

MSI AP54G (MS-6844)

Wireless 11g Access Point

User's Guide



FCC Caution

1. The 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.
2. FCC RF Radiation Exposure Statement: The 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.
3. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
4. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

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Important Safety Precautions

Always read and follow these basic safety precautions carefully when handling any piece of electronic component.

1. Keep this User's Manual for future reference.
2. Keep this equipment away from humidity.
3. Lay this equipment on a reliable flat surface before setting it up.
4. The openings on the enclosure are for air convection hence protects the equipment from overheating.
5. All cautions and warnings on the equipment should be noted.
6. Never pour any liquid into the opening that could damage or cause electrical shock.
7. If any of the following situations arises, get the equipment checked by a service personnel:
 - Liquid has penetrated into the equipment
 - The equipment has been exposed to moisture
 - The equipment has not work well or you can not get it work according to User's Manual
 - The equipment has dropped and damaged
 - If the equipment has obvious sign of breakage
8. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 60°C OR BELOW -20°C, IT MAY DAMAGE THE EQUIPMENT.

Revision History

Revision	History	Date
V 1.0	First Release	January 2004

1. Introduction

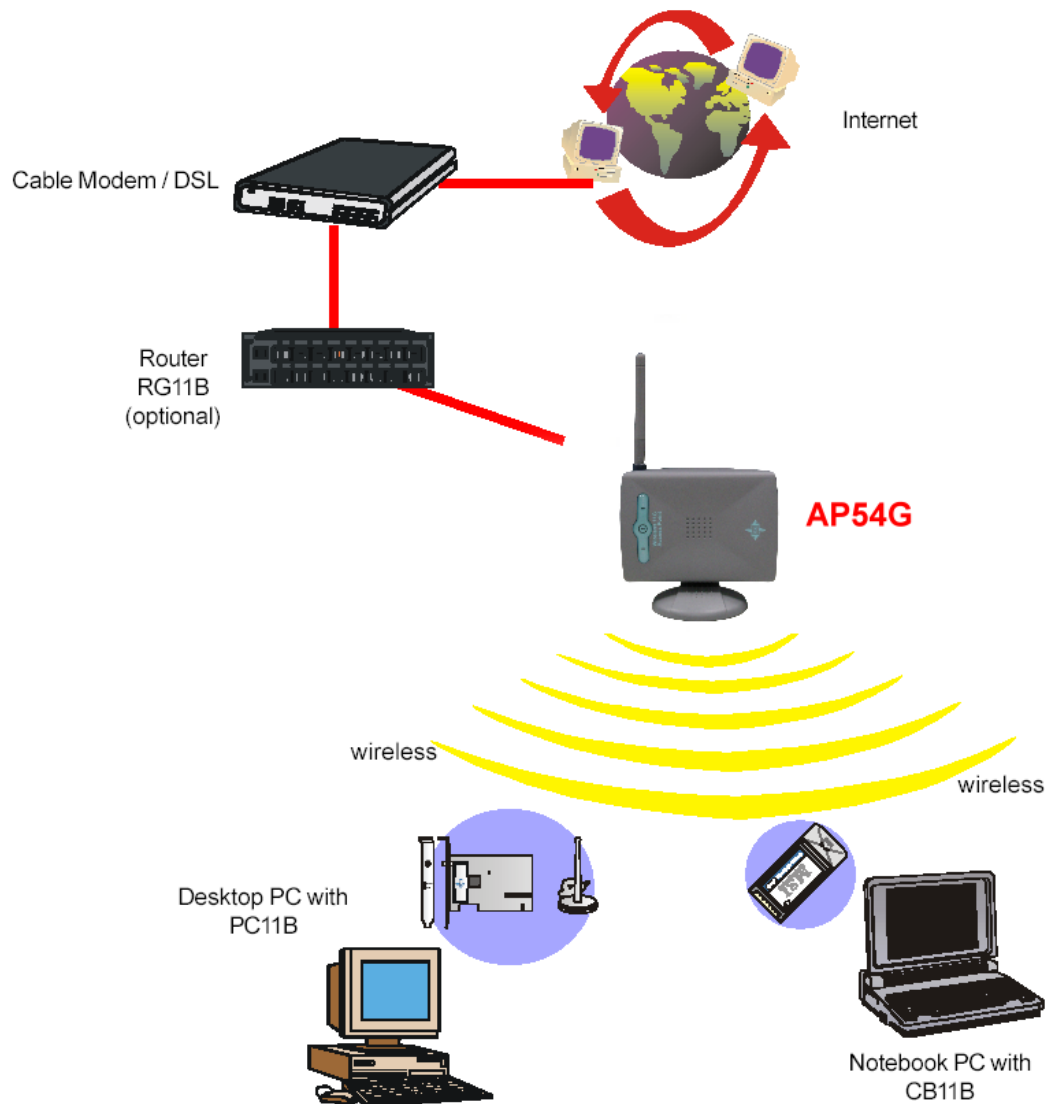
MSI AP54G (MS-6844) wireless access point is IEEE802.11g compliant, and connects one or more wireless enabled computers to an Ethernet network or Cable/xDSL modem for high speed connection, anywhere in your home or office.

