

**Wireless Internet Gateway
For ADSL/Cable**

Quick Installation Guide

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FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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 on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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:

Changes 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 digital device has been CE Approved.

Introduction

This manual details instructions of set-up and functions of the wireless Internet gateway.

This is a breakthrough for SOHO users who need to share a high speed broadband Internet connection to the Internet. The high-powered antenna design assures its wireless connection even in large building.

The wireless Internet gateway enables your network to connect through any ADSL/Cable modem onto the Internet--providing a simple network solution for SMB and SOHO users.

Wireless Internet gateway is equipped with:

- A WAN Ethernet port (to connect to ADSL/Cable modem)
- An Ethernet port (10/100Mbps)
- One asynchronous port

Once the WAN Ethernet is connected to an ADSL/Cable modem, your ISP will **automatically** activate your account. In this way, the entire LAN can share one high-speed line to the Internet.

The asynchronous port may connect to a 56K modem or to an ISDN TA (to be used as a dialup backup to the ADSL/Cable connection should the ADSL/Cable connection fail). If there is no ADSL/Cable service in your area, the dialup backup can also serve as your Internet access solution.

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 I.E 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 backup connection is needed)
- One RJ-45 ADSL/Cable Internet connection
- TCP/IP protocol installed
- UTP network Cable with a RJ-45 connection

FEATURES AND BENEFITS

High speed for wireless LAN connection

Support up to 11 Mbps data rate by incorporating 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

Capable of up to 128 Bit WEP encryption

IP sharing

Shared Internet Access for up to 253 users

ADSL/Cable Backup

Supports dialup backup in case ADSL/Cable connection fails

PPPoE Client

Supports PPPoE client function to connect to the remote PPPoE server

Idle Timer

Let you set a specified idle-time before automatically disconnecting

Routing Protocol

Supports static route, RIP 1/2

Built-in NAT function

Allows multiple PCs and devices to share one Internet connection

Virtual Server

Allows internal workstations (servers) to be accessible from Internet

New feature Upgradeable

New features are upgradeable in the future

Web-Based Configuration

Web based configuration

Firewall Protection

Built-in NAT firewall guarantees network security

DHCP Server

Automatically assigns IP information to network users

DHCP Client

Automatically acquires IP information for ADSL/Cable from your ISP

Dial-on Demand

Eliminates the need for Dial-up and automatically logs in to your ISP

Hacker Attack Logging

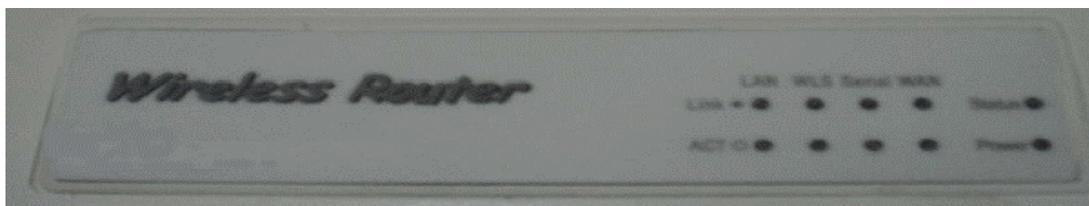
Supports general hacker attack pattern monitoring and logging

VPN Support

Support PPTP, L2TP and IPSec pass through function

ONE - PORT Wireless Internet Gateway ADSL/Cable Router

The Wireless Internet gateway Front View



LED indicators

LAN	ACT (Green)	Green LED will BLINK if packet is transmitting or receiving.
	LNK (Green))	Green LED will LIGHT when a good link is established.
WLS	ACT (Green)	Green LED will BLINK when data is transmitting or receiving.
	LNK (Green)	Green LED will LIGHT when Wireless LAN is ready.
Serial	ACT (Green)	Green LED will BLINK when data is transmitting or receiving.
	LNK (Green)	Green LED will LIGHT when remote carrier has be been detected.
WAN	ACT (Green)	Green LED will BLINK if packet is transmitting or receiving.
	LNK (Green)	Green LED will LIGHT when a good link is established.
STATUS	(Orange)	Orange LED will BLINK when device boot and upgrade firmware.

POWER (Red) Red LED will **LIGHT** if the gateway is receiving power.

The Wireless Internet gateway Rear View

The rear panel of the wireless Internet gateway is where all connections are made.



POWER (5 VAC)

The power port is where you will connect the AC power adapter

WAN

The WAN Ethernet port is where you will connect your ADSL/Cable modem

Async

The Async port is where you will connect the 56K modem or ISDN TA

LAN

The LAN port on the rear panel. This is where you will connect networked devices, such as PCs, ftp servers or anything else you want to put on your network.

NOTE !

The Reset Button

If you would like to load default settings, press the reset button and hold it for 5 seconds. It will load the factory default settings for the device. **Please be careful.** Do not press the reset button unless you want to clear the current data.

Connecting Wireless Internet Gateway To The Network

Preface

In order to install the wireless Internet gateway: you will need to check your PC's settings and the values from your ISP before connecting your gateway to the network.

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 use PPPoE, you will need the following values from your ISP in order to install your router:

- 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

NOTE !

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 IP settings as automatically assigned. By default, the gateway is a DHCP server, and it will give your PC the necessary IP settings.

NOTE !

If the gateway assigns your PC's IP address, you have to enable the function that obtains the IP address automatically for your PC. **(please See Page 36)**

Confirm Hardware Installation

After you have the previous values on hand, you can begin to configure your wireless Internet gateway.

1. Confirm power of the equipments, on your PCs, your ADSL/Cable modem and the wireless Internet gateway.
2. Connect the power-supply cable to the power port at the rear of the wireless Internet gateway. Plug the supplied power cable into a power outlet. Plug the other end into the back of the power adapter.
3. Connect a network cable from one of your PCs' Ethernet ports 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. (If your PCs install with the station cards, you can connect to the device without cabling)
4. Connect the network cable from your ADSL/Cable modem to the WAN Ethernet port on the rear of the wireless Internet gateway.

If everything is done, please continue to configure the wireless Internet gateway's settings on next page.....

Configuring Your Wireless Router

Launch your web browser and type the device IP address (**http:// 192.168.2.1**) in the browser's address box. This IP address is the default value of your gateway. Press **Enter**

NOTE !

Please make sure your PC's IP address is in the same network as the router's. In the windows 95/98 you can type **WINIPCFG**, in the windows 2000/NT you can type **IPCONFIG** (please see page 38)



The main menu will appear. It displays all the functions that you can browse, as well as 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.



Enter Network Password

Please type your user name and password

Site: 192.168.2.1

Route: Login as admin or user

User Name: admin

Password:

Save this password in your password list

OK Cancel

Click the **SETUP WIZARD**

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 wizard's page will appear.

NOTE ! If you would like to change the password please **See Page 26**

TIME SETTINGS

Please choose the local time zone. After selecting please click **Next** button to continue to the next step. You can also click the buttons on the left to set up the configuration.

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION DEVICE STATUS SETUP WIZARD ADVANCED SETTINGS SYSTEM TOOLS HELP

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

CABLE/xDSL ISP SETTINGS

ISP ADDITIONAL SETTINGS

WIRELESS SETTINGS

MODEM SETTINGS

SAVE & RESTART

TIME ZONE SELECTION

Please choose your local time zone:

(GMT-04:00) Atlantic Time (Canada)

NEXT >

NOTE 1: Please click "Next" to enter inputted data.
NOTE 2: Please remember to click "Save & Restart" after you have finished the changes to the device settings.

