/ISUS®

WiFi-g™ Onboard
3-in-1 Wireless LAN Adapter
54 Mbps
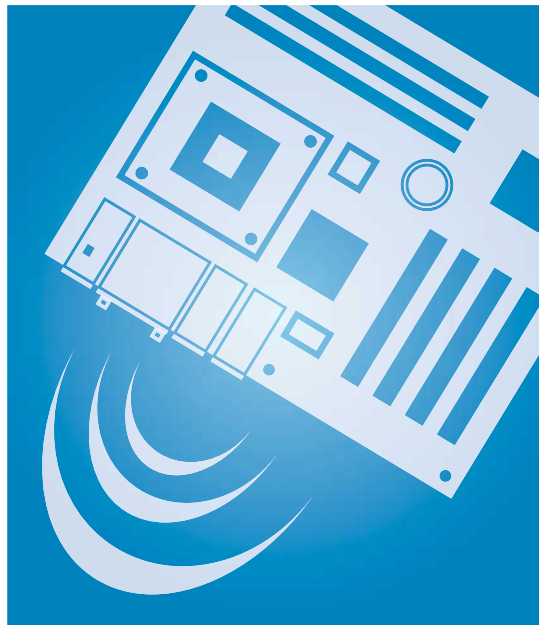
User Guide

E1667

First Edition V1

June 2004

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Notices

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and

- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (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 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.

> **CAUTION!** You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Reprinted from the Code of Federal Regulations #47, part 15.193, 1993. Washington DC: Office of the Federal Register, National Archives and Records Administration, U.S. Government Printing Office.

Safety statements

Regulatory Information/Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

> **CAUTION!** To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance [20cm] between the radiator and your body. Use on the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

Safety Information

In order to maintain compliance with the FCC RF exposure guidelines, this equipment should be installed and operated with minimum distance **[20cm]** between the radiator and your body. Use only with supplied antenna.

Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

> **CAUTION!** Any changes or modifications not expressly approved in this manual could void your authorization to use this device.

MPE Statement

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

Safety statements

Caution Statement of the FCC Radio Frequency Exposure

This Wireless LAN radio device has been evaluated under FCC Bulletin OET 65C and found compliant to the requirements as set forth in CFR 47 Sections 2.1091 and 15.247(b)(5) addressing RF Exposure from radio frequency devices. The radiation output power of this Wireless LAN device is far below the FCC radio frequency exposure limits. Nevertheless, this device shall be used in such a manner that the potential for human contact during normal operation – as a mobile or portable device but use in a body-worn way is strictly prohibit. When using this device, a certain separation distance between antenna and nearby persons has to be kept to ensure RF exposure compliance. In order to comply with the RF exposure limits established in the ANSI C95.1 standards, the distance between the antennas and the user should not be less than [20cm].

RF Exposure

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

About this guide

This user guide contains the information you need to install and configure your ASUS WiFi-g™ wireless solution.

How this guide is organized

This guide contains the following parts:

- **Chapter 1: Product introduction**

  This chapter describes the general features of the ASUS WiFi-g™ wireless solution. The chapter also presents the LED indications, and recommended WiFi-g™ network settings.

- **Chapter 2: Installation**

  This chapter provides step by step instructions on installing the wireless LAN adapter drivers and software applications using the support CD.

- **Chapter 3: Setting up**

  This chapter provides information on how to set up the WiFi-g™ in your home or office network using the setup wizard.

- **Chapter 4: Software support**

  This chapter provides information on several software applications included in the WiFi-g™ support CD.

- **Appendix**

  The Appendix lists the wireless LAN channels available for use in your country or location.

Conventions used in this guide

To make sure that you perform certain tasks properly, take note of the following symbols used throughout this guide.

WARNING: Information to prevent injury to yourself when trying to complete a task.

CAUTION: Information to prevent damage to the components when trying to complete a task.

IMPORTANT: Information that you MUST follow to complete a task.

NOTE: Tips and additional information to aid in completing a task.

