# Wireless Internet Gateway For Cable/xDSL

# User Guide

Web Edition Sep. 2002

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# **FCC Statement**

**Note:** This digital 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 when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the installation manual, 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 in, 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 in a circle different from that to which the receiver is connected
- Consult the dealer or an experience radio/TV technician for help

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.

# Warning:

Change or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# **CE Approved**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

# Introduction

This manual contains detail instructions on how to set-up and operate the wireless Internet gateway.

The Wireless Internet Gateway is compatible with the 802.11b standard, which supports speeds of up to 11Mbps. The high-powered antenna assures that wireless connections can even be established in large buildings.

This device is a breakthrough for SOHO (Small Office and Home Office) users who require a high speed Internet connection and the flexibility of a wireless LAN.

A high speed Internet connection can be easily established by simply connecting any Cable/XDSL modem to the wireless Internet Gateway.

The 4 port Wireless Internet Gateway is equipped with:

- One WAN Ethernet port (connect to any Cable/XDSL modem)
- 4 LAN Ethernet ports (connect to a PC client or a Hub)
- One asynchronous port (dialup backup or dialup Internet connection)

Once the WAN Ethernet is connected to a Cable/XDSL modem, the wireless Internet gateway will automatically negotiate an Internet connection with your ISP. SOHO, SMB (Small and Medium size Businesses) and ROBO (Remote Office and Branch Office) users will save cost by having their entire LAN share one high-speed Internet connection.

The asynchronous port can be connected to a 56K modem or to an ISDN TA, providing you with a backup Internet connection should the Cable/xDSL connection fails. If there is no Cable/xDSL service in your area, the asynchronous port can also serve as your Internet access connection.

# PACKAGE CONTENTS

Please inspect your package. The following items should be included:

- 1). Wireless Internet gateway (the Device)
- 2). Power adapter
- 3). Quick Installation Guide

If any of the above items are damaged or missing, please contact your dealer immediately.

# PRE- INSTALLATION CHECKLIST

# Before installing the Wireless Internet Gateway, you should:

- Have carefully read the entire manual.
- Be familiar with the terminology and concepts of browsers. (This guide works under the assumption that you are proficient with the browsers you are using).
- Have met all the hardware and software requirements.

# SYSTEM REQUIREMENTS

- Microsoft Internet Explorer 4.0 (or later version) or Netscape Navigator 4.0 (or later version)
- One computer with an installed 10Mbps, 100Mbps or 10/100Mbps Ethernet card
- One Modem or ISDN TA (if a dialup connection is needed)
- One RJ-45 Cable/XDSL Internet connection
- TCP/IP protocol installed in your computer
- UTP network Cable with a RJ-45 connector

# FEATURES AND BENEFITS

# **High speed wireless LAN connection**

Supports up to 11 Mbps data rate by incorporating the Direct Sequence Spread Spectrum (DSSS) technology

# IEEE 802.11b compatible

Fully compatible with the IEEE 802.11b standard

### Wireless AP features

Provides Roaming - Best Access Point Selection

# **Wireless Encryption Protocol**

Provides up to a 128 Bit WEP encryption

١

# **Cable/XDSL Modem Support**

The Wireless Internet Gateway can establish an Internet connection by connecting to any Cable/XDSL modem

### **DHCP Server / Client**

DHCP Server - Automatically assigns IP information to network users.

DHCP Client - Automatically gets IP information from an ISP DHCP server.

### **Firewall Protection**

Built-in NAT firewall that guarantees network security.

### **IP Sharing**

Supports unrestricted Internet access for all network users, all the time.

# **Hacker Attack Logging**

Supports general hacker attack pattern monitoring and logging.

# **High Performance 32 bit RISC CPU Engine**

With the most advanced 32bit RISC CPU engine, the Wireless Internet Gateway guarantees that its performance is sufficient for any future Cable/XDSL connection speeds.

### **PPPoE Client**

Supports PPPoE client function - To establish a connection with a remote PPPoE server.

### **PPTP Client**

Supports PPTP client function - To establish a connection with a remote PPTP server.

### **Telstra Client**

Supports Telstra client function - To establish a connection with the BPALogin server.

### **Virtual Server**

Allows an internal LAN server to be accessible from the Internet.

# **Upgradeable Firmware**

Allows new features to be added in the future.

# **Stateful Packet Inspection (SPI)**

A form of Firewall protection that ensures your LAN the maximum security.

# **VPN Support**

- Supports PPTP pass-through
- Supports L2TP pass-through
- Supports IPSec pass-through

# **DDNS Support**

The Dynamic DNS (DDNS) service allows you to locate a domain name (web server) whose public IP address is dynamically assigned.

# **UPNP Support**

Supports Universal Plug and Play (UPnP)

# **URL Block Support**

Prevents users from accessing certain websites on the Internet

# **E – Mail Alert Support**

Periodically sends security-related events to an User's email

### **Idle Timer**

Allows you to specify an idle-time before automatically disconnecting

# **Routing Protocols**

Supports static route and RIP 1 and 2

# **Firewall Protection**

Built-in NAT firewall that guarantees network security

### **Dial-on Demand**

Automatically logs in to your ISP - Eliminating the Dial-up process

# **Web-Based Configuration**

Web based configuration – Users can conveniently configure and monitor the device with a web browser

# **DMZ (Demilitarized Zone)**

Allows a Public IP address to be mapped to a specified Private IP address

# Cable/xDSL Backup

Supports an asynchronous port backup connection (dialup) should the Cable/xDSL connection fails

# 4 - Ports Wireless Internet Gateway Cable/xDSL Router

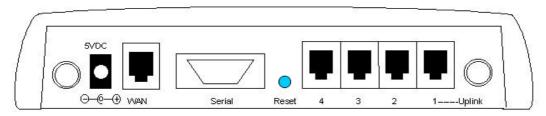
# The Wireless Internet Gateway Front View



| LED indicators        |  |   |  |  |
|-----------------------|--|---|--|--|
| LAN [1:4]<br>Link/Act | LINK (Green) Green LED will LIGHT when a good link is established. |   |  |  |
|                       | ACT (Green)  | Green LED will <b>BLINK</b> if packet is transmitting or receiving. |  |  |
| Wireless              | (Green)  | Green LED will <b>BLINK</b> if packet is transmitting or receiving. |  |  |
| Serial                | (Green)  | Green LED will <b>LIGHT</b> when a good link is established.        |  |  |
| WAN                   | (Green)  | Green LED will <b>LIGHT</b> when a good link is established.        |  |  |
| STATUS                | (Yellow)   | Yellow LED will <b>BLINK</b> when device boot and upgrade firmware. |  |  |
| POWER                 | (Red)  | Red LED will <b>LIGHT</b> if the gateway is receiving power.        |  |  |

# The Wireless Internet Gateway Rear View

The rear panel of the wireless Internet gateway is where all the LAN/WAN network connections are made.