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DEVICE IP SETTINGS

You have to give your internet gateway an IP address on your network. This is not the IP address from your ISP but the local internal LAN IP address. The IP address “192.168.2.1” is the default value of your gateway.

Device IP Address

The internal LAN IP address of your internet gateway

Device IP Subnet Mask

The subnet mask can usually be left as its default entry “255.255.255.0”

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION | DEVICE STATUS | **SETUP WIZARD** | ADVANCED SETTINGS | SYSTEM TOOLS | HELP

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

CABLE/xDSL ISP SETTINGS

ISP ADDITIONAL SETTINGS

WIRELESS SETTINGS

MODEM SETTINGS

SAVE & RESTART

DEVICE IP SETTINGS

The device IP address and subnet mask settings

IP Address: [192] . [168] . [2] . [1]

IP Subnet Mask: [255] . [255] . [255] . [0]

< Back | Next >

NOTE: Please click "Next" to enter inputted data.

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ADSL/Cable ISP SETTINGS

If you would like to use ADSL/Cable ISP settings, you have to enable this function by configuring this page. Some ISPs may give you Static IP settings. If this is the case for your ISP, then you need to:

- Enter the IP address that is provided by your ISP
- Enter the IP subnet mask
- Enter the ISP gateway address
- Enter the DNS IP address

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION DEVICE STATUS **SETUP WIZARD** ADVANCED SETTINGS SYSTEM TOOLS HELP

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

CABLE/xDSL ISP SETTINGS

ISP ADDITIONAL SETTINGS

WIRELESS SETTINGS

MODEM SETTINGS

SAVE & RESTART

CABLE/xDSL ISP SETTINGS

Your ISP requires you to input IP settings

IP assigned by your ISP: 0 . 0 . 0 . 0

IP Subnet Mask: 255 . 255 . 255 . 0

ISP Gateway Address: 0 . 0 . 0 . 0

Domain Name Server (DNS) IP Address: 0 . 0 . 0 . 0

< BACK NEXT >

NOTE: Please click 'Next' to enter inputted data.

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ISP ADDITIONAL SETTINGS (PPPoE SETTINGS)

If you would like to use ISP additional settings, you have to enable this function and configure this page. Some ISP use this protocol for authentication purposes; if this is the case, you need to enter:

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.

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

Host Name: Enter the name of the gateway.

Some ISP require you input the LAN card Mac address; if this is the case, you need to enter:

Mac Address: Enter this LAN card Mac address.

NOTE !

Some ISP may recognize your LAN card Mac address as a legal user; In this case, you have to copy the LAN card Mac address in the Mac address field.

For WIN 95/98 you can run **winiptcfg** to see the LAN card Mac address

For WIN 2000/NT you can run **ipconfig/all** to see the LAN card Mac address

The screenshot shows a web interface for configuring ISP settings. On the left is a 'Main menu' with buttons for 'TIME SETTINGS', 'DEVICE IP SETTINGS', 'CABLE & DSL ISP SETTINGS', 'ISP ADDITIONAL SETTINGS' (highlighted in red), 'WIRELESS SETTINGS', 'MODEM SETTINGS', and 'SAVE & RESTART'. The main content area is titled 'ISP ADDITIONAL SETTINGS' and contains three sections:

- Your ISP requires you to input username/password (PPPoE Settings)
 - User Name: [text input]
 - Password: [text input]
 - Retype Password: [text input]
 - Idle Times: [dropdown menu showing 'no idle timeout']
- Your ISP requires you to input Host Computer Name or Domain Name
 - Host Name: [text input containing 'Wireless']
 - Domain Name: [text input]
- Your ISP requires you to input WAN Ethernet Mac
 - Mac Address: [text input containing '00 90 4b 08 02 6e']

At the bottom of the form are '< BACK' and 'NEXT >' buttons. A note below the buttons reads: 'NOTE: Please click 'Next' to enter inputted data.' The footer of the page says 'Copyright © 2000'.

WIRELESS SETTINGS

Here allows user to configure ESSID, Channel, WEP Encryption and the level of WEP Encryption.

ESSID

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

CHANNEL

To avoid interference, user 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, you can **Enable Encryption and Select the method of encryption (40 Bit or 128 Bit)**.

If Encryption option is Checked, **User has to enter encryption key manually.**

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION DEVICE STATUS SETUP WIZARD ADVANCED SETTINGS SYSTEM TOOLS HELP

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

CABLE/xDSL ISP SETTINGS

ISP ADDITIONAL SETTINGS

WIRELESS SETTINGS

MODEM SETTINGS

SAVE & RESTART

WIRELESS SETTINGS

ESSID: Wireless

Channel: 6

No Encryption

Encryption:

40(64) Bit

Default Key: 1

128 Bit

Share key Open system

Key 1: 13 4c 41 59 dc

Key 2: 0 0 0 0 0

Key 3: 0 0 0 0 0

Key 4: 0 0 0 0 0

70 54 12 cc f2

3b 0 3d 4a 21

e0 cf 60

< BACK NEXT >

NOTE: Please click 'Next' to enter inputted data.

MODEM SETTINGS

The modem dialup can be used as a backup for the ADSL/Cable connection. If you would like to use modem backup you need to enable the modem settings function; click on the square shown below and input the ISP account information.

Note: If you want to change the baudrate settings, please click on the “**ADVANCED SETTINGS**”. Then click on the **MODEM SETTINGS** button.

The screenshot shows the EtherRouter web interface. At the top, there is a navigation bar with the following tabs: **DEVICE INFORMATION**, **DEVICE STATUS**, **SETUP WIZARD**, **ADVANCED SETTINGS** (circled in red), **SYSTEM TOOLS**, and **HELP**. Below the navigation bar, there is a main menu on the left with buttons for **TIME SETTINGS**, **DEVICE IP SETTINGS**, **CABLE/xDSL ISP SETTINGS**, **ISP ADDITIONAL SETTINGS**, **WIRELESS SETTINGS**, **MODEM SETTINGS** (highlighted in pink), and **SAVE & RESTART**. The main content area is titled **MODEM SETTINGS** and contains a checkbox labeled **Dialup Modem When Cable/xDSL is not connected** (circled in red). Below the checkbox are input fields for **ISP Phone Number**, **User Name**, **Password**, and **Retype Password**, along with an **Idle Time** dropdown menu set to **30 minutes**. At the bottom of the form are **< BACK** and **NEXT >** buttons. Two notes are provided at the bottom: **NOTE 1: Please click 'Next' to enter inputted data.** and **NOTE 2: Most modems are compatible with standard modem strings. But few modems or ISDN TAs may need special modem string settings. To setup these special modem strings. Please goto Modem Settings in the Advanced Settings.**