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WiFi-g™ specifications summary

Standard	IEEE 802.11g; IEEE 802.11b
Interface	PCI bus
Technology	Octogonal Frequency Division Multiplexing (OFDM) Direct Sequence Spread Spectrum (DSSS)
Data transfer rate	802.11g: 54 Mbps with auto-fallback to 48, 36, 24, 18, 12, 9, and 6 Mbps 802.11b: 11 Mbps with auto-fallback to 5.5, 2, and 1 Mbps
Supported networks	Infrastructure mode Ad-hoc mode Software Access Point (Soft AP) mode* Wireless Bridge (Wireless Distribution System) mode*
Frequency band	2.4 GHz ~ 2.5 GHz
Security	64-bit/128-bit configurable WEP encryption Wi-Fi Protected Access (WPA)

Operating distance	*802.11b operation* Indoor : 130ft (40m)
	                                 Outdoor: 1000ft (310m) LOS**
	802.11g operation Indoor : 80ft (25m)
	                                  Outdoor: 200ft (60m) LOS**

Compatibility	IEEE 802.11b and IEEE 802.11g devices
Supported OS	Windows® 2000/XP/Server 2003
Antenna	Detacheable dipolar antenna
LED	Green data transmission (AIR) LED
Software support	One Touch Setup Wizard Control Center Wireless Settings Mobile Manager (client mode) Site Monitor (client mode)

* Supported only when using Windows® XP and Server 2003 32-bit version.
** Line-of-Sight

Specifications are subject to change without notice.

Chapter 1

This chapter describes the general features of the ASUS WiFi-g™ wireless solution. The chapter also presents the LED indications, and recommended WiFi-g™ network settings.

Product introduction

1.1   Welcome!

Thank you for choosing the ASUS WiFi-g™ wireless solution!

The WiFi-g™ is an easy-to-use wireless local area network (WLAN) adapter designed for home or office use. Conforming to IEEE 802.11g standard for WLAN, the ASUS WiFi-g™ is capable of up to 54 Mbps data transmission rate using the Direct Sequence Spread Spectrum (DSSS) and the Octogonal Frequency Division Multiplexing technologies. The WiFi-g™ is backward compatible with the earlier IEEE 802.11b standard allowing seamless integration of both wireless LAN standards in a single network.

The WiFi-g™ also supports several wireless network configuration including Infrastructure, Ad-hoc, Soft Access Point, and Wireless Bridge (Wireless Distribution System) giving you flexibility to your existing or future wireless network configurations.

To provide efficient security to your wireless communication, WiFi-g™ employs both 64-bit/128-bit Wired Equivalent Privacy (WEP) and Wi-Fi Protected Access (WPA) encryptions.

With these and many more, ASUS WiFi-g™ is sure to keep you ahead in the world of wireless computing.

1.2   Features

No hardware installation

Because the WiFi-g™ wireless LAN adapter comes embedded in your ASUS Premium motherboard, no hardware installation is needed. Just install the drivers and utilities from the motherboard support CD and start computing wirelessly in no time.

54Mbps speed advantage

With data transmission rate up to five times faster than IEEE 802.11b standards, the WiFi-g™ breaks the wireless data transmission speed barrier to give you faster Internet connection and file sharing capabilities.

Easy integration

The WiFi-g™ is compatible with all IEEE 802.11b devices so you can still use your IEEE 802.11b devices in the WiFi-g™ network.

One Touch setup wizard

Designed for novice home users and experts alike, the **One Touch** setup wizard guides you through the entire setup process without the hassles of configuring confusing network settings.

The **One Touch** wizard guides you in configuring the WiFi-g™ as an access point and intelligently configures the Internet connection sharing settings so you can easily share your Internet connection with other computers in your home or office network.

Soft access point function

If you are using the 32-bit version of Windows® XP/Server 2003 operating system, you can transform the WiFi-g™ into a Software Access Point (Soft AP). As Soft AP, WiFi-g™ can support an unlimited number of client computers with wireless LAN adapters making it an ideal solution for homes and offices with single Internet connection or network printer.

