

UB54G, MS-6826

Wireless 11g USB Adapter

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.

Copyright Notice

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Revision History

Revision	History	Date
V1.0	First Release	November 2003

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.**
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How to Use This Guide

This User's Guide provides instructions and illustrations on how to install and use your **MSI UB54G** - the Wireless 11g USB Adapter.

- ❶ Chapter 1, **Introduction**, provides a general information on the product you bought, including its application, specification, and requirements.
- ❷ Chapter 2, **Installing Your UB54G**, tells you how to install the product into your system.

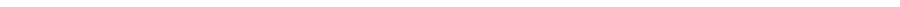
Please note that the setting diagrams or values in this guide are **FOR YOUR REFERENCE ONLY**. The actual settings and values depend on your system and network. If you are not sure about these information, please ask your network administrator or MIS staff for help.

Technical Support

- ❶ Visit the MSI website for FAQ, technical guide, driver and software updates, and other information: <http://www.msi.com.tw/>.
 - ❷ Contact our technical staff at: support@msi.com.tw.
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Introduction

>>> 1.1 UB54G (MS-6826) - Wireless 11g USB Adapter

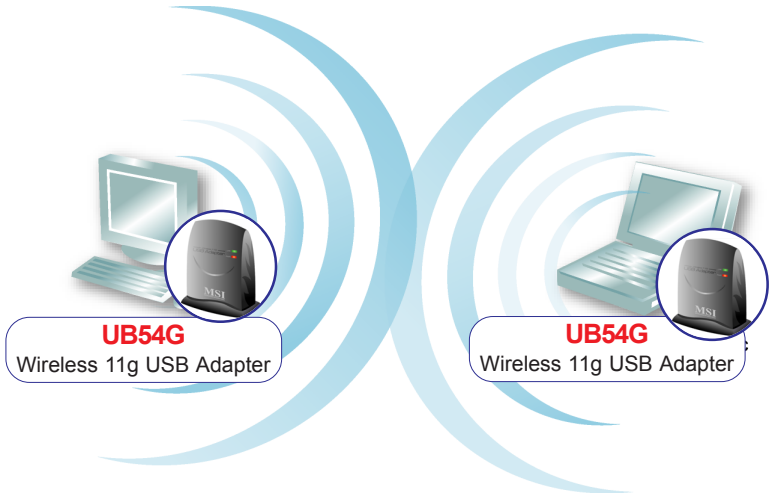
UB54G (MS-6826), compliant with IEEE802.11g standard, is compliant with IEEE802.11g, is a high-efficiency wireless adapter for wireless networking at home, in office or in public places. The data rate can be up to 54 Mbps and auto-negotiated to 48, 36, 24, 18, 12, 9, 6Mbps (IEEE 802.11g), or 11, 5.5, 2, 1Mbps (IEEE802.11b).

With UB54G, you can roam between conference room and office without being disconnected the LAN cables; in addition, sharing files and printers can be easy tasks.

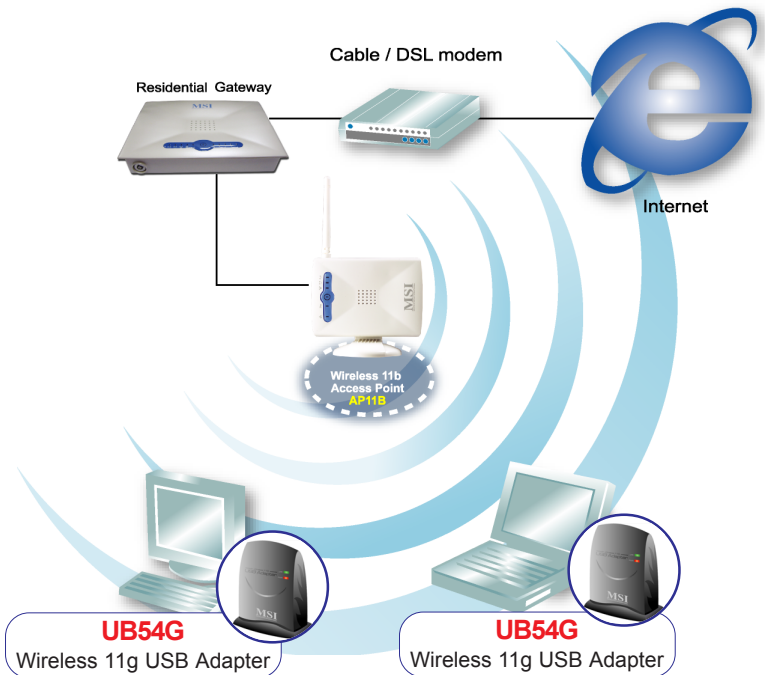
The UB54G is available to Microsoft Windows operating systems (Windows® XP/2000/ME/98SE) and can be integrated into networking with either **Ad-hoc mode** (computer-to-computer, without an Access Point) or **Infrastructure mode** (computer-to-access point, an Access Point is required).