SAVE & RESTART

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

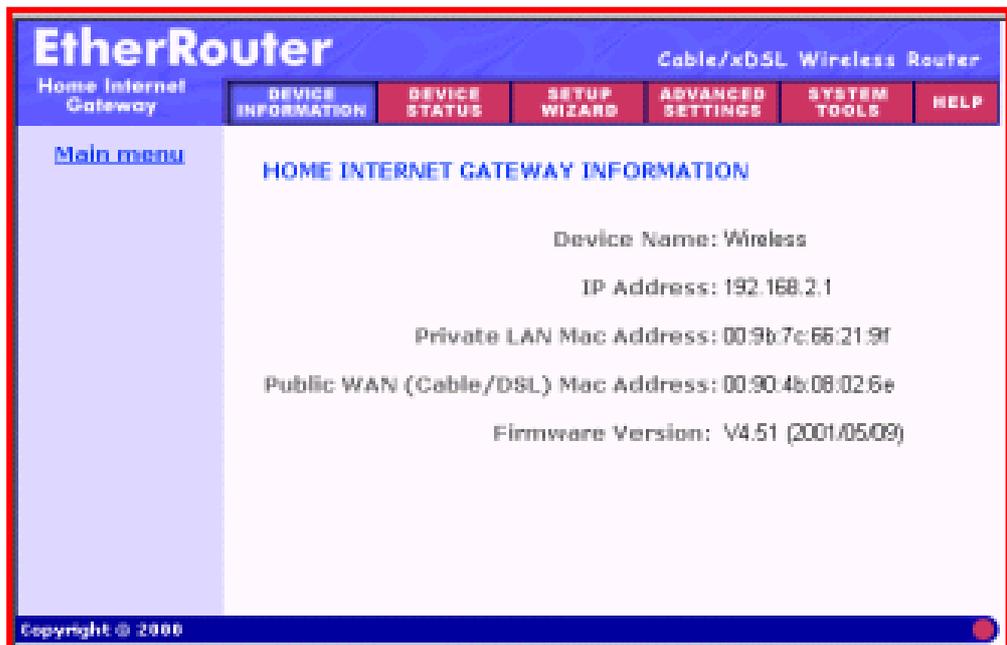


During the startup process the LED of the device will blink. Please **wait** until the blinking of the device stops before proceeding.



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 (ADSL/Cable) Mac Address

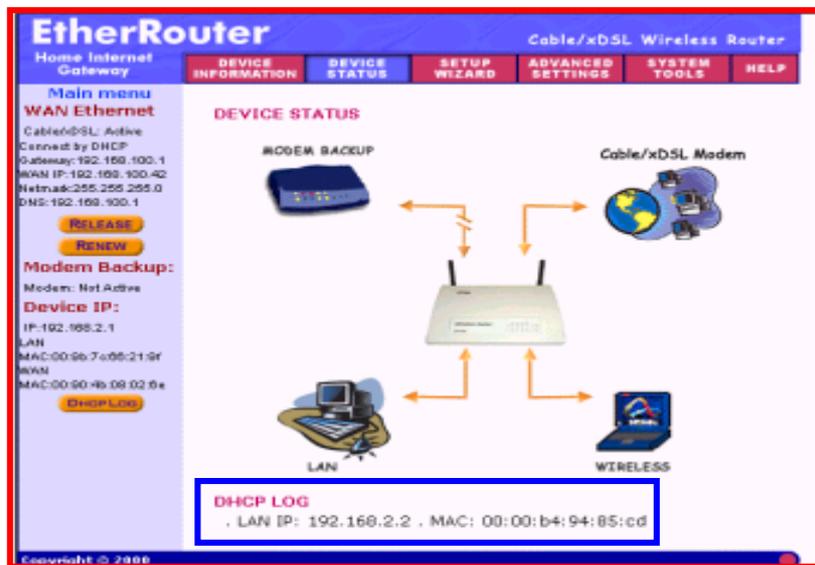
The Mac Address of the wireless internet gateway WAN Ethernet port

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 can be used as a dialup backup for the ADSL/Cable connection. If the current connection is via 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 **Release** button, the wireless internet gateway will disconnect with the ADSL/Cable modem.

Click **Renew** button, the wireless internet gateway will connect with the ADSL/Cable modem again.

DHCP Log

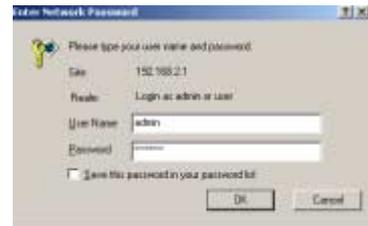
Click **DHCP Log** button, the screen will display the current DHCP client information.

Advanced Settings

Advanced settings include DHCP server, virtual server and password settings.

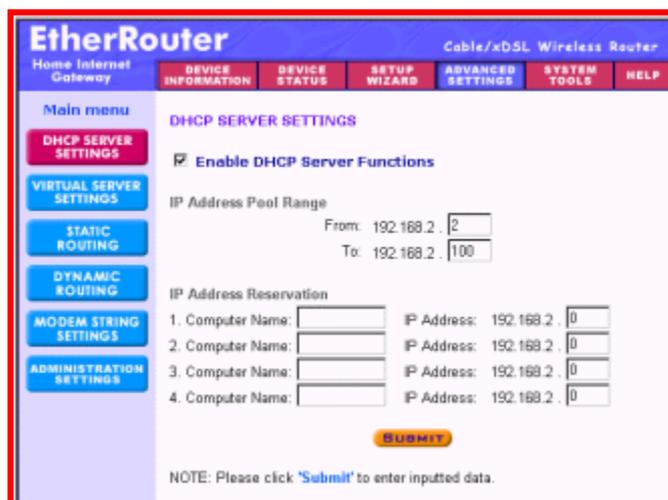
A username and password dialog will appear. Type “**admin**” in the user name box, and type the password that you have set for the device (the default is no password) Click **OK**.

The Advanced Settings page will appear.



DHCP SERVER SETTINGS

The wireless internet gateway’s DHCP server is enabled by default. If you would like to disable the DHCP server, uncheck on the square circled below.



EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICES INFORMATION DEVICES STATUS SETUP WIZARD **ADVANCED SETTINGS** SYSTEM TOOLS HELP

Main menu

- DHCP SERVER SETTINGS**
- VIRTUAL SERVER SETTINGS
- STATIC ROUTING
- DYNAMIC ROUTING
- MODEM STRING SETTINGS
- ADMINISTRATION SETTINGS

DHCP SERVER SETTINGS

Enable DHCP Server Functions

IP Address Pool Range

From: 192.168.2.2 To: 192.168.2.100

IP Address Reservation

1. Computer Name:		IP Address:	192.168.2.	0
2. Computer Name:		IP Address:	192.168.2.	0
3. Computer Name:		IP Address:	192.168.2.	0
4. Computer Name:		IP Address:	192.168.2.	0

SUBMIT

NOTE: Please click 'Submit' to enter inputted data.

IP Address Pool Range

The IP address pool contains the range of the IP address that will automatically be assigned to the clients of your network.

Default setting is from **192.168.2.2** to **192.168.2.100**

IP Address Reservation

You can use IP address reservation option to give particular computers on your network the same static IP address every time the computer is turned on.

VIRTUAL SERVER SETTINGS

Virtual server settings allow clients on the Internet to access your LAN via the Internet. You can use the IP mapping function to access an FTP server or Telnet server etc. remotely through Internet.

