# MSI MS-6811 RG11B Wireless 802.11b Residential Gateway



#### NOTE

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. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, 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.

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

## FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

## 1. Introduction

Thank you for purchasing MSI MS-6811 RG11B, the Wireless 802.11b Residential Gateway designed for high throughput and fully function that leads you into the wireless network environment. In the rapid growing network environment, the Wireless Residential Gateway acts as a home-end device that connects your computer(s) to the WAN service (eg. the Internet). With the Wireless Residential Gateway, networking and sharing information throughout the house/corporate becomes an easy and flexible task. In addition, MSI MS-6811 RG11B is also a switching device as an aggregating point of the wireless LAN and wired LAN clients, and as a bridge between LAN and WAN traffic.

MSI MS-6811 RG11B is an edged device that fits to SOHO application; therefore, it combines the basic firewall, wireless Access Point, print server and LAN switch into one compact and stylish package to provide security, VPN features and IP sharing function.

# 2. Networking Options

The Wireless Residential Gateway is a Base Station that bridges communication between (wireless) computers, and connects the computers to the Internet.

You can use the Wireless Residential Gateway as the followings:

- **Home connectivity**: a stand-alone wireless network.
- Broadband access: a wireless/wired Internet access via xDSL/Cable Modem or Ethernet.

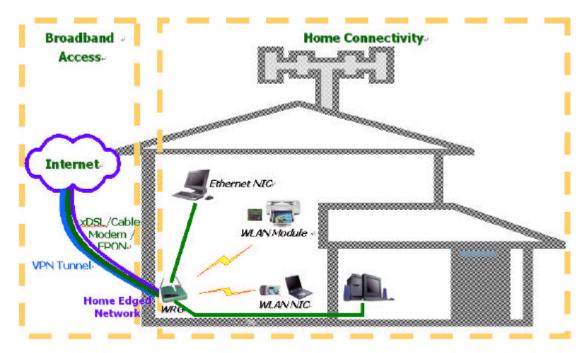


Figure 1. Wireless LAN Typical Configuration

To build your network, you need:

- One MS-6811 RG11B.
- One or more network adapters/wireless network adapters for computers.
- One ISP (Internet Service Provider) account for connecting to the Internet.

## 2.1 Stand-alone Wireless Network

As shown in the right part of *figure 1*, the out-of-the-box mode of operation for the Wireless Residential Gateway that allows your client stations to share files and printers. Adding wireless computers is as easy as inserting a wireless client adapter and configuring the computer with the same Network Name and Key.

## 2.2 Wireless Internet Access via xDSL/Cable Modem

To access the Internet via an ADSL modem, Cable modem or ISDN modem, you will need to:

- Connect the external modem to the Residential Gateway using a LAN cable.
- An ISP (Internet Service Provider) account.

## 2.3 Wireless Internet Access via Ethernet

The Wireless Residential Gateway can be installed in the companies or educational organizations that offer the Internet access to their employees or students via an existing LAN Infrastructure. In this mode, the Residential Gateway will act as a bridge between the wireless and wired network.

## 3. Package Contents

After removing the package, you should find the following items:

- MS-6811 RG11B.
- Power Supply.
- Software CD containing the User's Manual.
- Quick Installation Guide.

If any item is missing or damaged, please contact your dealer for assistance.

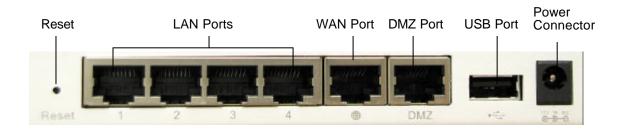
# 4. System Requirement

To configure the Wireless Residential Gateway, you will need:

- Computer with Windows®operating system and installed with Ethernet adapter.
- Internet Explorer 6.0 and later, or Netscape Navigator 6.0 and later.