Wireless bridge capability

Integrate several wireless LANs using the wireless bridge capability of the WiFi-g™. Using the bundled software applications, you can connect several wireless LANs without buying expensive wireless LAN peripherals.

Moveable omni-directional antenna

A moveable, omni-directional antenna comes with your WiFi-g™ to maximize your wireless coverage.

1.3   LED and antenna port

The WiFi-g™ comes with a green data transmission LED (AIR) and an antenna port located at the motherboard rear panel.

AIR LED
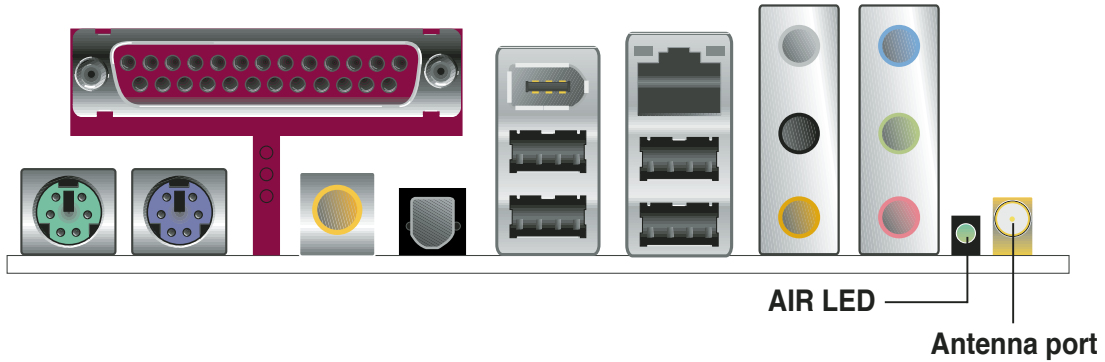
Antenna port

The location of the WiFi-g™ data transmission LED and antenna port may vary on other motherboard models.

LED indicators

Refer to the table below for LED indications.

| LED	Status	Indication
AIR	On	The WiFi-g™ is on but has no data activity.
	Off	The WiFi-g™ is off.
	Flashing	The WiFi-g™ is transmitting and/or receiving data.

1.4   Recommended network setup

You can use the ASUS WiFi-g™ in various wireless network configurations. It is recommended that you select the most appropriate configuration for your wireless home or office network.

> The following descriptions are for reference only and may not exactly match your actual network configuration.

1.4.1   Ad-hoc mode

When in Ad-hoc mode, the WiFi-g™ connects to another wireless device within its operating range. Select this configuration when no access point (AP) is present in your wireless network.
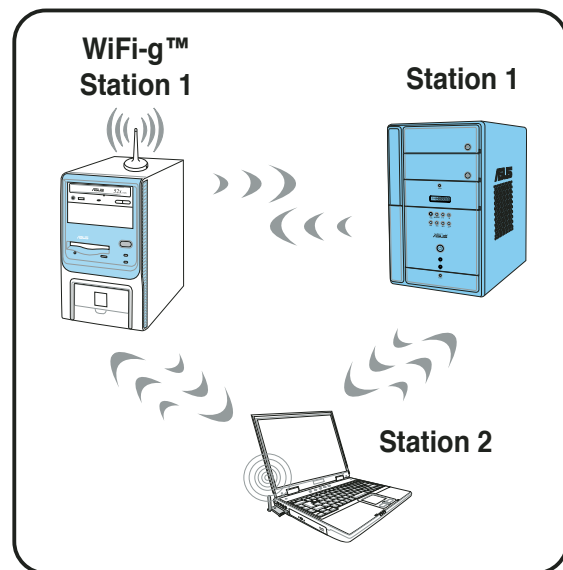
1.4.2   Infrastructure mode

In Infrastructure mode, the wireless network is centered on an access point (AP) that provides a central link for wireless clients to communicate with each other or with a wired network.