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION | DEVICE STATUS | SETUP WIZARD | **ADVANCED SETTINGS** | SYSTEM TOOLS | HELP

Main menu

- DHCP SERVER SETTINGS
- VIRTUAL SERVER SETTINGS**
- STATIC ROUTING
- DYNAMIC ROUTING
- MODEM STRING SETTINGS
- ADMINISTRATION SETTINGS

VIRTUAL SERVER SETTINGS

1. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE
2. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE
3. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE
4. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE
5. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE
6. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE
7. Internal IP	192.168.2.	<input type="text" value="0"/>	Service	NONE

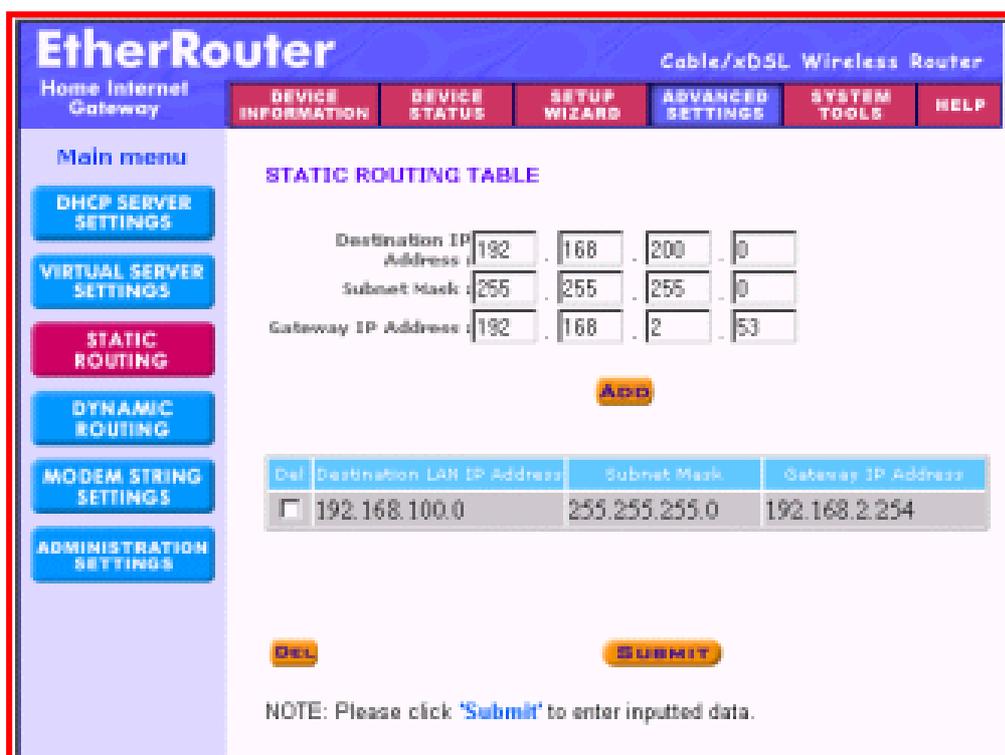
SUBMIT

NOTE: Please click 'Submit' to enter inputted data.

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STATIC ROUTING SETTINGS

Static routing settings allow the wireless internet gateway to route IP packets to another network. The routing table stores the routing information so that your network device knows where to redirect the IP packets to the proper network.



EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION | DEVICE STATUS | SETUP WIZARD | **ADVANCED SETTINGS** | SYSTEM TOOLS | HELP

Main menu

- DHCP SERVER SETTINGS
- VIRTUAL SERVER SETTINGS
- STATIC ROUTING**
- DYNAMIC ROUTING
- MODEM STRING SETTINGS
- ADMINISTRATION SETTINGS

STATIC ROUTING TABLE

Destination IP Address: 192 . 168 . 200 . 0

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP Address: 192 . 168 . 2 . 53

Add

Del	Destination LAN IP Address	Subnet Mask	Gateway IP Address
<input type="checkbox"/>	192.168.100.0	255.255.255.0	192.168.2.254

DEL **SUBMIT**

NOTE: Please click "Submit" to enter inputted data.

Destination IP Address

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

Subnet Mask

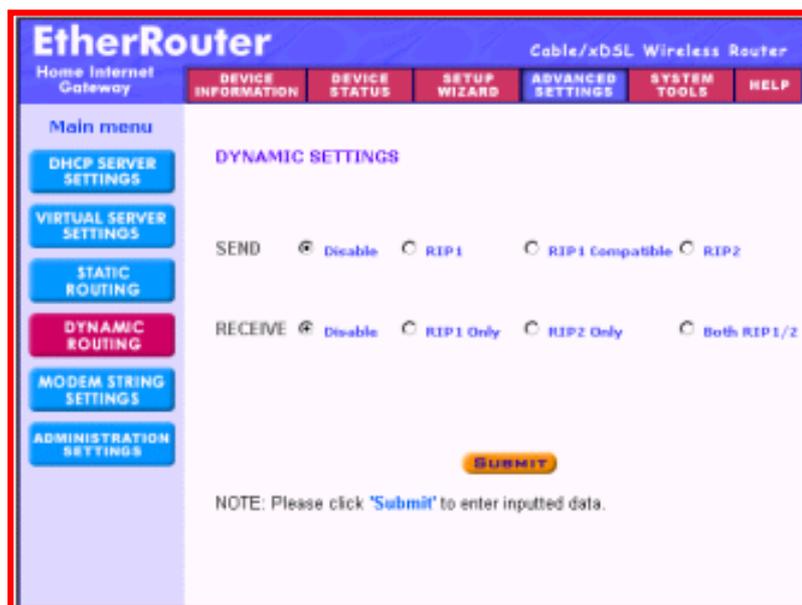
The subnet mask of your network IP address.

Gateway IP Address

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

DYNAMIC ROUTING SETTINGS

Dynamic routing settings allow the home internet gateway to route IP packets to another network automatically. The RIP protocol is applied, and broadcasts the routing information to other routers on the network regularly.



The screenshot shows the 'EtherRouter' web interface. At the top, it says 'Cable/xDSL Wireless Router'. Below that is a navigation bar with tabs: 'DEVICE INFORMATION', 'DEVICE STATUS', 'SETUP WIZARD', 'ADVANCED SETTINGS' (which is selected), 'SYSTEM TOOLS', and 'HELP'. On the left is a 'Main menu' with buttons for 'DHCP SERVER SETTINGS', 'VIRTUAL SERVER SETTINGS', 'STATIC ROUTING', 'DYNAMIC ROUTING' (highlighted in red), 'MODEM STRING SETTINGS', and 'ADMINISTRATION SETTINGS'. The main content area is titled 'DYNAMIC SETTINGS'. It has two sections: 'SEND' and 'RECEIVE'. The 'SEND' section has radio buttons for 'Disable' (checked), 'RIP1', 'RIP1 Compatible', and 'RIP2'. The 'RECEIVE' section has radio buttons for 'Disable' (checked), 'RIP1 Only', 'RIP2 Only', and 'Both RIP1/2'. At the bottom of the form is a yellow 'SUBMIT' button. Below the button is a note: 'NOTE: Please click 'Submit' to enter inputted data.'

For the SEND option choosing the proper protocol by which you transmit the data on the network.

For the RECEIVE option choosing the proper protocol by which the home internet gateway receive the data on the network.

MODEM STRING SETTINGS

Modem string settings allow user to detail settings for the modem. If you want to change the baudrate settings, please check the initial string. (You can refer to your manual of the modem or TA.)

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION | DEVICE STATUS | SETUP WIZARD | **ADVANCED SETTINGS** | SYSTEM TOOLS | HELP

Main menu

- DHCP SERVER SETTINGS
- VIRTUAL SERVER SETTINGS
- STATIC ROUTING
- DYNAMIC ROUTING
- MODEM STRING SETTINGS**
- ADMINISTRATION SETTINGS

MODEM SETTINGS

Baudrate Settings :

Pre-Initial String:

Initial String:

Dialup String:

SUBMIT

NOTE: Please click 'Submit' to enter inputted data.

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ADMINISTRATION SETTINGS

PASSWORD SETTINGS

You can give your internet gateway a new password. This password is required the next time you configure your internet gateway. To enter a password, type your password in the new password field and type it again in the retype password field.

NOTE !

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. Reset action will re-initialize the settings. All configurations, including password, will be reset, and requires re-entering.

