1. Introduction

Thank you for purchasing the Wireless 11g Broadband Router. This Wireless Broadband Router, IEEE802.11g standard compliant, is a high quality and reliable Internet routing and security device, enables multiple users to share the Broadband Internet connection with or without wires through a Cable or DSL modem. Simply install the router, connect to Cable/DSL modem, and surf Internet without extra efforts. Acting as a 10/100Mbps 4-port Ethernet switch as well, the router, with all ports supporting MDI/MDIX, allows you to use CAT5 cable to uplink to other routers/switches.

The Wireless 11g Broadband Router is featured with advanced security technology, supporting WEP, WPA-PSK, WPA (Wi-Fi Protected Access) TKIP/AES and RADIUS. With the router, your network is armed with the highest levels of protection. The Router provides a total solution for the Small and Medium-sized Business (SMB) and the Small Office/Home Office (SOHO) markets, giving you an instant network today, and the flexibility to handle tomorrow's expansion and speed.



1.1 Features

Internet Access Features

Shared Internet Access: All users on the LAN or WLAN can access the Internet through the Wireless Router, using only a single external IP address. The local (invalid) IP addresses are hidden from external sources. This process is called NAT (Network Address Translation).

DSL and cable modem Support: The Wireless Router has a 10/100BaseT Ethernet WAN port for connecting a DSL or cable modem. All popular DSL and cable modems are supported.

PPPoE and PPTP Support: The Internet (WAN port) connection supports PPPoE (PPP over Ethernet) and PPTP (Point-to-Point Tunneling Protocol), as well as "Direct Connection" type services.

Fixed or Dynamic IP Address: On the Internet (WAN port) connection, the Wireless Router supports both Dynamic IP address (IP address is allocated on connection) and Fixed IP address.

Advanced Internet Functions

Conferencing & Telephony Applications: Internet Telephony and Conferencing applications are supported.

DMZ: One PC on your local LAN can be configured to allow unrestricted 2-way communication with Servers or individual users on the Internet.

URL Filter: Use the URL Filter to block access to undesirable Web sites by LAN users, or Wireless LAN users.

Internet Access Log: This feature is used to verify which Internet connections have been made.

Wireless Features

Compliant with IEEE 802.11g standard.

Up to 54Mbps data transfer rates (wireless)

Backward compatible with IEEE802.11b (at 11Mbps)

WEP Support: Support 64/128 bit WEP (Wired Equivalent Privacy) encryption.

WPA Support: Support WPA-PSK Pass Phrase, WPA G-Rekey and WPA TKIP/AES Data Encryption.

Access Control: This feature ensures that only access Wireless Stations that can access your LAN.

Simple Configuration: All default settings can be changed easily.

Supports Wireless Distribution System (WDS)

LAN Features

4-Port Ethernet switch : The Wireless Router provides 4 10/100BaseT switching ports DHCP Server Support: This feature provides a dynamic IP address to PCs and other devices upon request. The Wireless Router can act as a DHCP Server for devices on your local LAN and WLAN.

Multi Segment LAN Support: This feature is enabled through Wireless Router's RIP (Routing Information Protocol) and build-in static routing table.

Configuration and Management

Easy Setup: Users allow to configure Wireless Router from anywhere on the LAN or WLAN via WEB browser.

Remote Management: The Wireless Router can be managed from any PC on the LAN.

UPnP Support: Universal Plug and Play feature. UPnP is supported by Windows ME or later.

Security Features

Password Protected Configuration: Optional password protection is provided to prevent unauthorized users from modifying the configuration data and settings. Wireless LAN Security: Supports 64/128 bit WEP Encryption, WPA-PSK, WPA TKIP/AES, RADIUS Server.

NAT Protection: This feature allows all LAN users to share a single IP address and all users' IPs are hidden. From the external viewpoint, there is no network only Wireless Router exists.

Firewall: All incoming data packets are monitored and all incoming server requests are filtered.

1.2 Package Contents

One Wireless 11g Broadband Router

One 9V AC Power Adapter

One CD including user's manual

One RJ-45 Ethernet Cable

1.3 LEDs Indication & Connectors of Wireless Router

Front Panel LEDs Indication

LED	Light Status	Description
PWR	On	Wireless Router is powered on.
	Off	No power.
LAN	On	LAN port is successfully connected.
(1, 2, 3, 4)	Flashing	Data is being sent or received.
WAN	On	WAN port is successfully connected
	Flashing	Data is being sent or received.
ACT (WLAN)	Flashing	Data is being sent or received.
LINK (WLAN)	On	Wireless connection is ready.