**POWER (5 VDC)** The power port is where you will connect the AC to DC

switching power adapter.

**WAN** The WAN 10M Ethernet port is where you will connect

your ASDL/Cable modem.

**Serial** The Serial port is where you will connect the 56K modem

or ISDN TA.

**LAN[1:4]** There are four LAN ports on the rear panel. This is

where you connect network devices, such as PCs, switches, hubs, print servers or LAN servers etc.



### The Reset Button

If you want the device to have the factory default settings, press the reset button and hold it for  $5 \sim 6$  seconds. It will load the factory default settings into the device. **Please be careful**. Do not press the reset button unless you want to clear the current configurations.

# Connecting Wireless Internet Gateway To The Network

# Preface

To establish an Internet connection, you will need to check the values from your ISP, check your PC's settings, and configure the Wireless Internet Gateway.

# The information offered by your ISP

- Dynamic IP settings
- Your fixed IP address for the gateway
- Your subnet mask for the gateway
- Your default gateway IP address
- Your DNS IP address

# NOTE!

If you would like to establish a connection through the PPPoE protocol, you will also need the following values from your ISP as well:

- Username
- Password

# The static IP settings for the PC

Your PC's fixed IP address

Your PC's subnet mask

Your PC's default gateway

Your PC's primary DNS IP address

The router's default IP address settings is 192.168.2.1

# The dynamic IP settings for the PC

We recommend that you leave your PC's IP settings as "automatically assigned." By default, the gateway's DHCP server is enabled, and it will give your PC the necessary IP settings.

# NOTE!

If you want the gateway to automatically assign your PC its IP address, you will need to configure your PC to obtain an IP address automatically. (Please See Page 45)

# **Confirm Hardware Installation**

Once you have the above information, you can begin to configure your Wireless Internet Gateway.

- Make sure that the power supply outlet voltage is compatible with the power adapters of your PCs, Cable/XDSL modem and the Wireless Internet Gateway.
- Connect the power-supply cable to the power port at the rear of the Wireless Internet Gateway. Plug the supplied power adapter into a power outlet.
- Connect a network cable from your PC's Ethernet port to one of the LAN ports on the back of the Wireless Internet Gateway. Do the same with all the PCs you wish to connect to the Wireless Internet Gateway.
- 4. Connect the network cable from your Cable/XDSL modem to the WAN Ethernet port on the rear of the Wireless Internet Gateway.

Once you have completed the hardware installation, please proceed to the next page to configure the Wireless Internet Gateway ... ... .....

# **Configuring Your Wireless Router**

Launch your web browser and type the router's default IP address (http://192.168.2.1) into the browser's address box and press Enter

Please make sure your PC's IP address is in the same network as the router's; In windows 95/98 you can type **WINIPCFG** and in windows 2000/NT you can type **IPCONFIG** (Please See Page 47) to find out

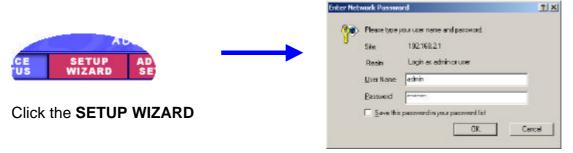


The main menu will appear. It displays all the functions that you can browse through, as well as the setup for the Wireless Internet Gateway.



# SETUP WIZARD

**Setup wizard** is a step-by-step process that will let you input all the basic settings.

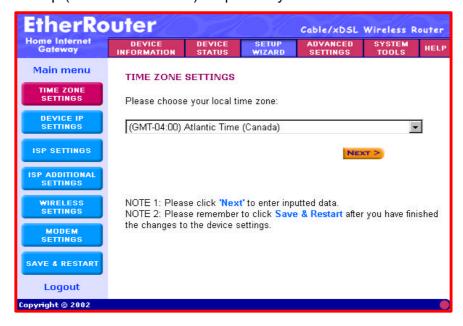


A username and password will appear. Leave the password box empty and type **admin** (the default username) in the username box. Click **OK**The setup wizards page will appear.

NOTE! If you would like to change the password please See Page 34

# TIME SETTINGS

Please choose a local time zone. Once you have selected a time zone, please click the **Next** button to continue to the next step. You can also click the buttons on the left to jump to other settings. Otherwise by clicking **Next**, you will proceed to the next step (buttons on the left) sequentially.



# DEVICE IP SETTINGS

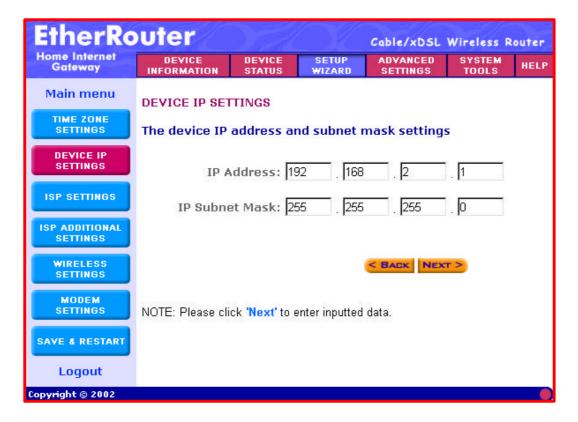
In this section, you can give your Wireless Internet Gateway an IP address for the local area network (LAN) side. This is not the IP address given to you by your ISP, but rather the local internal LAN IP address of your network. The IP address "192.168.2.1" is the default value of your gateway.

# **Device IP Address**

This is the internal LAN IP address of your Wireless Internet Gateway

### **Device IP Subnet Mask**

This is the subnet mask, you can usually leave it as the default entry "255.255.255.0"

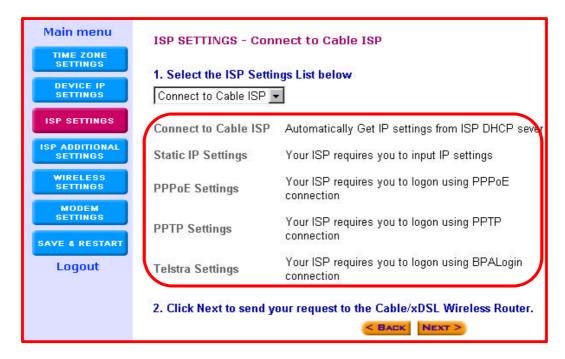


# **ISP SETTINGS**

The ISP Settings section is where you input all the information required by your ISP, so that you can connect to the Internet.