The screenshot shows the 'EtherRouter' administration interface. The top navigation bar includes 'Home Internet Gateway', 'DEVICE INFORMATION', 'DEVICE STATUS', 'SETUP WIZARD', 'ADVANCED SETTINGS', 'SYSTEM TOOLS', and 'HELP'. The left sidebar contains a 'Main menu' with buttons for 'DHCP SERVER SETTINGS', 'VIRTUAL SERVER SETTINGS', 'STATIC ROUTING', 'DYNAMIC ROUTING', 'MODEM STRING SETTINGS', and 'ADMINISTRATION SETTINGS'. The main content area is titled 'PASSWORD SETTINGS' and contains the following text: 'The new password will be used to authenticate the user when configuring the device.' Below this are two input fields: 'New Password:' and 'Retype Password:'. Underneath is the 'SYSTEM ADMINISTRATION' section, which includes 'HTTP Port No:' (80) and 'Telnet Port No:' (23). A checkbox labeled 'Allow remote user to configure the device' is circled in red, with the text 'Remote administration host' and 'IP Address:' followed by four input boxes. At the bottom, there is a checked checkbox for 'Allow remote user to ping the device'.

SYSTEM ADMINISTRATION

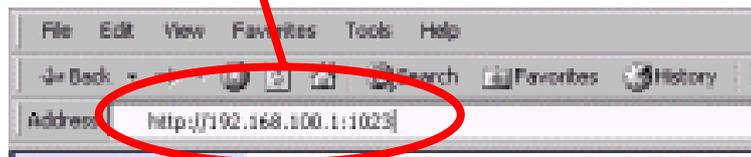
Here allows remote user to configure and administrate the wireless internet gateway through Internet.

The default port no for **HTTP** and **TELNET** are **80** and **23** respectively.

The default IP address of remote administration host is: **0.0.0.0**. (IP address 0.0.0.0 means that any PC on the network can remote access and manage the wireless internet gateway)

If you use this function you have to **enable** the feature “**Allow remote user to configure the device**” first. Once you have enabled this function, type the wireless internet gateway **WAN IP address (http://192.168.100.1:1023)** into the browser of any or specific PC on the network.

http://<WAN IP Address>: <Port No>



NOTE !

Once HTTP port no (**NOT PORT 80**) have be changed and the sers of LAN terminal want to configure the wireless internet gateway, the users have to type the wireless internet gateway **LAN IP address with port no (http://192.168.2.1:1023)**

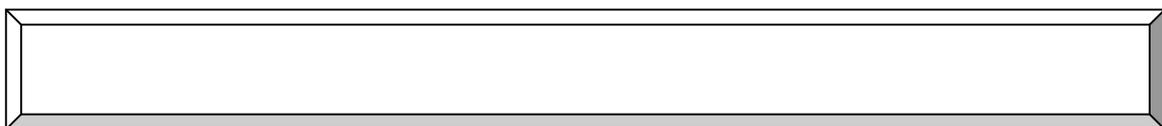
If you finished all the settings, please click Submit button to go to the next page...

SAVE & RESTART

Here shows all the functions of the **ADVANCED SETTINGS**. If you have finished making all the changes on the various pages, please **click Save & Restart** to save the settings and restart the device. If you want to configure the setting again, you can browse those functions then click them. After the restart, the device will function according to the saved settings.

Save & Restart lets you save the input settings to the wireless internet gateway (so as to be retrieved at a later time) and then restart it.

The screenshot displays the 'EtherRouter' web interface. At the top, there is a navigation menu with the following items: 'Home Internet Gateway', 'DEVICE INFORMATION', 'DEVICE STATUS', 'SETUP WIZARD', 'ADVANCED SETTINGS' (which is highlighted), 'SYSTEM TOOLS', and 'HELP'. Below the navigation menu, a message states: 'You have successfully submitted the settings to the device!'. Underneath this message, there are six configuration options, each with a brief description: 'DHCP Server Settings' (You can configure the device to function as a DHCP server for the workstations on the LAN.), 'Virtual Server Settings' (You can configure your private LAN access to be accessible from Internet.), 'Static Routing Settings' (Static routing), 'Modem String Settings' (Modem string and baudrate settings are entered here), 'Dynamic Routing' (Dynamic RIP/RIP2 routing settings are set here), and 'Administration Settings' (Password Settings and Remote Administration). At the bottom of the main content area, there is a link that says 'Start to save the submitted settings and restart it' followed by a button labeled 'Save & Restart' with a right-pointing arrow. This button is circled in red. Below the button, there are two notes: 'NOTE 1: Please continue the advanced setup by clicking the options.' and 'NOTE 2: Once you have submitted all the necessary settings, please click the **SAVE & RESTART** button to save the changes to the device. New settings will take effect after the device has been restarted.' The footer of the page contains the text 'Copyright © 2000'.



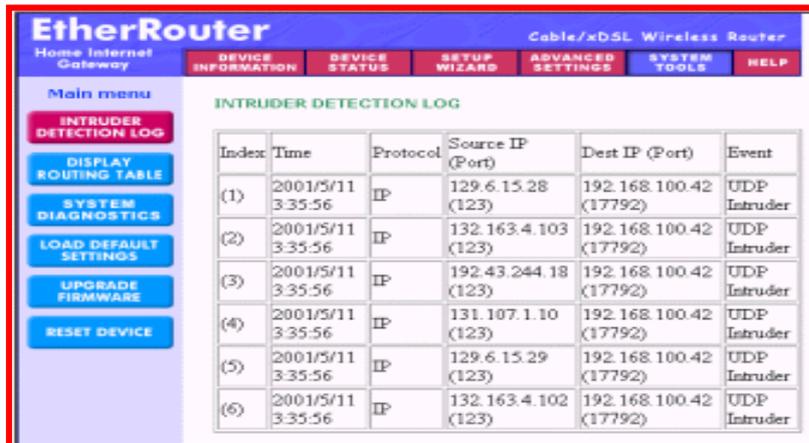
SYSTEM TOOLS

System tools

Detects the status of the wireless internet gateway.

INTRUDER DETECTION LOG

The event messages show the possible hacker attacks that have occurred on your internet gateway. Up to 32 hacker attacks may be logged in this manner.

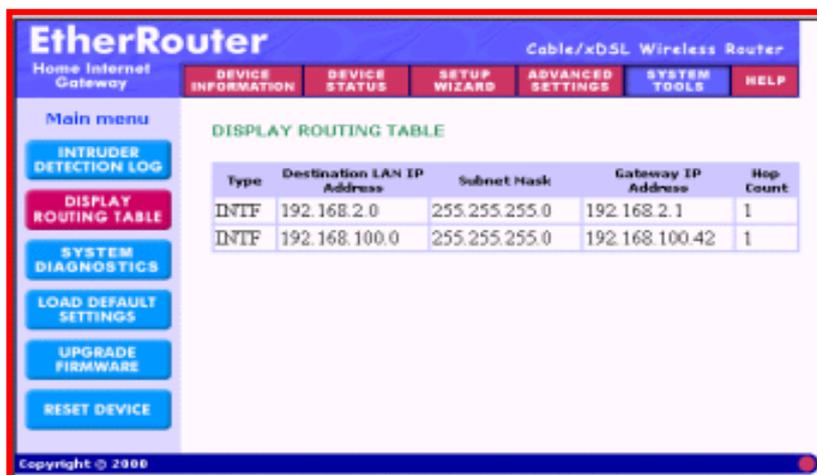


The screenshot shows the 'INTRUDER DETECTION LOG' page in the EtherRouter web interface. The page title is 'EtherRouter Cable/xDSL Wireless Router'. The main menu on the left includes 'INTRUDER DETECTION LOG', 'DISPLAY ROUTING TABLE', 'SYSTEM DIAGNOSTICS', 'LOAD DEFAULT SETTINGS', 'UPGRADE FIRMWARE', and 'RESET DEVICE'. The log table has the following data:

Index	Time	Protocol	Source IP (Port)	Dest IP (Port)	Event
(1)	2001/5/11 3:35:56	IP	129.6.15.28 (123)	192.168.100.42 (17792)	UDP Intruder
(2)	2001/5/11 3:35:56	IP	132.163.4.103 (123)	192.168.100.42 (17792)	UDP Intruder
(3)	2001/5/11 3:35:56	IP	192.43.244.18 (123)	192.168.100.42 (17792)	UDP Intruder
(4)	2001/5/11 3:35:56	IP	131.107.1.10 (123)	192.168.100.42 (17792)	UDP Intruder
(5)	2001/5/11 3:35:56	IP	129.6.15.29 (123)	192.168.100.42 (17792)	UDP Intruder
(6)	2001/5/11 3:35:56	IP	132.163.4.102 (123)	192.168.100.42 (17792)	UDP Intruder

DISPLAY ROUTING TABLE

Here shows the current static routing configuration.