The AP54G wireless access point's high-gain antennas offer a range of operation of up to 500 feet indoor, providing seamless roaming throughout your LAN infrastructure. Advanced user authentication ensures a high level of security for wireless networking, while easy-to-use web-based configuration tools ensure that you'll always be in control. Best of all, the AP54G wireless access point features easy installation---your choice to be free-standing, wall- or ceilingmounted.

With all these features come together in one compact, lightweight, and power-efficient unit, you have the ultimate in flexible networking---the AP54G wireless access point.

2. Networking Options

Infrastructure Mode: Infrastructure networking differs from Ad-hoc networking is that it includes an Access Point. The Access Point enables users on a wireless LAN to access an existing wired network, allowing wireless users to take advantage of the wired networks resources, such as Internet, email, file transfer, and printer sharing. The scale and range of the Infrastructure networking are larger and wider than that of the Ad-hoc networking.



3. Features and Benefits

➤ **54Mbps Data Rate/150-500ft Indoor Range**

The AP54G runs with data-intensive applications like multimedia and streaming video/audio --- even through walls, floors and ceilings. You get high-speed networking without wires --- ideal for home office networking requirements.

➤ **Superior Antennas Design**

One external dipole and one internal patch antennas provide superior polarized reception and transmission for the best signal quality.

➤ **Wi-Fi Certified**

The AP54G complies with IEEE802.11g standard and Wi-Fi, allowing full interoperability with any Wi-Fi certified wireless product.

➤ **Easy Installation**

User-friendly web-based interface and step-by-step Setup Wizard make the AP54G fast and easy to install.

➤ **WEP Security to Ensure Privacy**

Supports 64/128-bit WEP encryption, which ensures that your network signal is secure and private.

4. Package Contents

Unpack the package and check all the items carefully. If any item contained is damaged or missing, please contact your local dealer as soon as possible. Also, keep the box and packing materials in case you need to ship the unit in the future.

Your AP54G package should contain the following items:

- AP54G x 1
- Stand x 1
- Quick Start Guide x 1
- CD title including User's Manual and Quick Start Guide x 1
- DC 12V/500mA Power Adaptor x 1

5. Product View



LEDs Indicate the power and traffic utilization status.

Antenna External dipole antenna.

6. Installation and Configuration

6.1 Default Parameters

Password	admin
IP address	192.168.1.254
Subnet mask	255.255.255.0
SSID	AP54G
Channel	7
Encryption	Off
DHCP client	Disable

6.2 System Requirements

You need the followings to configure respective network settings:

- Computers with the following operating systems and with an installed Ethernet adapter
 - Microsoft Windows
 - Linux
 - MAC OS
- Any browser compatible with Internet Explorer 6.0 and later, or Netscape Communicator 6.0 and later

6.3 Installing Your AP54G

● **Positioning**

The AP54G can be free-standing, wall- or ceiling-mounted. Before making the AP54G workable, please note that the AP54G should be placed in a location with the followings:

- **Easy accessibility:** you can conveniently connect the AP54G to the xDSL/Cable Modem through the Ethernet port.
- **Easy LEDs observation:** you may monitor the real-time networking status and take instant measures as problems arise.
- **Maximum wireless coverage:** to achieve the maximal coverage, the AP54G should be placed at a high level in position without obstacles and defiladed space. No matter how you install the AP54G--- in a wall-mounted or free-standing fashion, remember the antenna should always point vertically upward.

