



Wireless LAN Client Quick Setup Guide

PCMCIA WLC030

USB WLL013



This Quick Set-Up Guide provides you with the basic instructions for setting up these wireless adaptors on your computer. The complete user manual that includes an illustrated step-by-step guide can be found on this CD.

1 Introduction

A Wireless Local Area Network (WLAN) serves the same purpose as a conventional wired Ethernet network (LAN) but without the wires. Computers are linked together by radio waves. The wireless adaptor is your “wireless network card”. It turns your computer into a wireless station, allowing it to connect to other wireless stations or wireless access points to share network resources including Internet access. Your wireless adaptor is Wi-Fi certified to the IEEE 802.11b standard. This ensures wireless connectivity among all wireless equipment that meets the same 802.11b standard irrespective of vendor.

THIS PRODUCT CAN BE SET UP ON TWO TYPES OF WIRELESS NETWORKS

1. Infrastructure network

In an infrastructure network, your wireless adaptor connects your computer to a wired network via a wireless access point. This enables your computer to share all available resources including Internet access and peripherals on the wired network.

2. Ad-hoc (peer to peer) network

This is a computer network built of wireless stations. Your wireless adaptor connects your computer to other wireless stations for file sharing.

WIRELESS PRIVACY

Privacy is an important issue with wireless. These functions are provided for access control and security:

1. Service Set ID (SSID)

This is a user specified name that uniquely identifies a wireless domain. You must set your wireless adaptor to use the SSID for the wireless network.

2. Wired Equivalent Privacy (WEP) is an authentication algorithm that protects users from eavesdropping. When enabled, all wireless stations always transmit data encrypted using a key of your choice. The receiving station will use the same key for decryption.

2 Installing the Wireless Adaptor

IMPORTANT: Do not connect the wireless adaptor to your computer before installing the supplied software from the manufacturer's CD. Otherwise if you connect the adaptor to your computer Windows would pop up a message box requesting the driver in which case click Cancel to proceed.

Windows XP comes with built in wireless adaptor software. You only need to follow section 2.2 to install the driver. Please skip the procedure in section 2.1.

2.1 INSTALLING THE SOFTWARE

1. Exit from all currently running programs.
2. Insert the provided manufacturer's CD into your drive. A menu will launch. If it fails to load automatically, click **Start - Run** and enter **d:\run.exe** (substitute d: with your CD drive letter) then **OK**.
3. Select **Install Driver and Utility** from the menu.
4. Then **Next**. Select **One Click Installation - OK**. The program will look after the install automatically.
5. Click **Finish** to complete installation.

2.2 INSTALLING THE ADAPTOR

After installing the software, insert the WLC030 into the PCMCIA slot or plug the WLL013 into the USB port of your computer.

Windows 98, 98SE, ME & 2000:

- Windows will detect and install the driver automatically.
- Windows 98: You need to insert your Windows 98 CD to complete the driver installation.
- Windows 2000: When the **Digital Signature not Found** message appears, click **Yes**.

Windows XP only

1. Windows will report **Found New Hardware**. Select **Install from a list or specific location [Advanced] - Next**. Click **Browse** then **My Computer**:
WLC030 PCMCIA card: Browse to **D:\Utility\Driver\PCMCIA\WinXP**
WLL013 USB adaptor: Browse to **D:\Utility\Driver\USB\WinXP**
(Substitute D: with your CD drive letter)
2. Click **Next** then **Continue Anyway** to proceed.
Windows will start copying drivers. Click **Finish** to complete installation.

All Windows users should now follow the next section to configure the adaptor properties.

3 *Configuring Wireless Adaptor Properties*

Before you start you need to know:

1. The type of network you are connecting to, infrastructure or ad-hoc.
2. The SSID of the network you are connecting to.

The SSID is already determined on an existing network by the network administrator. You will have to set up your adaptor in order to comply with the network. Only when you are setting up a new network, is there an option on the SSID.

3.1 WINDOWS 98, 98SE, ME & 2000

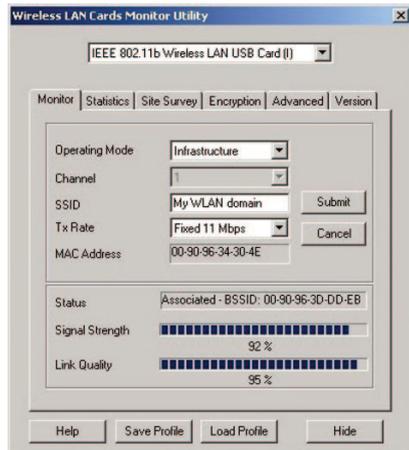
Pages 17-33 of the User's Manual on CD describe every individual function of the utility. Please refer to these pages for all the details if necessary.