>>> 1.2 How UB54G Works

Q Ad-hoc Mode : An Ad-hoc network is a local area network, especially one with wireless or temporary plug-in connections. Therefore, some of the network devices are part of the network only for the duration of a communications session. Users in the network can share files, print to a shared printer, and access the Internet with a shared Gateway or Access Point. In this kind of network, new devices can be quickly added; however, users can only communicate with other wireless LAN devices that are in this wireless LAN workgroup, and are within range.



Infrastructure Mode : The difference between Infrastructure network and Ad-hoc network is that the former one includes an Access Point. In network environment, the Access Point can manage the bandwidth to maximize bandwidth utilization. Moreover, 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.



>>> 1.3 Specifications

Connection Interface	USB 2.0 Type-B standard
Standard	IEEE 802.11g/b
Frequency Range	2.4GHz to 2.4835GHz
Data Rate and Modulation Types	IEEE802.11b (auto-fallback): - CCK @ 5.5 and 11Mbps - DQPSK @ 2Mbps - DBPSK @ 1Mbps IEEE802.11g (auto-fallback): - OFDM @ 54, 48, 36, 24, 18, 12, 9, 6Mbps
Network Protocols Support	TCP/IP, NetBEUI, IPX/SPX

Operating Channels

Channel ID	Center Frequency (GHz)	Regulatory Domain					
		North American	ETSI	Mexico	France / Singapore	Japan	Israel
1	2.412	X	X		X (10 dBm)	X	
2	2.417	X	X		X (10 dBm)	X	
3	2.422	X	X		X (10 dBm)	X	X
4	2.427	X	X		X (10 dBm)	X	X
5	2.432	X	X		X (10 dBm)	X	X
6	2.437	X	X		X (10 dBm)	X	X
7	2.442	X	X		X (10 dBm)	X	X
8	2.447	X	X		X (10 dBm)	X	X
9	2.452	X	X		X (10 dBm)	X	
10	2.457	X	X	X	X	X	
11	2.462	X	X	X	X	X	
12	2.467		X		X	X	
13	2.472		X		X	X	
14	2.484					X	

Modulation Technology	Direct Sequence Spread Spectrum (DSSS), DBSK, DQPSK, CCK
Media Access Protocol	CSMA/CA with ACK
Antenna	Internal Dipole Antenna
Security / Encryption	64-/128-bit WEP

Range	Outdoor: 50m ~ 450m Indoor: 10m ~ 100m
LED	LNK LED: Green ACT LED: Red
Operating system	Microsoft® Windows® 98SE/ ME/2000/XP
Environmental	Operating Temperature: 0 ~ 50°C Storage Temperature: -20 ~ 75°C Operating Humidity: 10 ~ 90%, non-condensing
Operation Voltage	5.0 VDC(+/- 0.5V)
Certification	EMC, FCC Class B, CE, BSMI, DGT, Wi-Fi, WHQL, USB-IF

>>> 1.4 System Requirements

Before installing the UB54G, your PC should meet the following:



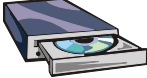
- Desktop/notebook PC with an available USB port.



- Windows® 98SE/ME/2000/XP operating system.



- Minimum 5MB free disk space for installing the driver and utilities.



- CD-ROM drive, double speed or higher.

>>> 1.5 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. The package should contain the following items:



- One Wireless 11g USB Adapter - **UB54G**.