The screenshot shows the 'DISPLAY ROUTING TABLE' page in the EtherRouter web interface. The page title is 'EtherRouter Cable/xDSL Wireless Router'. The main menu on the left includes 'INTRUDER DETECTION LOG', 'DISPLAY ROUTING TABLE', 'SYSTEM DIAGNOSTICS', 'LOAD DEFAULT SETTINGS', 'UPGRADE FIRMWARE', and 'RESET DEVICE'. The routing table has the following data:

Type	Destination LAN IP Address	Subnet Mask	Gateway IP Address	Hop Count
INTF	192.168.2.0	255.255.255.0	192.168.2.1	1
INTF	192.168.100.0	255.255.255.0	192.168.100.42	1

SYSTEM DIAGNOSTIC

System diagnosis shows your internet gateway's information. It will perform a check-up on your internet gateway to make sure that everything is functioning properly.

EtherRouter Cable/xDSL Wireless Router

Home Internet Gateway

DEVICE INFORMATION | DEVICE STATUS | SETUP WIZARD | ADVANCED SETTINGS | SYSTEM TOOLS | HELP

Main menu

- INTRUDER DETECTION LOG
- DISPLAY ROUTING TABLE
- SYSTEM DIAGNOSTICS**
- LOAD DEFAULT SETTINGS
- UPGRADE FIRMWARE
- RESET DEVICE

SYSTEM DIAGNOSTIC

Configuration

Firmware Version: V4.51

ISP Settings

IP assigned method: Assigned by ISP DHCP server
IP address: 0.0.0.0
Gateway IP address: 0.0.0.0
DNS Server IP address: 0.0.0.0
Host Name: Wireless
PPPoE Enable : No
PPPoE Username:

Modem Settings

Telephone Number:
Dial-up User Name:
Idle Timeout: 30 minutes
Pre Initial String: AT
Initial String: AT SD=1
Dialup String: ATDT

Device Settings

Device IP address as: 192.168.2.1
Device Network Mask: 255.255.255.0
DHCP Server: Enabled
Pool from: 192.168.2.2
Pool to: 192.168.2.100

Diagnosis

ISP Status

Cable / xDSL IP address: 192.168.100.42
ISP Gateway IP address: 192.168.100.1
DNS IP address: 192.168.100.1
Modem (async) IP address: 0.0.0.0

Link Status

Cable/xDSL	Connected
LAN	Connected
Modem	Modem is Not Ready

Current WAN connection

Cable/xDSL	Connected
------------	-----------

LAN MAC Table

. LAN IP: 192.168.2.2 . MAC: 00:00:b4:94:85:cd

WAN MAC Table

. LAN IP: 192.168.100.108 . MAC: 00:01:08:07:06:05
. LAN IP: 192.168.100.44 . MAC: 00:00:b4:5e:6c:c8
. LAN IP: 192.168.100.42 . MAC: 00:90:4b:08:02:6e
. LAN IP: 192.168.100.1 . MAC: 00:12:23:34:45:56
. LAN IP: 192.168.100.91 . MAC: 00:47:58:a4:35:01
. LAN IP: 192.168.100.86 . MAC: 00:47:58:a4:30:01
. LAN IP: 192.168.100.40 . MAC: 00:90:cc:0b:8c:9b
. LAN IP: 192.168.100.235 . MAC: 00:08:00:c0:1f:4b
. LAN IP: 192.168.100.26 . MAC: 00:80:c8:f7:ae:23
. LAN IP: 192.168.100.50 . MAC: 00:40:96:4a:17:4b
. LAN IP: 192.168.100.62 . MAC: 22:22:22:22:22:23

Copyright © 2008

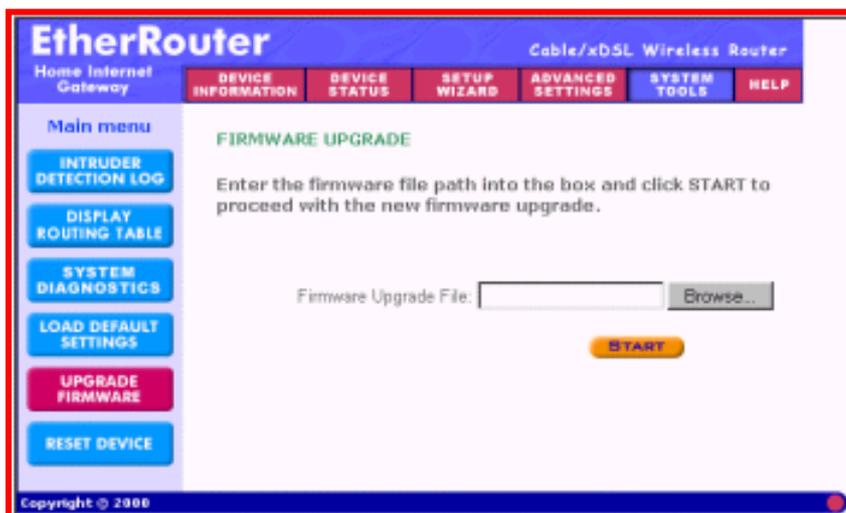
LOAD DEFAULT SETTINGS

This allows you to load the original default settings of your wireless internet gateway.



UPGRADE FIRMWARE

The upgrade firmware option allows you to upgrade the latest firmware to your wireless internet gateway.



RESET DEVICE

Resetting the device will restart it. Click on the **START** button to restart.



How using telnet to configure your Wireless Internet Gateway

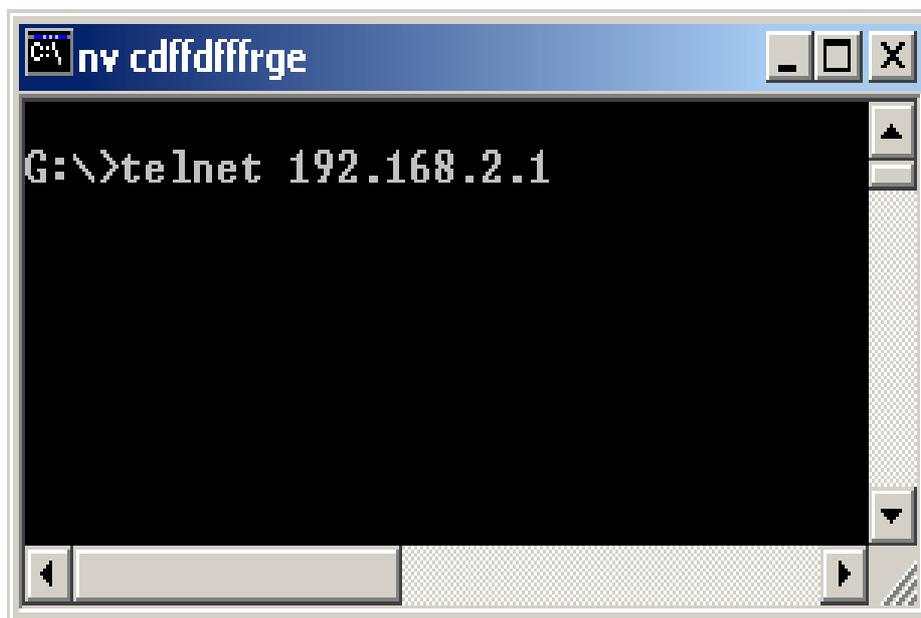
Telnet is a telecommunications software utility which allows you to access a remote device. The internet gateway has a built-in telnet server that enables a telnet client to remotely configure the gateway using a menu system.