Go to **Start - Programs - Wireless LAN Card - Configuration & Monitor Utility**. The utility appears as an icon on the system tray. Double-clicking this icon will open it.

Connecting to a wireless access point (infrastructure mode)

1. Select the **Monitor** tab.
2. In **Operating Mode**, select **Infrastructure**.
3. In **SSID**, enter the SSID.
All wireless clients must use the same SSID as the access point.
4. Click **Submit**.

Your adaptor will automatically find the channel number to which the access point is set. quality indicators are displayed. **Status** indicates the MAC address of the access point your computer is associated with.



Connecting to other wireless stations (ad-hoc or peer-to-peer mode)

1. Click the **Monitor** tab.
2. In **Operating Mode**, select **Ad-Hoc**.

4. In **SSID**, enter the SSID. All wireless clients must use the same SSID in order to communicate with each other.
5. Click **Submit**.

The wireless link quality indicators are not available for this mode.

3.2 WINDOWS XP ONLY

Pages 34-42 of the User's Manual on CD describe every individual function of the utility. Please refer to these pages for all the details as required.



Your wireless adaptor uses the Windows built in **Wireless Network Connection** utility for configuration and monitoring. The utility can be accessed via the **Network Connection** icon on the system tray.

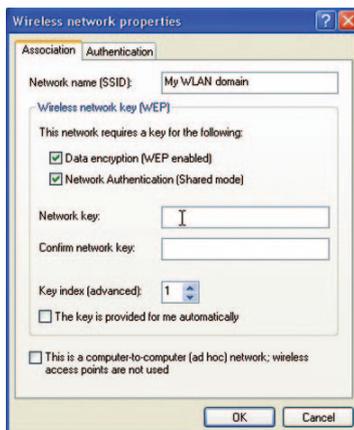
Connecting to an existing access point or wireless station

1. Double click the Network Connection icon to open the **Connect to Wireless Network** window. You will see all the access points or wireless stations that are available.
2. Select the access point or wireless station you intend to connect to.
3. If the target network has been set with WEP, you must enter the same WEP key in the **Network key** field. Otherwise leave blank. If WEP is not used, tick the **Allow me to connect...** box
4. Click **Connect** to join the target network.

After successful connection to the target network, double-click the icon on the system tray again. The **Wireless Network Connection Status** window displays the link status.

that you wish to connect to. Open **Wireless Network Connection Status** window, click **Properties**. Select the **Wireless Networks** tab. Under the **Preferred networks** section, click **Add**. Enter necessary network settings such as SSID and, if required, the network's WEP settings. You must enter the same WEP key already in use by the network.

Please make sure in the **Authentication** tab **Enable network access control using IEEE802.1X** is disabled.



4 Setting Up Wireless Privacy

4.1 WEP

WEP is for protection against eavesdropping and prevention of access from unauthorised wireless stations. Both 64 and 128 bit encryption are supported. The 128 bit option is more secure but it impacts more on the effective throughput of the network than the 64 bit option.

The WEP setting is determined on an existing network by the network administrator. Only if you are setting up a new network there is the option on the WEP setting.

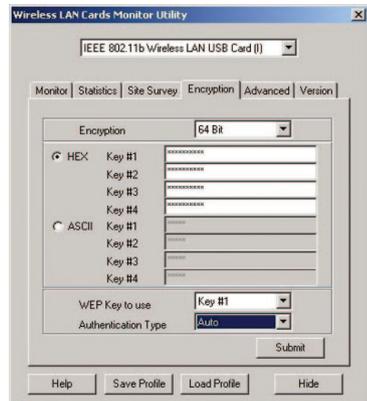
Before you start you should know:

1. The type of encryption, 64 or 128-bit.
2. The encryption keys.
3. The key number to be used.
4. Open or shared key authentication.

These settings must be identical to those on the access point or wireless stations. If the network you are connecting to uses no encryption, go to **Encryption** and check that the setting is disabled.

If the network is protected by WEP:

1. Select **Encryption** from the **Wireless LAN Cards Monitor Utility**.
2. Choose **64** or **128 Bit** encryption.
3. Enter the WEP keys in either **HEX** or **ASCII**. Note that in HEX format only digits 0-9 and letters A-F are accepted. The four keys, including the one selected as **WEB Key to use**, are used to decrypt the data you receive.
4. In the **WEP Key to use** box, select the key number to encrypt data.
5. Select **Open System** or **Shared Key** for authentication type. To enable the settings, click the **Submit** button.