- One USB cable.



- One Quick Start Guide.



- One software CD-ROM including drivers, utilities, User's Guide and Quick Start Guide.

>>> 1.6 Product View

LEDs

LNK - a steady **GREEN** light indicates that the UB54G is connected.

ACT - a flashing **RED** light indicates that the UB54G is transmitting data over the network.

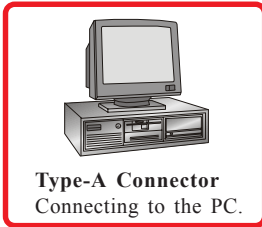
USB Connector (Type-B)



2 Installing Your UB54G

>>> 2.1 Connecting the UB54G

1. Unpack the package carefully to find the UB54G and USB cable.
2. Connect the Type-B end of USB cable to the USB connector on the bottom of the UB54G, and the Type-A end to the USB connector on your computer.



>>> 2.2 Removing the UB54G

The UB54G supports hot-plug function, so that you can remove it under Windows operating system without shutting down the system.

NOTE: *DO NOT remove the UB54G while transferring data (the LED is flashing). Please close the communication programs or stop the task before removing it.*

>>> 2.3 Installing the Driver and Utility

This section describes the procedures of installing the driver and utility. Follow the instruction step by step to finish the installation. If you use Windows® 98SE/ME, please prepare the Windows® Setup CD at hand before installing the driver; because the system will ask you to insert the Setup CD to copy files during the installation.

Please **NOTE** that the UB54G should be installed into your computer before installing the driver and utility. Then, turn on the computer, and the operating system will detect a new device and start to configure the new device. Click **Cancel** here to start installation from the InstallShield Wizard.

Tip: The card should be installed into your computer before installing the driver and utility.



- Step 1.** Insert the software CD into your CD-ROM drive, and the Setup program should launch automatically.

If the Autorun program doesn't launch automatically, click **Start** at the taskbar and select **Run...** Type **E:\setup.exe** in the Open box and click **OK** (**E** is your CD-drive) to launch the Setup program manually.

The main screen of Setup program will appear as below. Click the **Install Software** button.



Step 2. The welcome screen of InstallShield Wizard appears. click **Next**.

Read and accept the License Agreement; then, click **Next**.

in the following window, enter the user's information (*User Name, Organization*) in the respective fields; then, click **Next**.

Step 3. Click **Install** and the program will copy the necessary files to the system. The progress indicator shows the installing status.

Tips: *If you use Windows 98SE/ME, you may be asked to insert the Windows Setup CD during the installation. Please insert the Setup CD by the on-screen instruction to continue the installation.*

Step 4. Click **Finish** when the installation is completed. The MSI Wireless LAN icon will appear in the status area.






MSI Wireless LAN icon

>>> 2.4 The MSI Wireless LAN Icon


After installing the driver, the UB54G provides a convenient and powerful Wireless Network Utility, allowing you to set up, configure, and know your networking status easily and clearly.

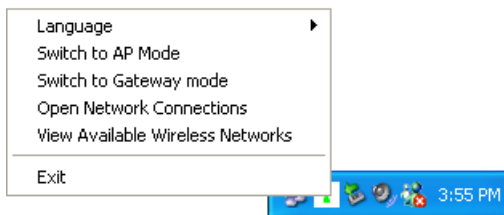
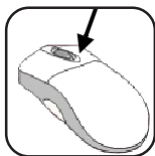
The MSI Wireless LAN Icon

-  - Not connected to the network.
-  - Connected to the network.
-  - Receiving/transmitting data from/to the network.

When you move the mouse over the icon, it shows the current connection information.



-  **Right-clicking** the icon will bring up a shortcut menu containing more settings:



Language

You can select language according to your operating system.

Switch to AP Mode

This function allows you to use your MSI wireless adapter as a virtual access point.

Switch to Gateway Mode

This function allows you to use your MSI wireless adapter as a virtual gateway.

Open Network Connections

Select to open the Network Connections window.

View Available Wireless Networks

Launch the utility to configure your network settings.

Exit

Close the program.

- **Clicking** the icon will launch the utility as shown below to configure your network settings.