NOTE !

To successfully configure your internet gateway using telnet, TCP/IP have to be correctly configured on your PCs and router. And your PCs have to be located on the same subnet.

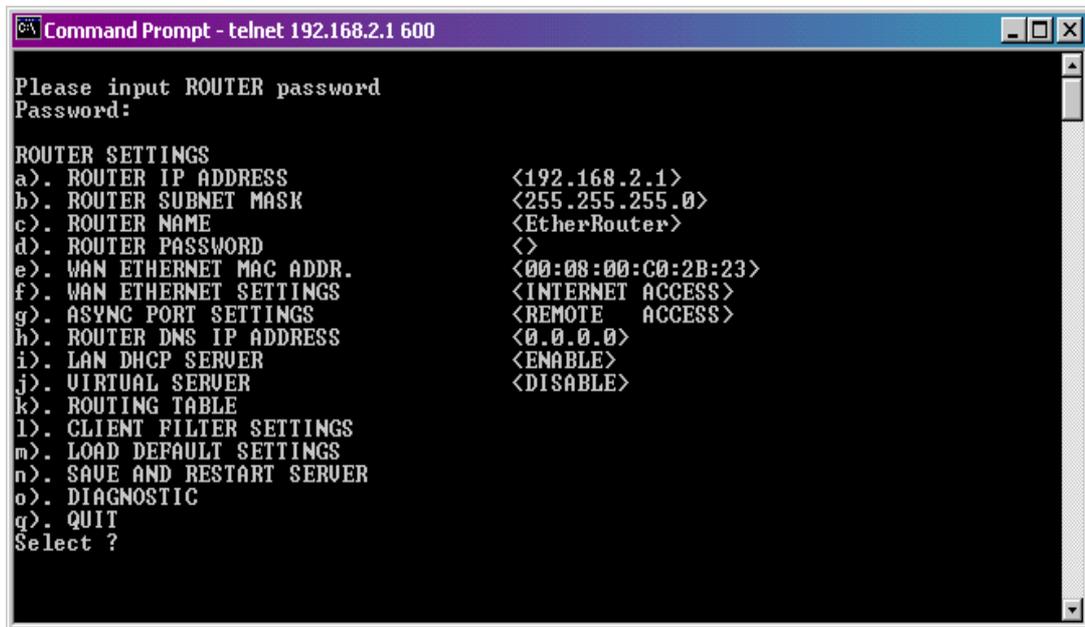
Launch DOS command prompt and type **Telnet**, followed by router's IP address (default IP address is 192.168.2.1) then press **Enter**.

NOTE: If you change **Telnet** port no (**NOT PORT 23**), you should type:
192.168.2.1 <Port No>.



The image shows a screenshot of a DOS command prompt window. The title bar of the window reads "nv cdffdffrge". The command prompt shows the current directory as "G:\\" and the command "telnet 192.168.2.1" has been entered. The window includes standard Windows-style window controls (minimize, maximize, close) and a scroll bar on the right side.

When prompted to input the router password, press **Enter**. The wireless internet gateway telnet server menu will be shown as below.



```
Command Prompt - telnet 192.168.2.1 600
Please input ROUTER password
Password:
ROUTER SETTINGS
a). ROUTER IP ADDRESS          <192.168.2.1>
b). ROUTER SUBNET MASK        <255.255.255.0>
c). ROUTER NAME                <EtherRouter>
d). ROUTER PASSWORD           <>
e). WAN ETHERNET MAC ADDR.     <00:08:00:C0:2B:23>
f). WAN ETHERNET SETTINGS     <INTERNET ACCESS>
g). ASYNC PORT SETTINGS       <REMOTE ACCESS>
h). ROUTER DNS IP ADDRESS     <0.0.0.0>
i). LAN DHCP SERVER           <ENABLE>
j). VIRTUAL SERVER            <DISABLE>
k). ROUTING TABLE
l). CLIENT FILTER SETTINGS
m). LOAD DEFAULT SETTINGS
n). SAVE AND RESTART SERVER
o). DIAGNOSTIC
q). QUIT
Select ?
```

Define the **Router IP Address**, **Router Subnet Mask**, **Router Name** and **Password** by selecting menu letter corresponding to each item. (item a~d)

WAN Ethernet Mac Address

Displays the hardware address of the board. You may change the Mac address if required by your ISP.

WAN Ethernet Settings

Selects the function of the WAN Ethernet port as **Internet Access**. Complete the **External IP Port Address**, **External IP Port Netmask**, **Gateway IP Address** and **DNS IP Address** fields using the IP address provided by your ISP.

Async Port Settings

Selects the function of the async port as **IP Routing** if you have an analog modem or ISDN TA connected to the async port. Complete the **Telephone number**, **User name** and **Password** needed to make the connection to your ISP. Use the menu options to provide specific information about your modem's **Serial baudrate (speed)**, **Modem Pre-initial**, **initial**, **dial-up** and **hangup strings**. You may also use the menu options to create or edit **Login Scripts**.

Router DNS IP Address

Enter the IP address of your ISP system's DNS as provided by your ISP.

LAN DHCP Server

You can enable or disable the DHCP function on the internet gateway. If you select enable, you will be prompted to enter the address range from which the router will issue IP address.

Virtual Server (IP Mapping)

Define the list of mapped internal and external IP address. For example, you may want to use IP mapping to access an FTP server on your LAN via the internet.

Load default Settings

Sets the router back to its original factory settings.

Apply and Save Changes

Saves the current configurations into the internet gateway's memory.

NOTE: you must select **Apply and Save Changes** before leaving the menu or your configuration changes will be lost when the gateway is powered off.

Diagnostic

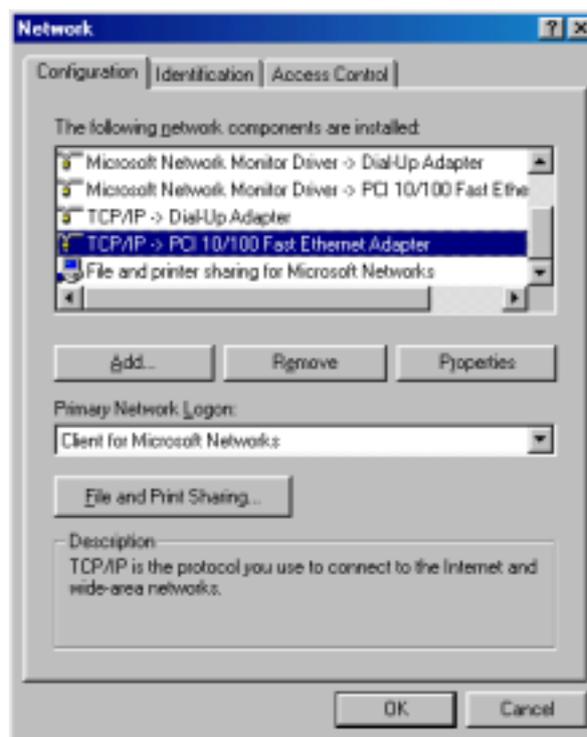
Select Diagnostic to perform basic hardware checking and display the gateway's firmware version. You may also use this option to assign WAN and LAN Mac address if required by your ISP.