In this setup, the WiFi-g™ functions as a wireless client/station that connects to an AP to establish connection to a wired or wireless LAN.
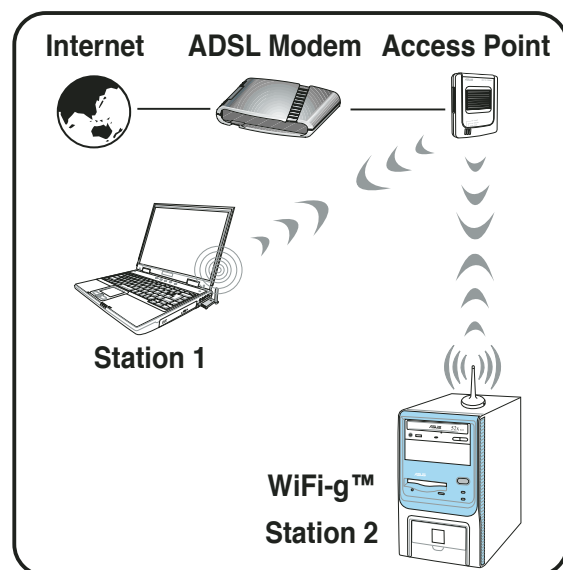
1.4.3 Software Access Point (Soft AP)

You can configure the WiFi-g™ as a software access point (Soft AP). In this mode, the WiFi-g™ becomes the access point that connects wireless clients to the Internet or network printer.

Set WiFi-g™ to this mode if:

1. you are using Windows® XP/Windows® Server 2003 operating system
2. the motherboard has an onboard Ethernet/Gigabit LAN adapter

The WiFi-g™ Soft AP feature can support an unlimited number of wireless clients and is ideal for homes with several computers but with only a single Internet connection and/or one printer.
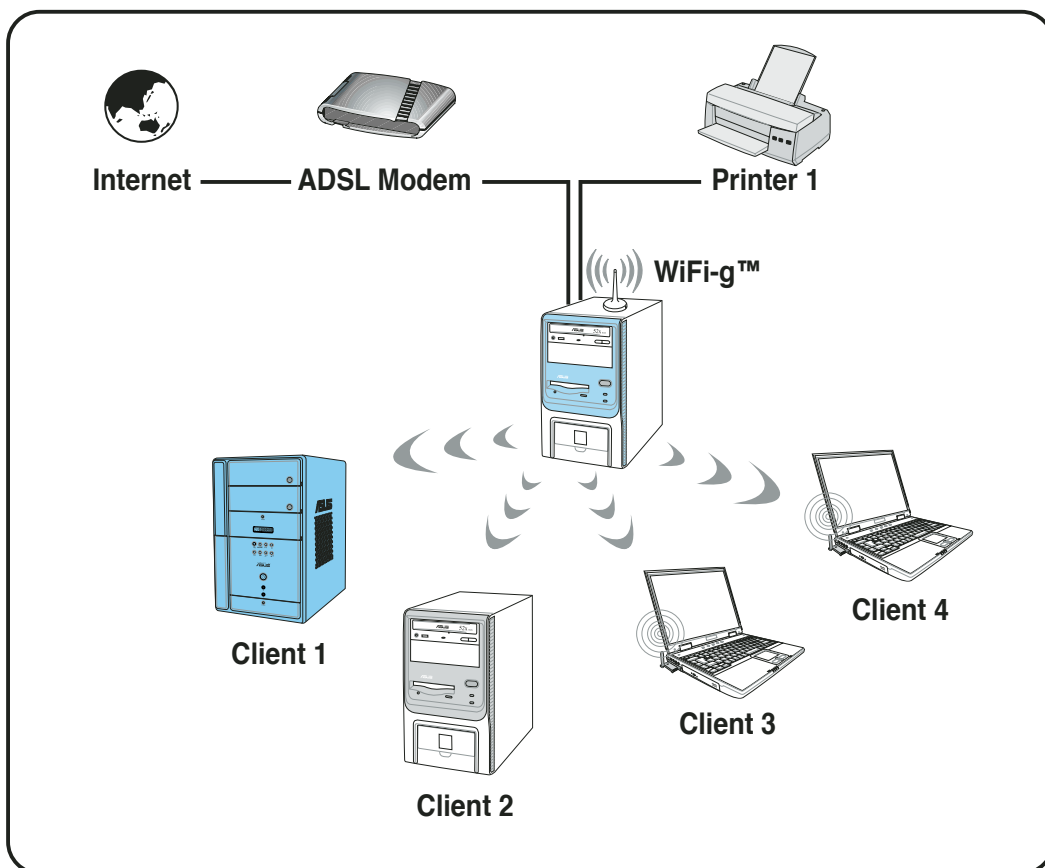
1.4.4 Wireless bridge (Wireless Distribution System)