# **Connect to Cable ISP**

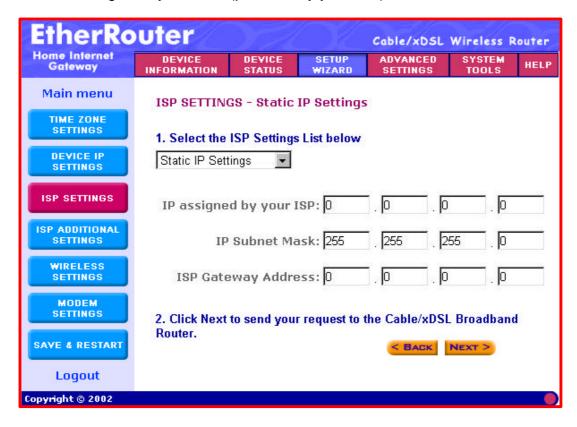
Select **Connect to Cable ISP** if you have a cable connection. Please select "**Connect to Cable ISP**" and click "**Next**" to proceed to the next page.



# **Static IP Settings**

Select **Static IP Settings**, if your ISP will give you a static IP address. You will have to enter the following information:

Enter the IP address (provided by your ISP)
Enter the IP subnet mask (provided by your ISP)
Enter the ISP gateway address (provided by your ISP)



# **PPPoE Settings**

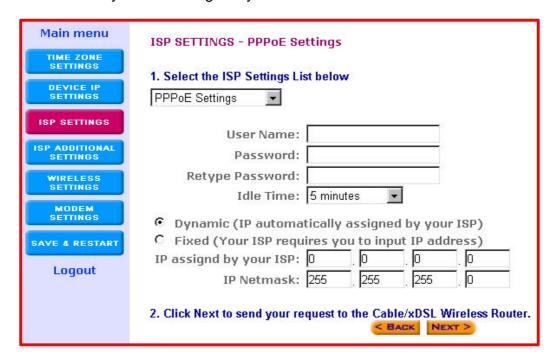
Select **PPPoE Settings**, if your ISP requires the PPPoE protocol to establish an Internet connection. You will have to enter the following information:

**User name**: Enter the user name of your ISP account. **Password**: Enter the password of your ISP account.

**Retype password**: Enter the password of your ISP account again to re-confirm.

**Dynamic/Fixed**: Select ONE.

Dynamic - If your ISP will automatically assign you an IP address Fixed - If your ISP has given you a fixed IP address



# **PPTP Settings**

Select **PPTP Settings**, if your ISP requires the PPTP protocol to establish an Internet connection (e.g. Europe). You will have to enter the following information:

**User name**: Enter the user name of your ISP account. **Password**: Enter the password of your ISP account.

**Idle Time**: You do not have to configure this section and is dependent on the user's actual need s. If the Internet connection has been idle for certain period of time, this function allows you to disconnect it automatically.

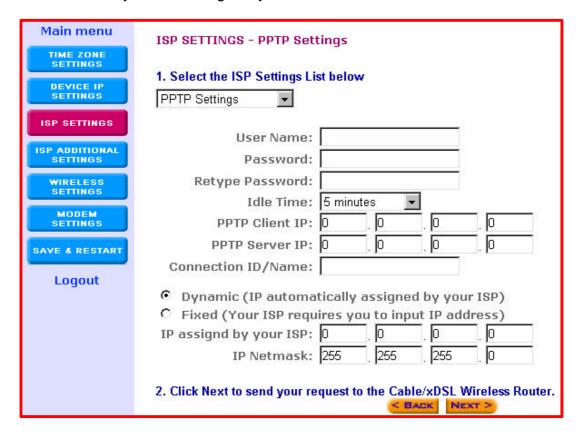
PPTP Client IP: Provided by ISP

**Connection ID**: Input this ID information only if your ISP has given you one.

**Dynamic/Fixed**: Select ONE.

Dynamic - If your ISP will automatically assign you an IP address

Fixed - If your ISP has given you a fixed IP address



# **Telstra Settings**

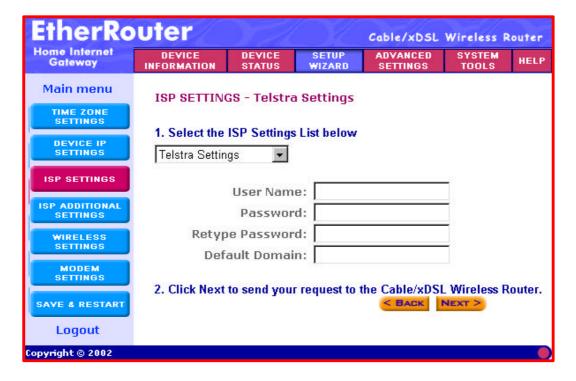
The **Telstra Settings** is a service that applies to connections in Australia only. You will have to enter the following:

**User Name**: Enter the User Name (Provided by the ISP) **Password**: Enter the Password (Provided by the ISP)

Retype password: Re-Enter the password of your ISP account again to re-

confirm.

Default Domain: Input the default domain if your ISP has given you one



# ISP ADDITIONAL SETTINGS

In this section you can input special settings required by certain ISPs. You do not need to configure the entire section, only the settings needed by your particular ISP. If your ISP does not require any additional settings, then please leave this section blank and proceed to the next section.

Some ISPs require you to manually setup the DNS settings; if this is the case, you will need to enable this function and enter the DNS IP Address.

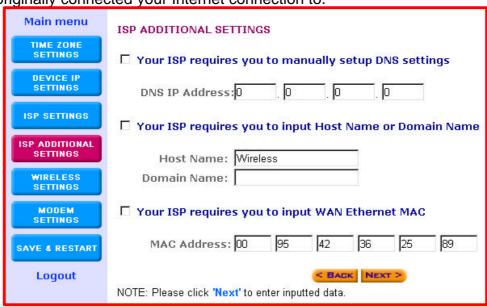
Some ISPs use Host Name and Domain Name to authenticate the user; if this is the case, you will need to enter the following:

Host Name: Enter the name of the gateway.

Domain Name: Enter the domain name provided by your ISP

Some ISPs require you to input the LAN card's Mac address; if this is the case, you will need to enter the following:

MAC Address: Enter the PC's LAN card MAC address. This PC is the one that you originally connected your Internet connection to.



Some ISPs may only recognize your PC's LAN card MAC address as a legal user. In this case, you will have to copy the LAN card MAC address of that PC and input it in the MAC address field. For WIN 95/98 you can run winipcfg to see the LAN card Mac address For WIN 2000/NT you can run ipconfig/all to see the LAN card Mac address

# **WIRELESS SETTINGS**

In the Wireless Settings section, you can configure the ESSID, Channel, WEP Encryption and the level of WEP Encryption settings.