Back Panel Connectors



Button/port	Description		
Reset	Reset configurations to default. Press the button and hold for 10		
	seconds.		
LAN	Connect LAN systems with RJ-45 cable.		
(1x, 2x, 3x, 4x)			
WAN	Connect DSL or Cable modem.		
DC IN	Connect with AC Power Adapter.		

1.4 System Requirements

One or more PCs (desktop or notebook) with Ethernet interface.

TCP/IP protocol must be installed on all PCs.

Have valid Internet Access account and a DSL or cable modem.

10/100BaseT network cables with RJ-45 connectors.

In case to use Wireless Access Point, all Wireless devices must be compliant with IEEE 802.11b/g.

System with MS Internet Explorer ver. 5.0 or later, or Netscape Navigator ver. 4.7 or later.

1.5 Installation Instruction

- 1) Power off Wireless Router and DSL/cable modem.
- 2) Connect systems to the LAN ports on the Wireless Router with straight LAN cables.
- 3) Connect the DSL or cable modem to the WAN port on the Wireless Router.
- 4) Power on DSL or cable modem first, then connect power adapter to the power jack on the Wireless Router and plug the power cable into an outlet.
- 5) Check LEDs.
 - a) Once power on Wireless Router, Power LED should be on.
 - b) LAN LED should be on for each active LAN connection.
 - c) The WAN LED should be on when the DSL or cable modem is connected.

Warning: Only use the power adapter is provided from this package, use other power adapter may cause hardware damage

2 PC Configuration

User needs to configure TCP/IP network settings, Internet access configuration and Wireless configuration for each system within Wireless Router's LAN network. By default, Wireless Router acts as a DHCP server for server version of Windows, it automatically assigns IP address to each system when systems boot up. For all non-server version of Windows, the default TCP/IP setting acts as a DHCP client. If user chooses fixed IP addresses for client systems, the **Gateway** of the client system must be set to the IP address of the Wireless Router and **DNS** of the client system should be set to the address provided by your ISP.

2.1 TCP/IP Networking Setup

Checking TCP/IP Settings for Windows 9x/Me

a) Select "Start → Control Panel → Network", the window below will appear:

Network ? 🗙					
Configuration Identification Access Control					
, , ,					
The following <u>n</u> etwork components are installed:					
Client for Microsoft Networks					
🔜 Microsoft Family Logon					
Big Cic Coo Devel A Cic Fact Filterent & Jackson					
SIS 900-Based PLI Fast Ethernet Adapter					
TCP/IP -> SiS 900-Based PCI East Ethernet Adapter					
Add Remove Properties					
Primary Network Logon:					
Microsoft Family Logon					
<u>F</u> ile and Print Sharing					
Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks.					
OK Cancel					

b) Click "**Properties**", the window below will appear:

TCP/IP Properties				? ×	
Bindings	Advanced		NetBIOS		
DNS Configuration	Gateway	Gateway WINS Confi		IP Address	
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.					
Obtain an IP address automatically					
© Specify an IP address:					
IP Address:					
S <u>u</u> bnet Mask	k:				
		ОК		Cancel	

If you decide to use DHCP, select "**Obtain an IP address automatically**", then click "OK" to confirm your settings. Once you restart your system, Wireless Router will obtain an IP address for this system.

If you decide to use fixed IP address for your system, select "**Specify an IP** address", and make sure that **IP Address** and **Subnet Mask** are correct.

 c) Select "Gateway" tab and enter correct gateway address in "New gateway" field, then click "Add":

TCP/IP Properties		? ×			
Bindings DNS Configuration	Advanced Gateway WINS Conf	NetBIOS iguration IP Address			
The first gateway in the Installed Gateway list will be the default. The address order in the list will be the order in which these machines are used.					
New gateway:					
Installed gateways:					

 d) Select "DNS Configuration" tab and make sure select "Enable DNS", enter the DNS address provides from your ISP in the "DNS Server Search Order" field, then click "Add":

TCP/IP Properties		? ×
Bindings DNS Configuration	Advanced Gateway WINS Conf	NetBIOS iguration IP Address
Disable DNS Disable DNS		
Host	Domain:	
UNS Server Sea		<u>A</u> dd emove
Domain Suffix Se	earch Order	Add
		emove
	04	Cancel

Checking TCI/IP Setting for Windows NT4.0

a) Select "Control Panel → Network", click "Protocols" tab then select "TCP/IP protocol", window shown as below will appear:

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. 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
- Consult the dealer or an experienced radio/TV technician for help. the receiver is connected.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of about eight inches (20cm) between the radiator and your body.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

The manufacturer declared that this device is limited in CH1~11 by specified firmware controlled in USA.