When all options have been configured and after you have selected **Apply and Save Changes**, select **q.) Quit**.

How Configuring Your PCs Connect To The Wireless Router

If you **do not** wish to set a static IP address on your PC, you will need to configure your PC to accept the IP address that your gateway will provide.

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

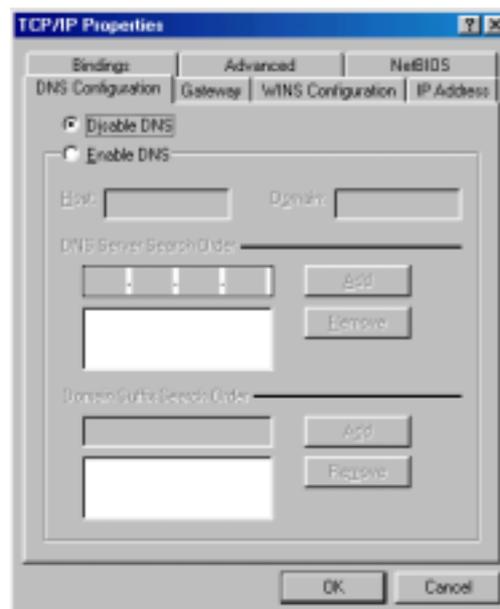


4. Click the **Properties** button, then choose the **IP ADDRESS** tab. Select **Obtain an IP address automatically**.



5. Then select **DNS configuration** tab to add **DNS IP address**. If you do not wish to add DNS you can **Disable DNS function**. Press **OK**. You have completed the client settings.

6. After clicking **OK**, windows will ask you to restart the PC. Click **Yes**.



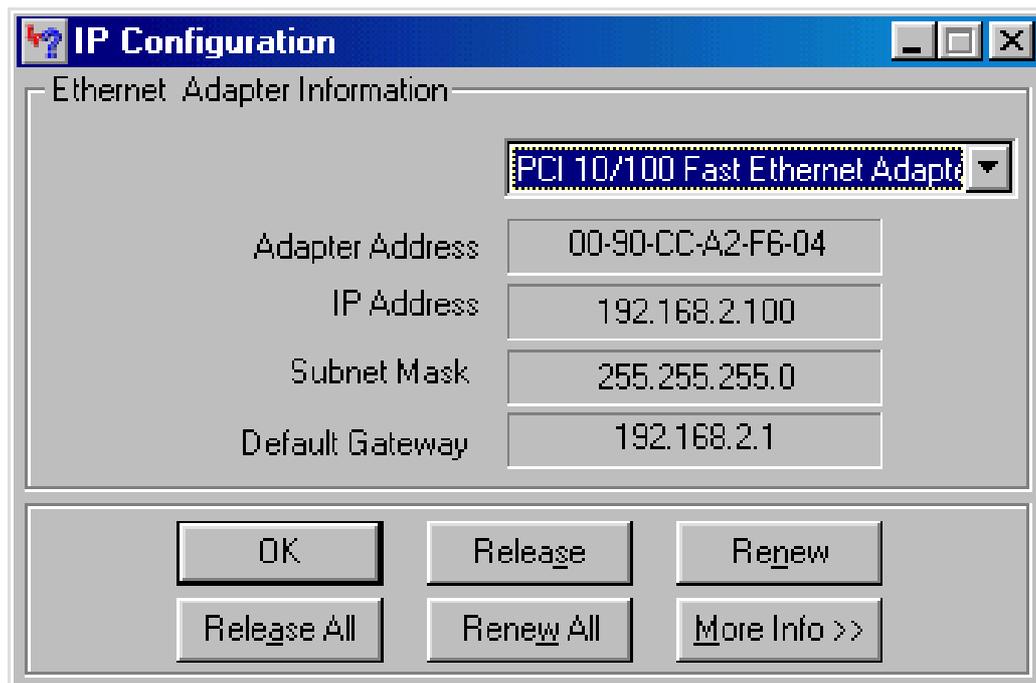
CONFIRM YOUR PC's IP CONFIGURATION

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

- **WINIPCFG (for windows 95/98)**

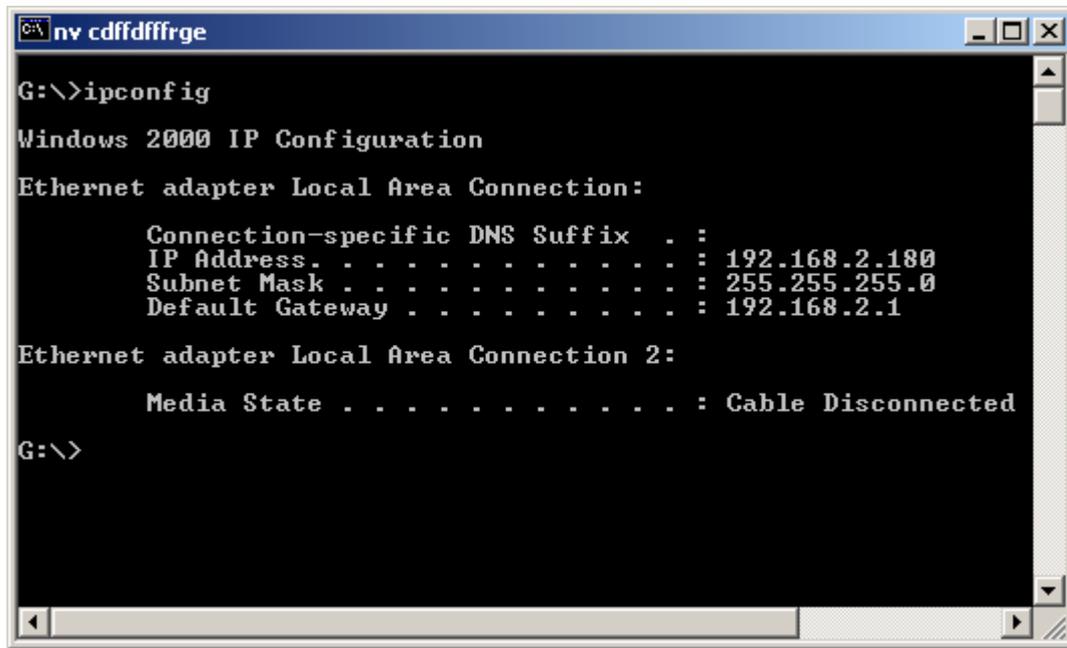
Inside the windows 95/98 **Start** button, select Run and type **winipcfg**. In the example below this computer has a IP address of 192.168.2.100 and the default gateway is 192.168.2.1. The default gateway should be the network device IP address. The MAC address in windows 95/98 is called the Adapter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



```
nv cdffdfrrge
G:\>ipconfig
Windows 2000 IP Configuration
Ethernet adapter Local Area Connection:
    Connection-specific DNS Suffix . :
    IP Address . . . . . : 192.168.2.180
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.2.1
Ethernet adapter Local Area Connection 2:
    Media State . . . . . : Cable Disconnected
G:\>
```

This concludes the user manual.

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