.2003
Using Short Radio Headers	= No
WEP Status	= Disabled
Authentication Type	= Auto Switch
Channel Set	= FCC
MAC Address	= 00:E0:98:11:11:17
1 Mbps Data Rate	= Basic
2 Mbps Data Rate	= Basic
5.5 Mbps Data Rate	= Basic
11 Mbps Data Rate	= Basic
Channel (Frequency)	= 0 (0 MHz)
Status	= Associated
SSID	= Londa
Network Type	= Infrastructure
Power Save Mode	= CAM
Associated AP MAC	= 00:E0:98:00:48:13
Associated AP IP	=
Up Time (hh:mm:ss)	= 0:08:48

At the bottom of the window, there are two signal indicators: "Signal Strength" and "Signal Quality", each represented by a horizontal bar chart with green bars of varying heights.

Statistics Tab

The **Statistics** tab shows the available statistic information. Press **Reset** button to renew this list of statistics.

The screenshot shows a software interface with a 'Profile' dropdown menu at the top. On the left side, there is a vertical menu with options: 'Config', 'Advanced Config', 'Status', 'Statistics' (circled in orange), 'About', and 'Exit'. The main area displays a table of statistics:

Counter Name	Value
Tx OK	100
Tx Error	0
Tx Retry	15
Tx Beacon OK	0
Tx Beacon Error	0
Rx OK	145
Rx Packet Count	7806
Rx Retry	62
Rx CRC Error(0-500)	3649
Rx CRC Error(500-1000)	0
Rx CRC Error(>1000)	3770
Rx ICV Error	0

At the bottom right of the table area, there is a 'Reset' button. Below the table, there are two signal indicators: 'Signal Strength' (represented by a yellow bar graph) and 'Signal Quality' (represented by a green bar graph).

About Tab

Click on the **About** tab to view basic version information about the **Configuration Utility**.



Exit Tab

Click on the **Exit** tab to exit the application.