In a wireless bridge setup, the WiFi-g™ connects two or more APs while maintaining connection to its wireless clients. The wireless bridge feature of the WiFi-g™ is a cost-effective solution for integrating several wireless networks.
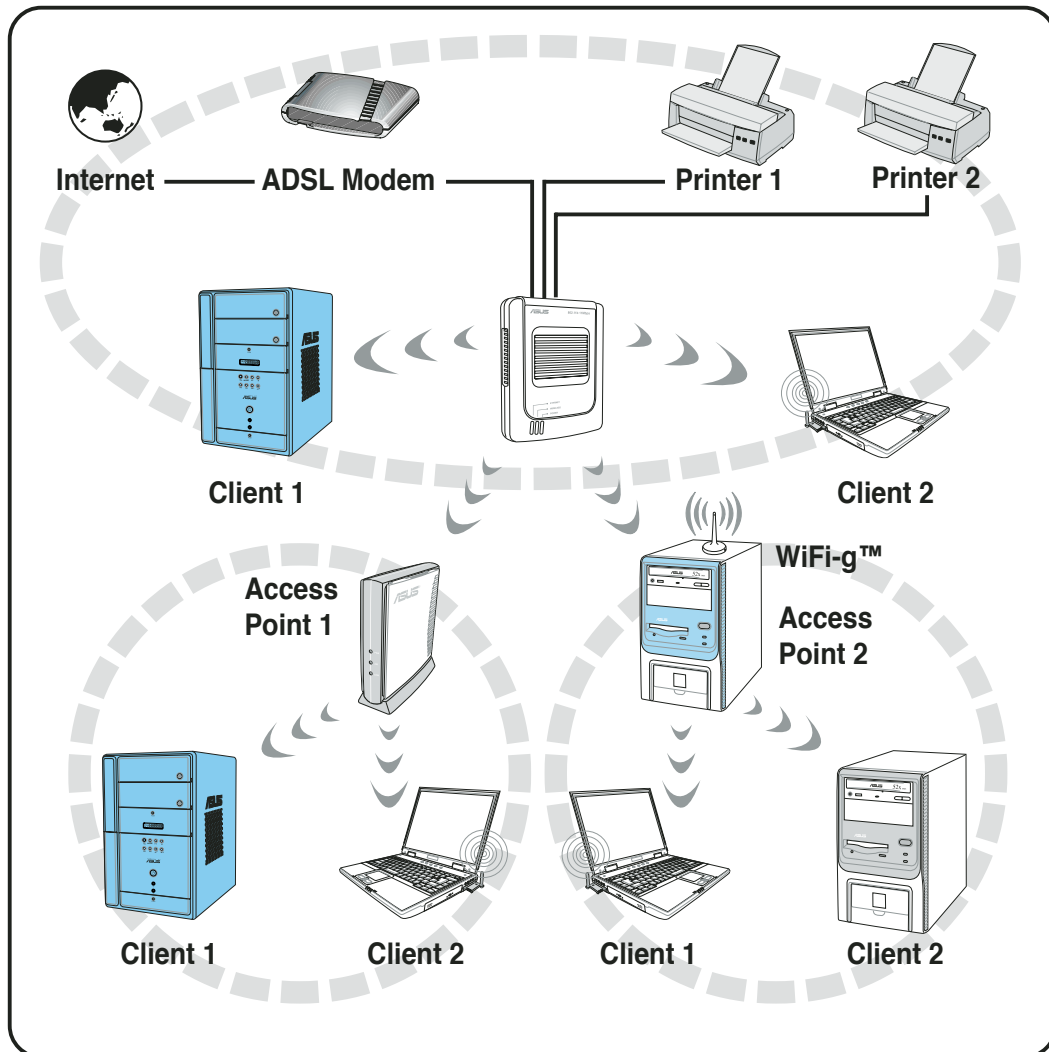
Chapter 2

This chapter provides step by step
instructions on installing the WiFi-g™
drivers and utilities to your computer.
This part also provides information on
installing the WiFi-g™ antenna.