### **ESSID**

The ESSID is a unique name shared among all points in a wireless network.

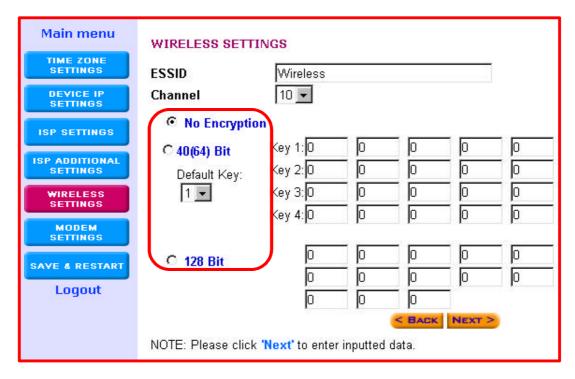
### **CHANNEL**

To avoid interference, users should choose a proper Channel in wireless network.

### **WEP**

WEP (Wired Equivalent Privacy) is method of encrypting data that is transmitted over your wireless network to ensure data security. If you would like to use this function, then please select the encryption key size (40 Bit or 128 Bit).

If the Encryption (40 Bit or 128 Bit) option is checked, then you must enter the encryption key manually.



# **MODEM SETTINGS**

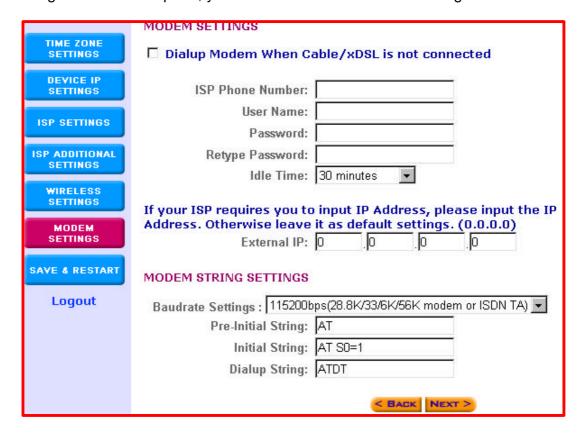
The modem settings screen is where you can setup the asynchronous port as:

- 1) A backup connection to the Cable/xDSL connection.
- 2) A dialup Internet access connection

To enable the modem function for the asynchronous port - Click on the **Dialup Modem When Cable/xDSL** is not connected square shown on the screen below and then input the ISP account information

**External IP:** If your ISP requires you to input an IP address, please input the IP address here. Otherwise leave it as the default setting (0.0.0.0).

**Modem string settings** – some modems require specific communication strings. The modem string settings section allows you to specify strings on the router so that it can communicate with your modem (if required). If you would like to change the baudate speed, you can do so in the baudrate settings field.

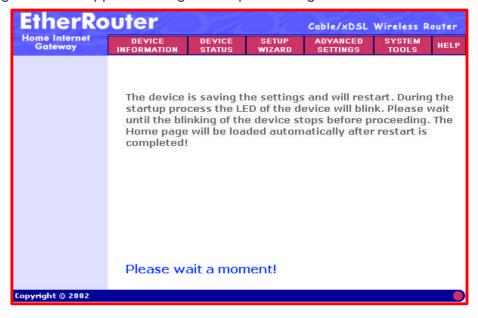


# **SAVE & RESTART**

After you have finished making all the changes on the various pages, please click **Save & Restart** to save the settings and to restart the device. After the device has restarted, the device will function according to the saved settings.



During the startup process the LED of the device will blink. Please **wait** until the LED lights have stopped blinking before proceeding.



# Logout

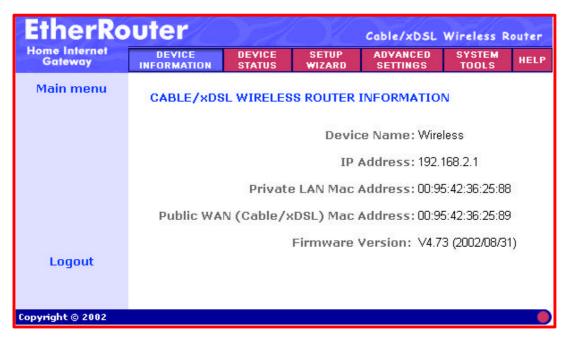
Click **Logout** if you would like to leave/logout the router's web based configuration page. When you logout other computers can configure the device.

Click **Yes** - the screen will close. Click **No** - the screen will not close.



# **Device Information**

**Device information** displays the current settings of the wireless Internet gateway.



### **Device Name**

The host name of the wireless Internet gateway

### **IP Address**

The IP address of the wireless Internet gateway

### **Private LAN Mac Address**

The Mac address of the wireless Internet gateway LAN port

# Public WAN (Cable/xDSL) Mac Address

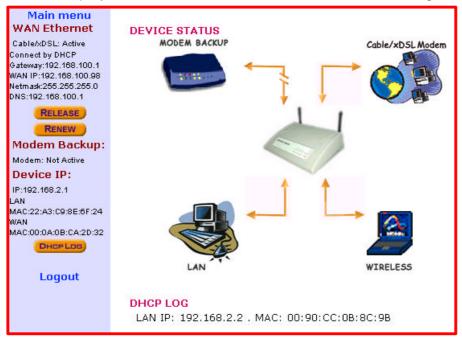
The Mac Address of the wireless Internet gateway WAN Ethernet port

### Firmware version

Displays the Firmware Version and its release date

# **Device Status**

**Device status** displays the current connection status of the Internet gateway.



# **Modem Backup**

The modem (asynchronous port) can be used as a backup Internet connection (dialup) to the Cable/xDSL connection or as an Internet access connection. If the current connection is via the backup modem, it will show "Modem: Active," otherwise it will show "Not Active".

### **Device IP**

Shows the Device IP address, private LAN Mac address and public WAN Mac address of the wireless Internet gateway.

### **Release and Renew**

Click the **Release** button - the Wireless Internet Gateway will disconnect with the ISP

Click the **Renew** button - the Wireless Internet Gateway will connect with the ISP.

# **DHCP Log**

Click **DHCP Log** button, the screen will display the current DHCP client information.

# **Advanced Settings**

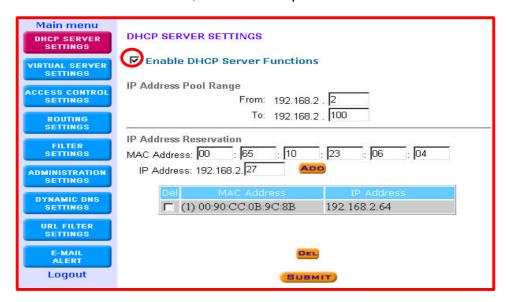
The **Advanced settings** section includes settings for the DHCP server, virtual server static routing, dynamic routing, filter settings and administration settings.