# 5. Connect and Power Up

# **5.1** Connections



Reset Button	Press and release this button to restart the Residential Gateway.
	If you press and hold this button more than five seconds, the
	system will reload the factory default settings.
LAN Ports 1~4*	There are four 10/100 Mbps RJ-45 ports to provide connection
	to the computers and network devices.
WAN Port*	This 10/100 Mbps Fast Ethernet port provides connection to
	your xDSL/Cable Modem or Ethernet connection.
DMZ Port*	This is a 10/100 Mbps dedicated DMZ port. All WAN traffic
	will be checked by the firewall before forwarding, except the
	DMZ traffic. Based on the configuration, users may setup
	Web, SMTP email, Telnet, FTP, etc. traffic being handling by
	the DMZ connected host.
USB Port	The USB 1.1 port is used to connect the printer to provide print
	sever function.
<b>Power Connector</b>	Connect the enclosed power adapter and provide power to the
	Wireless Residential Gateway.

<sup>\*</sup> All ports support Auto MDI/MDIX.

# **5.2 LEDs**



Power	A steady <b>Blue</b> light indicates the power adapter is connected.
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LAN 1~4	A Green light glows when there is a computer/device
	connected to respective port, and flashes when receiving/
	transmitting data on the link.
WAN	A Green light glows when the system connects to the xDSL/
ATTA.	Cable Modem or Ethernet connection, and flashes when
ATD.	receiving/transmitting data on the link.
DMZ	A Green light glows when there is a computer/device
	connected to this port, and flashes when receiving/transmitting
	data on the link.
Lock	A Green light glows when the system is locked for security.
8	
Wireless Status	There are three indicators showing the status of wireless
	network.
	<b>Green</b> : High traffic - WAN traffic utilization more than
	75%.
	Yellow: Fair traffic - WAN traffic utilization between
	20% and 75%.
	Orange:s Low traffic - WAN traffic utilization less then
	20%.

## **5.3** Installing the Wireless Residential Gateway

### **5.3.1 Positioning**

The Wireless Residential Gateway can be put on a flat surface or can be mounted on the wall. Before connecting the Wireless Residential Gateway to your devices, please note that the it should be placed in a location where is:

- Easy to access; so that you can conveniently connect it to the xDSL/Cable Modem through the WAN port, and to the PCs/devices through the LAN ports.
- Allows you to observe the LEDs clearly; so that you may monitor the real-time networking status and take instant measures as problems arise.

## **5.3.2** Connecting

- 1. Plug the DC end of the power adapter into the connector of the Wireless Residential Gateway, and the AC end to the wall outlet later.
- 2. To connect the Internet, use the suitable cable to connect the Wireless Residential Gateway's WAN port to your xDSL/Cable Modem.
- 3. For wired connection, connect your computers/devices to the LAN ports (1~4) on the Wireless Residential Gateway.
- 4. For wireless connection, install the wireless adapters onto your computers, and you have to configure settings to take full advantages of the Wireless Residential Gateway.

## **5.3.3 Power Up**

When the DC end of the power adapter is connected the Wireless Residential Gateway, plug the AC end of the power adapter to the wall outlet can power up the system; and, the system will perform POST (Power-On-Self-Test) to diagnose the system.

#### 5.4 Security Lock

MSI MS-6811 RG11B provides a security lock on its front panel. When it is locked, the users cannot enter the Web Configuration through the browser to change any respective setting.

## 6. Specification

**Standards** IEEE 802.11b

**LAN Connection** - Four auto-negotiating 10/100Mbps RJ-45 ports,

Auto MDI/MDI-X.

- One auto-negotiating 10/100Mbps DMZ port,

Auto MDI/MDI-X.

**WAN Connection** One 10/100Mbps Fast Ethernet port for connecting

to the xDSL/Cable Modem or Ethernet connection.

Internet Protocol Support TCP/IP, NAT, DHCP, HTTP, FTP, PPPoE, DDNS.

**Operating System Support** Microsoft® Windows® 98SE/Me/2000/XP.

**LEDs** Power, LAN, DMZ, WAN, Lock, Wireless network.

**Environmental and Physical** - Dimension: 180(L) x 129(W) x 31(H) mm.

- Weight: 392 g.

- Operating Temperature: 0°C to 50°C.

- Storage Temperature: -25°C to 70°C.

- Humidity: 5% to 95% non-condensing.

**EMI Compliance** FCC Class B, CE Class B.