Installation

2.1 Installation

2.1.1 System requirements

Before installing the WiFi-g™ drivers and utilities, make sure that your system meets the following requirements.

- ASUS motherboard with onboard WiFi-g™ solution*
- Intel® Pentium™ 4
  AMD Duron; Athlon™XP/64/64FX; Opteron™ system
- Minimum 64MB system memory
- Operating system

  Station mode : Windows® 2000/XP/Server 2003
  AP/wireless bridge mode : Windows® XP/Server 2003
- Optical drive for utilities and driver installation

> *Visit the ASUS website for an updated list of motherboards with onboard WiFi-g™ wireless LAN adapter.

2.1.2 Installing the antenna

The WiFi-g™ wireless solution comes with an omni-directional and moveable dipolar antenna to maximize the WiFi-g™ coverage.

To install the antenna:

1. Locate the wireless LAN atenna port on the motherboard rear panel.

2. Connect the antenna twist-on connector (female) to the wireless LAN antenna port (male).

3. Place the antenna at an elevated location to receive or transmit better signal.

- Do not place the antenna under your table or in a closed compartment.

- The speed of wireless transmission decreases as you move farther from the access point. Minimize the distance between the WiFi-g™ and the access point (Infrastructure mode) or between the WiFi-g™ and other wireless devices to achieve a faster data transmission rate.

2.1.3   Operating range

The WiFi-g™ range is dependent on the operating environment. Every home or office layout varies in obstacles, barriers, or wall types that could reflect or absorb radio signals. For example, two wireless devices in an open space can achieve an operating distance of up to 200 ft, while the same devices can only achieve up to 80 ft when used indoors.

By default, the device automatically adjusts the data rate to maintain an operational wireless transmission. Therefore, a wireless device that is close to the access point may operate at higher speeds while a wireless device far from the access point may operate at lower speeds.

Site survey

A site survey (utility provided with the ASUS WiFi-g™) analyzes the installation environment and recommends the best location for wireless LAN devices and access points.
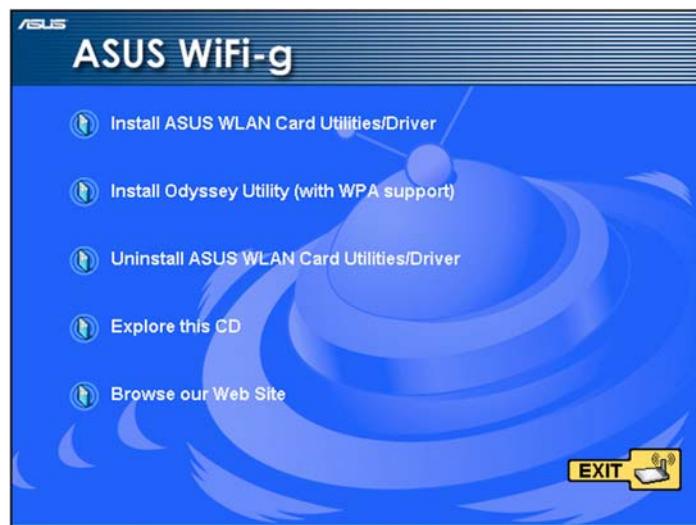
2.2 Driver and utilities installation

✎ • The contents of the motherboard support CD are subject to change without notice. Visit the ASUS website for driver/utilities updates.

• If you are using a Windows® operating system, your computer auto-detects the WiFi-g™ during start-up and displays an **Add New Hardware Wizard** window. Click **Cancel** then proceed with the following instructions.