4.2 MAC ADDRESS FILTERING OR ASSOCIATION CONTROL

Some access points block access from unauthorised clients by registering the MAC address of all authorised clients. If the network uses this function you must

supply the MAC address of your adaptor to the network administrator for inclusion into the access point's list of authorised users. The MAC address of your adaptor is printed on a barcode label affixed to the product. The label reads MAC:009096-xxxxx. 009096 is the first half of the address.

5 *Uninstalling the device and software*

Removing adaptor hardware from computer

It is recommended that you follow the standard Windows procedure for disconnecting a PCMCIA or USB device from your computer.

1. Double click the **Safely Remove Hardware** icon on system tray.
2. Select the device, click **Stop** and then **OK**.
3. When the safe to remove message is displayed, click **OK** and remove device.

Uninstalling the wireless adaptor software

Please remove the adaptor before uninstalling software. Windows XP users who are using the Windows built in utility will not require this procedure.

1. Exit from all currently running programs.
2. Go to **Start - Programs - Wireless LAN Card - Configuration & Monitor Utility**.
3. Click **Uninstall Configuration & Monitor Utility**.
4. Click **OK** to confirm removal and **Finish**.

6 *Indicators and Antenna*

Wireless adaptor status lights

The two lights indicate connection status and data transfer status:

LED	COLOUR	STATE	DESCRIPTION
Power	Red	On	The adaptor is plugged into your computer
Activity	Green	Blinking	Transmission mode. The faster blinks, the higher the data rate

External antenna on the WLL013 USB adaptor

The USB adaptor comes with one powerful external antenna. It can be rotated from 0 to 180 degrees to obtain the best possible connection quality.

7 Troubleshooting

1. *Cannot connect to access point (infrastructure mode) or other wireless stations (ad-hoc mode)*

- ⊕ Check that the POWER light on the adaptor is on.
- ⊕ Make sure the adaptor and access points/wireless stations are using the same SSID.
- ⊕ If MAC address filtering (see section 4.2) is enabled at the access point, contact the network administrator to include your adaptor's MAC address into the list of authorised clients.
- ⊕ If WEP is used, make sure the same encryption (64- or 128-bit) is selected and the same WEP key table has been entered.
- ⊕ Incorrect IP Address or Subnet Mask. Check these settings in the **TCP/IP Properties** dialog box in the **Network Configuration** tab.
- ⊕ Restart computer.

2. *How to find the MAC address of my adaptor*

- ⊕ The MAC address of your adaptor can be read off the barcode label affixed on the product. The label reads MAC:009096-xxxxxx. 009096 is the first half of the address.
- ⊕ Alternatively if the adaptor is already installed go to the DOS prompt, type **ipconfig /all**. The MAC address is shown under **physical address** as a group of 6 double digits.

3. *Poor Link Quality*

If the link quality is poor, it may be due to:

- ⊕ Radio interference.
- ⊕ Distance between adaptor and access point/wireless station is too far.

4. *How to avoid radio interference*

Other wireless devices and appliances on site may share the same 2.4 GHz band. If undesirable effects are observed, try switching to a different channel. Alternatively, switch the other devices to use a different channel. Also try the following:

- ⊕ Move the computer to a different location or orientation. If the adaptor is USB, move the adaptor instead of the computer.

- ⊗ If the radio interference source is known, increase the separation between the wireless computers and the device causing the interference.
- ⊗ Do not share the same AC power socket between the computer and the device generating the interference.
- ⊗ Stay away from microwave sources (including microwave oven) and large metal objects.

Warranty



Dynamalink warrants this product against defects in materials and workmanship for a period of twelve months from the original date of purchase. We will, at our discretion, repair or replace the faulty unit, free of charge, provided it is returned to us with proof of purchase from an authorised dealer within the warranty period. Return delivery after repair will be paid for by Dynamalink. We reserve the right not to repair or replace goods that:

- ⊕ have been mishandled, abused or not installed according to the guidelines as outlined in the instructions.
- ⊕ have been subjected to a power surge from other equipment or other external factors.
- ⊕ have been altered or modified.

Help



Always check that your hardware is installed correctly. Check our web site for the latest information and troubleshooting guide. If you have difficulties, contact Dynamalink Technical Support for issues relating to installation and operation.

If possible, visit Dynamalink's on-line support area at:

New Zealand www.dynamalink.co.nz/support

Australia www.dynamalink.com.au/support



Contact Dynamalink's Technical Support:

New Zealand

Phone 0800 653 962

Fax 0800 503 962

(Monday-Friday: 8:30am-7:30pm)

Australia

Phone 1800 653 962

Fax 1800 063 962

(Monday-Friday: 8:30am-5:30pm)