A username and password will appear. Type "admin" in the user name box, and type the password that you have setup the device to (by default there is no password) and then Click **OK.** The Advanced Settings page will appear as shown below.



# DHCP SERVER SETTINGS

By default the Wireless Internet Gateway's DHCP server is enabled. If you would like to disable the DHCP server, unclick the square circled in **red** below.



# **IP Address Pool Range**

The IP address pool contains the range of IP addresses that will be used by the device's DHCP server to automatically assign IP addresses to your network clients.

The Default IP address range is from 192.168.2.2 to 192.168.2.100

### **IP Address Reservation**

The IP address reservation setting allows you to save fixed private IP address to specific computer/network clients.

MAC Address: Enter the MAC address of the PC or server.

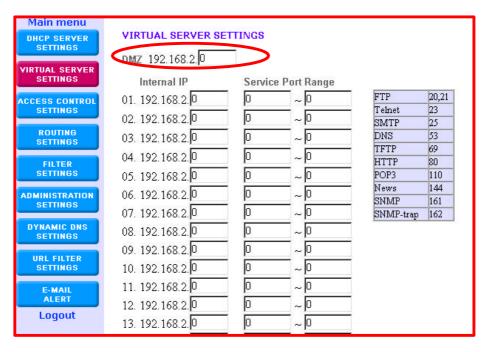
IP Address: Enter the IP address that you want to reserve for the above MAC address.

# VIRTUAL SERVER SETTINGS

The **Virtual server settings** allows clients on the Internet to access certain services on your LAN via the Internet. You can use the IP mapping function to access a FTP server or a Telnet server etc. remotely through Internet.

The **DMZ** function re-directs all packets (regardless of services) going to your WAN IP address to a particular LAN client/server. If you would like to enable the DMZ function, enter an IP address in the DMZ IP field. The value '0' means that the DMZ function is disabled.

The difference between the virtual server and the DMZ function is that the virtual server re-directs a particular service/Internet application (e.g. FTP, websites) to a particular LAN client/server, whereas DMZ re-directs all packets (regardless of services) going to your WAN IP address to a particular LAN client/server.

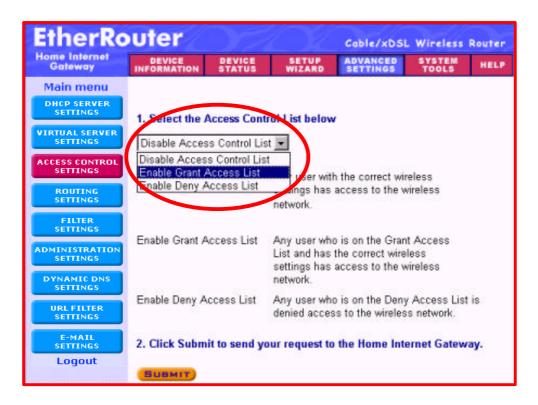


# ACCESS CONTROL SETTINGS

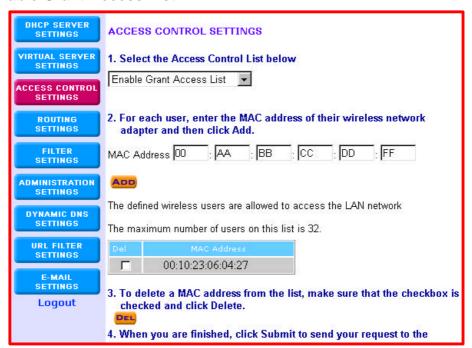
The Access control settings allow you to define the Access Control list. The First option is "Disable Access Control List", which disables this function. The Second option is "Enable Grant Access List", which allows you to define a list of MAC address. Only packets with these MAC address can pass through the router

The Third option is "Enable Deny Access List", which allows you to define a list of MAC address. Packets with these MAC address cannot pass through the router

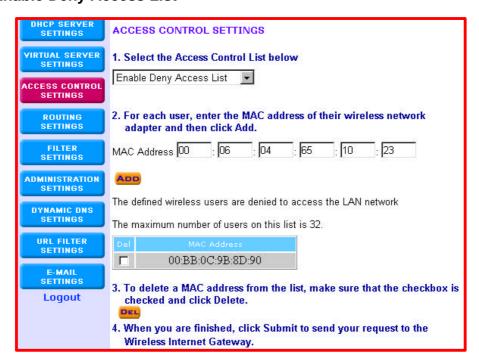
For the second and third options, type in the MAC address, and click 'Add' to add a MAC address to the access control list. The list will be shown, and can be deleted by clicking the 'Del' button.



### Enable Grant Access List

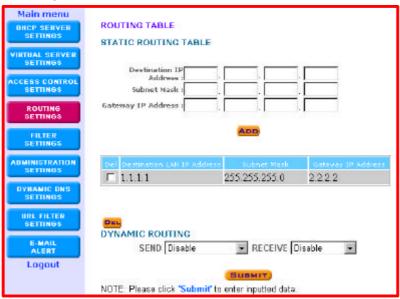


# Enable Deny Access List



# ROUTING SETTINGS

The **Static routing settings** allow the Wireless Internet Gateway to route IP packets to another network (subnet). The routing table stores the routing information so that your network device knows where to redirect the IP packets.



# **Destination IP Address**

The destination IP is the address of the remote network to which you want to assign a static route.

### **Subnet Mask**

The subnet mask of your network IP address.

# **Gateway IP Address**

The IP address of the interface used to link to the remote network.

**Dynamic routing settings** allow the Wireless Internet Gateway to route IP packets to another network automatically. The RIP protocol is used to do the dynamic routing, it basically communicates routing information with other routers periodically.

**SEND** option – choose the routing protocol (routing information) you wish to transmit to other routers on your network.

**RECEIVE** option - choose the routing protocol (routing information) you wish to receive from other routers on your network.

# FILTER SETTINGS - LAN FILTER SETTINGS

The **LAN Filter Settings** allow the administrator to define whether a local user is permitted to access the Internet. To activate this feature, check **LAN Side Filter Enabled** and then define a filtering policy. To define a filtering policy, enter the IP address range, enter the network port number and select the transport protocol(s).