To install the WiFi-g™ driver and utilities:

1. Place the motherboard support CD to the optical drive.

2. The CD automatically displays the **Drivers** menu if Autorun is enabled in your computer. Click the **ASUS Wireless LAN Adapter** option.

✎ If Autorun is not enabled in your computer, locate and browse the ASUS WiFi-g™ folder on the support CD, then double click the Setup.exe file to begin installation.

3. Click **Install ASUS WLAN Card Utilities/Driver** when the ASUS WiFi-g™ installation window appears.

4. Follow screen instructions to install the WiFi-g™ driver and utilities.

5. Restart your computer after installation is done.

Chapter 3

This chapter provides information on how to set up the WiFi-g™ in your home or office network using the setup wizard.
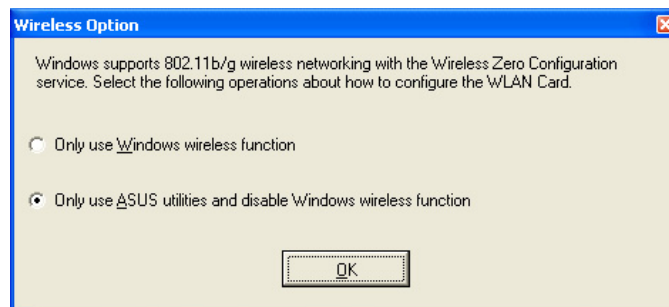
Setting up

3.1 Setting the card in your home

After you have installed the WiFi-g™ drivers and utilities to your system, you are now ready to setup the WiFi-g™ in your home network.

Windows® XP wireless options

If you are using Windows® XP, a **Wireless Option** window appears during startup. Select **"Only use ASUS utilities and disable XP wireless function"**, then click **OK**.

> Make sure you select the ASUS utilities option to avail of the WiFi-g™ soft AP features.

3.2 One Touch wizard

3.2.1 Launching the One Touch wizard

> Make sure that you have selected the most appropriate configuration for your wireless home network before you proceed. Refer to section 1.4 "Recommended network setup" for details.

The **ASUS One Touch Wizard** allows you to configure the WiFi-g™ through step-by-step screen instructions. This utility launches automatically when you restart the system after installing the WiFi-g™ drivers and utilities. The wizard helps you to:

1. Configure the WiFi-g™ as an access point, and
2. Set the Internet connection sharing feature.

You can also launch the wizard in the Windows® desktop by clicking **Start** > **All Programs** > **ASUS Utility** > **WLAN Card** > **Setup Wizard**.

3.2.2   Creating your own wireless LAN

You can create your own wireless local area network (WLAN) in your home using the WiFi-g™ Software Access Point (Soft AP) feature. Create your own WLAN if your:

1. home network does not have an existing access point
2. computer is connected to the Internet and you intend to share the connection to other computers in your home (other computers must have an installed IEEE 802.11b/g wireless LAN adapter such as Centrino notebooks or Wi-Fi-enabled PDAs)
3. operating system is Windows® XP or Server 2003.

To create your own WLAN:

1. In the **Operation Mode** field, select **Create a new Wireless LAN (AP)**, then select **One Touch (Recommended for home users)**.
2. Click **Next**.
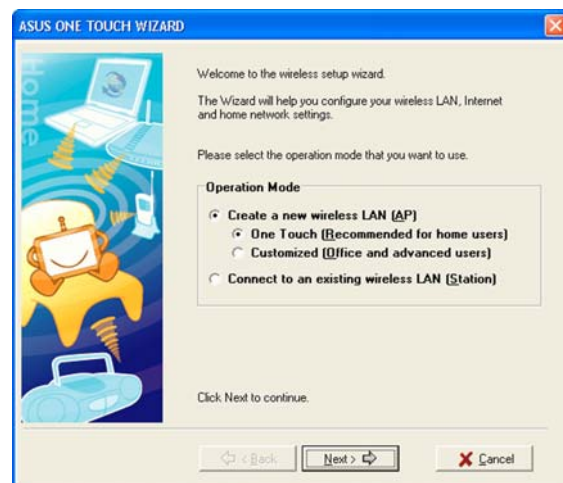
3. The wizard displays the WiFi-g™ SSID. Check the **Data encryption (WEP-enabled)** option to enable data encryption, then click **Next** to continue.