● **Connecting Cables**

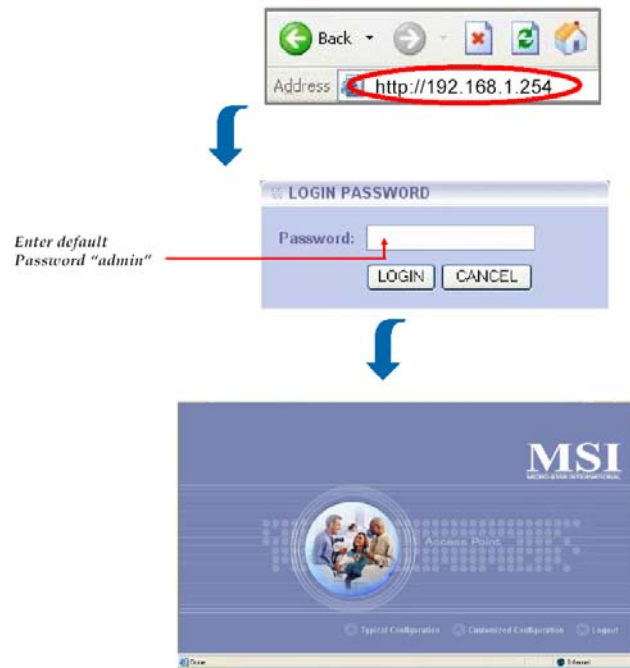
1. Plug the DC end of the power adapter into the connector of the AP54G, and the AC end to the wall outlet later.
2. For wired connection, connect the AP54G to the LAN port.

● **Power Up**

When the DC end of the power adapter is connected the AP54G, 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.

6.4 Web-based Configuration

The AP54G provides you a convenient tool to customize the network settings. Whenever you want to configure the respective settings, open your web browser (eg. Internet Explorer or Netscape Communicator), then type the default IP address **192.168.1.254** in the Address bar and press [**Enter**].



The index window will appear as below, providing three options to select: **Logout**, **Typical Configuration** and **Customized Configuration**.

- **Typical Configuration** provides a step-by-step setup wizard to guide you through the basic settings. Generally, after completing the three steps in this option, your AP54G can connect to the ISP and your client computer can access to the Internet without any problem.
- **Customized Configuration** allows you to customize the network settings of your AP54G for some specific purposes, such as changing password, upgrading firmware, and other network settings.
- **Logout** allows you to exit the configuration utility.

7. Specification

Data Rates	IEEE 802.11b (Auto-Fallback): - CCK @ 5.5 and 11Mbps - DQPSK @ 2Mbps - DBPSK @ 1Mbps IEEE 802.11g (Auto-Fallback): - OFDM @ 54, 48, 36, 24, 18, 12, 9, 6Mbps
Standard	IEEE 802.11g/b, IEEE802.3u 10/100 Base-Tx
Range	150-500 feet (indoor), 1000-1600 feet (outdoor)
Frequency	2.4GHz
Wireless Radio Type	DSSS (Direct Sequence Spread Spectrum)
ModulationType	CCK, BPSK, and QPSK
WEP Encryption	64/128-bit
Antenna	One external dipole and one internal patch
Protocols Support	TCP/IP, DHCP Client, HTTP
Wired Interface	One Ethernet IEEE 802.3u 10/100 Base-Tx, RJ-45 with Auto MDI/MDI-X
User Selectable Settings	Network Mode, SSID, Channel, Tx Rate, RTS/CTS Threshold, Fragmentation Threshold, WEP, Mac Filtering, Firmware Upgrade
LED Indicators	WLAN, LAN
Output Power	Up to +18dBm
Sensitivity	-82dBm @ 11Mbps -85dBm @ 5.5Mbps -87dBm @ 2Mbps -88dBm @ 1Mbps
Power Consumption	Max. 3.6 watts (continuous transmit mode)
Power Adapter	110~120AC (USA, Canada) 220~240AC (Europe) DC output: 12V DC Output current: 500mA