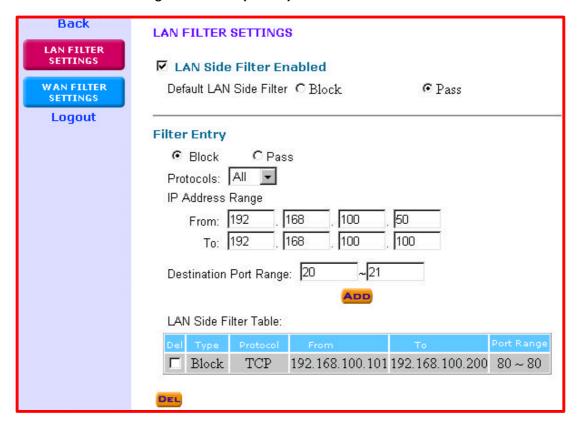
For example, to prevent local users with IP addresses (ranging from **101** to **200**) from accessing websites (HTTP service - port **80**), the settings are as follows,

LAN Side Filter Enabled: **Enabled** Default LAN Side Filter: **Pass** 

Filter: **Block** Protocol: **TCP** 

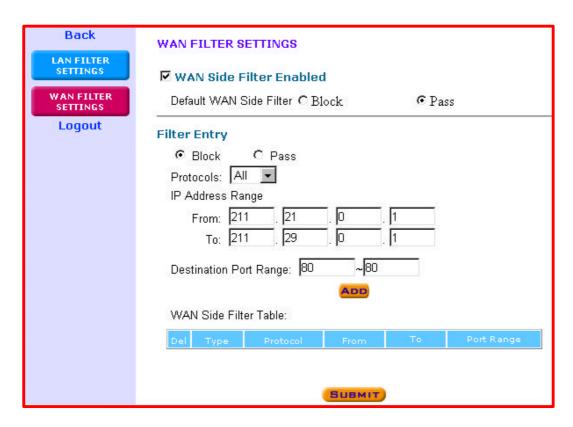
IP Address Range: 101 ~ 200

Destination Port Range: 80 ~ 80 (HTTP)



# FILTER SETTINGS - WAN FILTER SETTINGS

The **WAN Filter Settings** allow the administrator to define whether remote/outside user(s) is permitted to access the private local area network. To activate this feature, check **WAN Side Filter Enabled** and then define a filtering policy. To define a filtering policy, enter the IP address range, enter the network port number and select the transport protocol(s).



For example, to prevent remote users with IP addresses (ranging from 211.21.0.1 to 211.29.0.1) from accessing your LAN's virtual Web server (port 80), the settings are as follows,

WAN Side Filter Enabled: **Enabled** Default WAN Side Filter: **Pass** 

Filter: **Block** Protocol: **ALL** 

IP Address Range: 211.21.0.1 to 211.29.0.1 Destination Port Range: 80 ~ 80 (HTTP)

# ADMINISTRATION SETTINGS

# **PASSWORD SETTINGS**

You can setup the Wireless Internet Gateway so that a password is required in order to access its web-based configuration pages. This password will be required the next time you want to configure your Wireless Internet Gateway. To setup a password, type your password in the new password field and type it again in the retype password field to reconfirm.

It is important to remember your password. If for any reason you lose or forget your password, press the small reset button located on the back of the device for 5~6 seconds. The Reset action will reset the device to the factory default settings. In factory default the user name is **admin** and there is **no** password

| DHCP SERVER                | ADMINISTRATION SETTINGS  |  |  |  |
|----------------------------|--|--|--|--|
| SETTINGS                   | PASSWORD SETTINGS  |  |  |  |
| VIRTUAL SERVER<br>SETTINGS | The new password will be used to authenticate the user when configuring the device.        |  |  |  |
| ACCESS CONTROL<br>SETTINGS | New Password: ********  Retype Password: ********  |  |  |  |
| ROUTING<br>SETTINGS        | SYSTEM ADMINISTRATION  |  |  |  |
| FILTER<br>SETTINGS         | HTTP Port No:  80  |  |  |  |
| ADMINISTRATION<br>SETTINGS | Allow remote user to configure the device  Remote administration host  IP Address: 0 0 0 0 |  |  |  |
| DYNAMIC DNS<br>SETTINGS    | ✓ Allow remote user to ping the device   |  |  |  |
| URL FILTER<br>SETTINGS     | SYSTEM LOG   |  |  |  |
| E-MAIL<br>ALERT            | ☐ Enable System Log Function  Log server IP address 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |  |  |  |
| Logout                     | MISCELLANEOUS  |  |  |  |
|                            | ▼ Force to reconnect PPPoE if packets can not Send/Receive from PPPoE connection           |  |  |  |
|                            | SYSTEM PARAMETERS  |  |  |  |
|                            | Enable TCP MTU Adjustment Function MTU Setting 1500  |  |  |  |
|                            | UPnP   |  |  |  |
|                            | ☐ Enable UPnP Function   |  |  |  |
|                            | SUBMIT   |  |  |  |

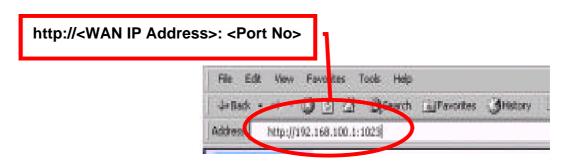
#### SYSTEM ADMINISTRATION

This allows remote user(s) to configure and administrate the Wireless Internet Gateway from a remote site (through the Internet).

The default value of the **HTTP** port is **80**. You can select a different port number for the remote web-based configuration page

The default IP address of the remote administration host is: **0.0.0.0**. (IP address 0.0.0.0 means that any remote PC can access and manage the Wireless Internet Gateway from a remote site).

You will have to **enable** the "Allow remote user to configure the device" to use this function. Once you have enabled this function, type the device's WAN IP address and the HTTP port No (e.g. http://192.168.100.1:1023) into the browser of the specified remote administrator.





If the above HTTP port number (NOT PORT 80) for the remote administrator(s) is changed then the LAN administrators must enter the same changed port number in order to access the device's web-based configuration, e.g. Device LAN IP address with HTTP port no (http://192.168.2.1:1023)

#### SYSTEM LOG

The System Log function allows the administrator to assign an IP address to a server on which a log server is running. When a particular event occurs, the router will send a notification to the log server. The log server can then present the log to the administrator/user. [Free log server can be downloaded from Internet, such as Kiwis SysLog Daemon]

#### **Miscellaneous**

Some ISPs require you to force a PPPoE re-connection when the Internet connection can't send or receive packets.

#### **System Parameter**

The System Parameter allows you to set the MTU value (Maximum Transmission Unit) for your Internet connection. If you would like to enable the MTU setting, click on the square circled above. The default MTU value is 1500 bytes.

Some ISPs restrict the packet size for a PPPoE connection. Use the system parameter to change the MTU to cater to the ISP's connection requirement.

#### **UPnP**

The Universal Plug and Play (UPnP) function allows Windows XP to automatically configure the router for various Internet applications (such as gaming and videoconferencing).

# DYNAMIC DNS SETTINGS

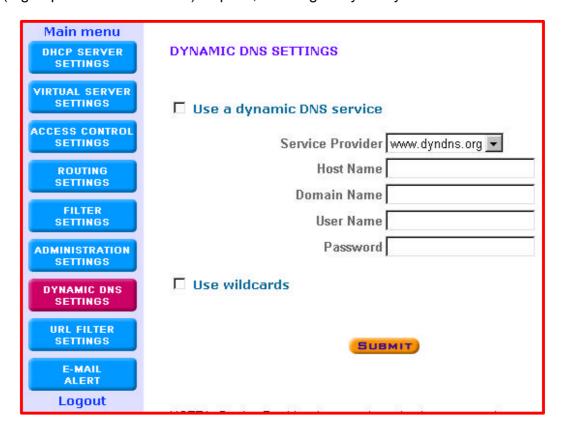
The Dynamic DNS (DDNS) service allows you to locate a domain name (web server) whose public IP address is dynamically assigned. The DDNS server provides a central public database where information can be stored and retrieved. The dynamic DNS server also stores password protected information and accepts queries based on e-mail address.

If you would like to use the DDNS function, you will have to register with a DDNS service provider, and enter the following information provided by the DDNS service provider:

Host Name: Enter the host name for your DDNS account. User Name: Enter the user name for your DDNS account. Password: Enter the password for your DDNS account.

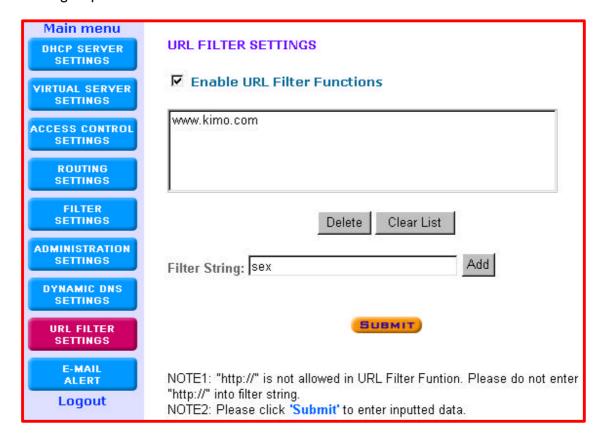
#### **Use wildcards**

If you use DYNDNS as your DDNS service provider, you can enable the **Use wildcards** feature. The wildcards feature - any URL request that contain your domain name (<a href="www.router.com">www.router.com</a>), as part of its URL domain name (e.g.http://broad/router.com) request, will be given your dynamic IP address.



# **URL FILTER SETTINGS**

The **URL Filter** settings prevent users from accessing certain websites on the Internet. The router can block sites based on specify words or letters. Sites will be blocked if any of these words or letters is part of the website's name (URL) or newsgroup name.



# E-MAIL ALERT

Your router can periodically email you a log of security-related events (such as denied incoming service requests and administrator logins).

The router can also email you an immediate alert when it detects a significant security incident; such as a known attack directed at your IP address, a computer on the Internet scanning your IP address for any open ports and someone on your LAN (Local Area Network) trying to visit a blocked site.

Fill out the settings on the screen below if you would like to have alerts and logs sent to you by e-mail,

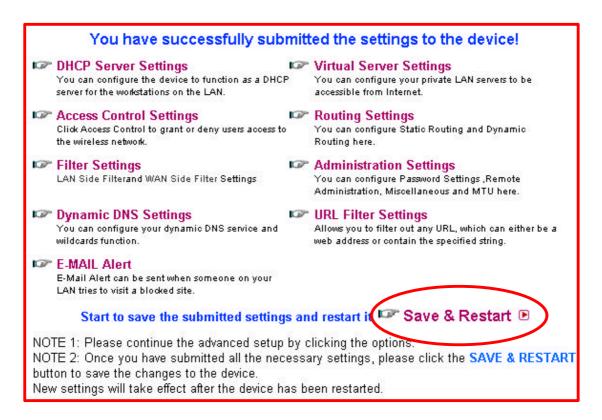


When you have filled in all the settings for the E-Mail Alert page, please click on the Submit button to proceed to the next page ...

### **SAVE & RESTART**

When you have finished making all the changes on the various pages above, please **click Save & Restart** to save the settings and to restart the device. If you would like to configure the setting(s) again, click on a function (see screen below), this will link you to that particular function's configuration screen. After the device restarts (reboots), the device will function according to the saved settings.

**Save & Restart** lets you save the inputted settings to the Wireless Internet Gateway and then restarts (reboots) the device.



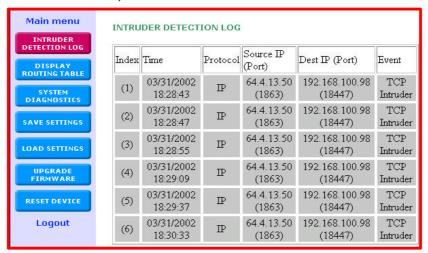
# **System Tools**

#### System tools

The System Tools detects the status of the Wireless Internet Gateway.

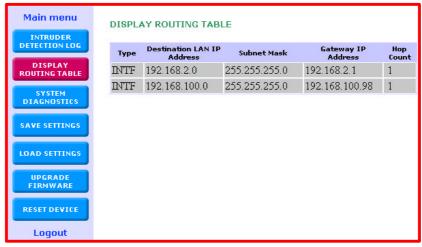
#### INTRUDER DETECTION LOG

The event messages displays the possible hacker attacks that have occurred on the Wireless Internet Gateway. Up to 32 hacker attacks may be logged in this manner (see screen below).



# DISPLAY ROUTING TABLE

The routing tables screen below displays the device's current static routing configuration.



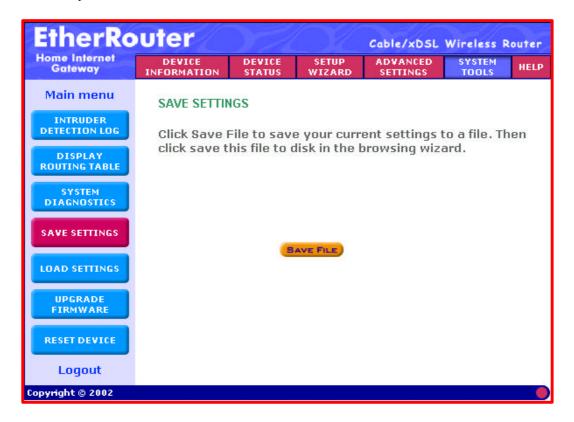
# SYSTEM DIAGNOSTICS

The System diagnostics screen shows the device's configuration information. It also checks the device to make sure that everything is functioning properly.



# SAVE SETTINGS

The Save Settings screen allows you to save the device's configuration to a file. Click **Save File** to save your current settings to a file. Then click **save** to save this file to your disk.



# LOAD SETTINGS - LOAD DEFAULT SETTINGS

The load default settings screen allows you to load the factory default settings to your device.



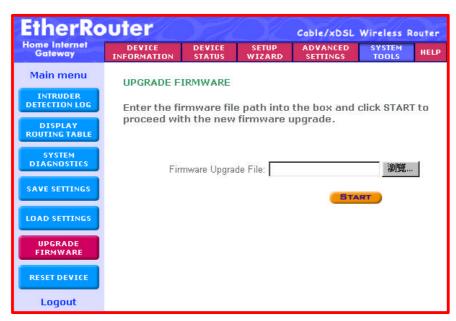
### LOAD SETTINGS - LOAD SETTINGS FROM FILE

The load settings from file screen allow you to load a previously saved file to the device again.



# **UPGRADE FIRMWARE**

The upgrade firmware screen allows you to upgrade the latest firmware to your device.



### RESET DEVICE

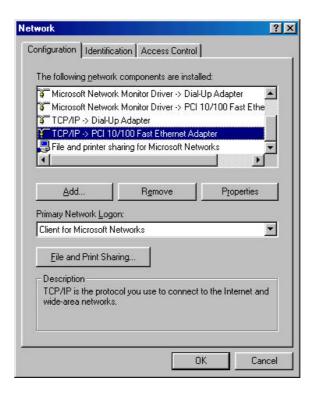
The Reset Device screen allows you to restart/reboot the device. Click on the **START** button to restart/reboot the device.



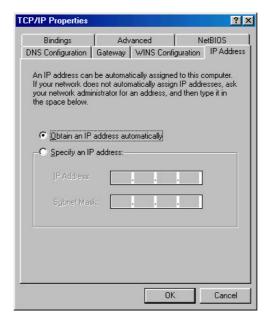
# How Configuring Your PCs Connect To The Cable/xDSL Wireless Router

If you **do not** want to set a static IP address for your PC, you will need to configure your PC to request an IP address from the gateway.

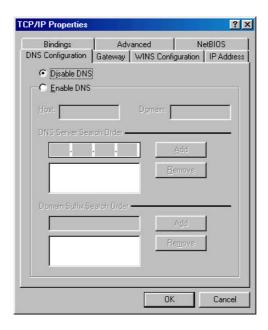
- 1. Click Start button, select Settings, then select Control Panel
- 2. Double-click the Network Icon
- 3. In the **configuration** tab, select the **TCP/IP protocol line** that is associated with your network card/adapter. If there is no TCP/IP line listed, you will need to install the TCP/IP now.



4. Click the **Properties** button, then choose the **IP ADDRESS** tab. Select **Obtain an IP address automatically**.



- 5. Then select the **DNS configuration** tab to add a **DNS IP address**. If you do not wish to add a DNS IP address you can select the **Disable DNS** function. Press **OK**. You have completed the client settings.
- 6. After clicking **OK**, windows might ask you to restart the PC. Click **Yes**.

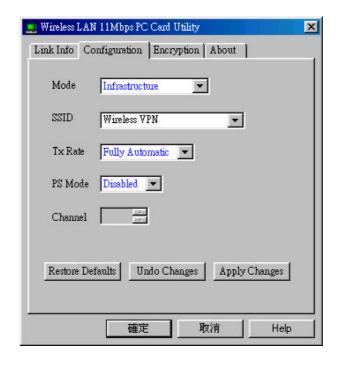


# CONFIGURING YOUR WIRELESS PCs

- 1. Click Start button, select Settings, then Control Panel
- 2. Double-click the **Network** Icon
- 3. In the **configuration** window, select the **TCP/IP protocol line** that is associated with your WIRELESS network card/adapter. If there is no TCP/IP line listed, you will need to install the TCP/IP now.
- 4. Click the **Properties** button, then choose the **IP ADDRESS** tab. Select **Obtain an IP address automatically**.
- 5. Then select the **DNS configuration** tab to add a **DNS IP address**. If you do not wish to add a DNS IP address you can select the **Disable DNS** function. Press **OK**. You have completed the client settings.
- 6. Double Click Wireless Utility taskbar.

7. Click **Configuration** Tab.

2:40 PM 📘 Wireless LAN 11Mbps PC Card Utility Wireless utility icon Link Info | Configuration | Encryption | About | State Associated - BSS ID = 00:02:B3:86:DB:D0 Current Channel 11 Rescan Current Tx Rate 2 Mbits/s Throughput (Bytes/sec) Tx 16,112 Rx 37,706 Link Quality: Excellent (100%) Signal Strength: Good (80%) 取消 確定 Help



Mode: Select "Infrastructure" mode

SSID: Enter the same SSID as Wireless Internet Gateway

Tx Rate: Select "Fully Automatic"

PS Mode: Select "Disabled"

**Channel:** The Wireless Card will automatically detect the channel of the Wireless Internet Gateway

8. Click Encryption Tab.

Encryption (WEP): Enter the same Wireless Internet Gateway settings

9. Click OK and Restart your Wireless PC

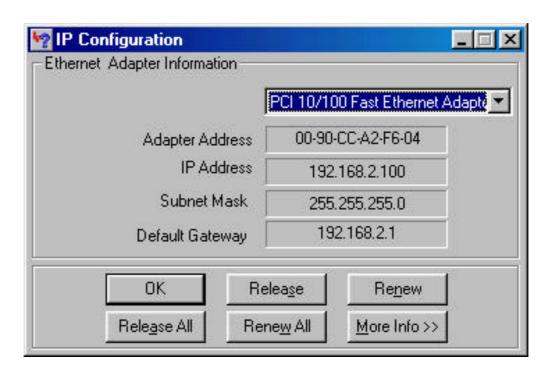
# CONFIRM YOUR PC's IP CONFIGURATION

There are two tools which are great for finding out a computer's IP c onfiguration: MAC address and default gateway.

#### WINIPCFG (for windows 95/98)

Inside the windows 95/98 **Start** button, select Run and type **winipcfg**. In the example below this computer has an IP address of 192.168.2.100 and the default gateway is 192.168.2.1. The default gateway should be the network (Router) device's IP address. The MAC address in windows 95/98 is called the Adapter Address.

**NOTE!** You can also type **winipcfg** in the DOS command.



#### • IPCONFIG (for windows 2000/NT)

In the DOS command type **IPCONFIG** and press **Enter**. Your PC IP information will be displayed as shown below.

#### This concludes the user manual.

Should you require further assistance or have other inquires please contact your distributor.