The service set identifier or SSID identifies the wireless device in a network. By default, the wizard uses the computer name as the SSID. You can change the SSID, if desired. A wireless device must have the same SSID as that of the WiFi-g™ to establish connection.

4. The wizard automatically
    configures the WiFi-g™ wireless
    LAN settings. A **Congratulations!**
    message indicates that
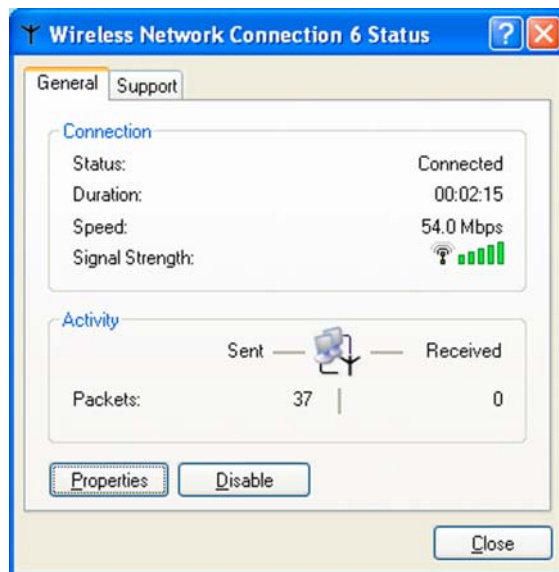
    you have successfully establish your
    wireless LAN.

5. A balloon appears in the
    Windows® taskbar after a
    wireless LAN is created. Click
    the balloon to display the
    wireless network connection
    status.
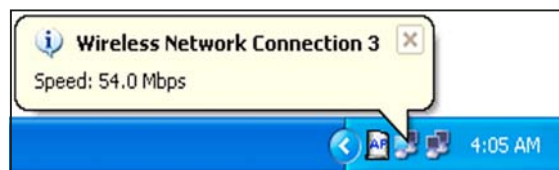
6. Configure the wireless LAN
    settings from the **Wireless
    Network Connection Status**
    window, then click **Close**.

7. Click **Finish** to close the wizard, or **Next** to setup your Internet and home network settings.

> The Internet and home network settings allow you to share an Internet connection with other computers in your home WLAN.

8. The wizard checks your Internet connection. Select the **Check my Internet connection or create a new one** option to check an existing or create a new Internet connection. Otherwise, select the **My computer is connected to the Internet. Start the ICSS setup now.** option to continue.

    Click **OK** when finished.

> Selecting **Check my Internet connection or create a new one** opens a **Network Connections** window. Check or create your Internet connection from this window, then return to the One Touch Wizard to continue.
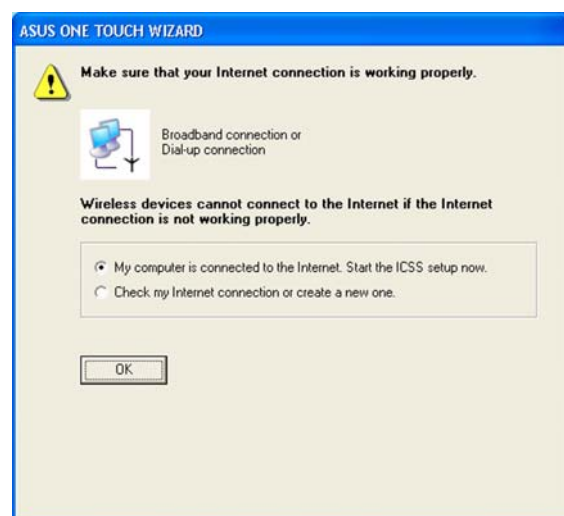
9. The wizard automatically selects and recommends the ideal Internet connection from the list. Check the **Enable firewall** box, then click **Next** to continue.
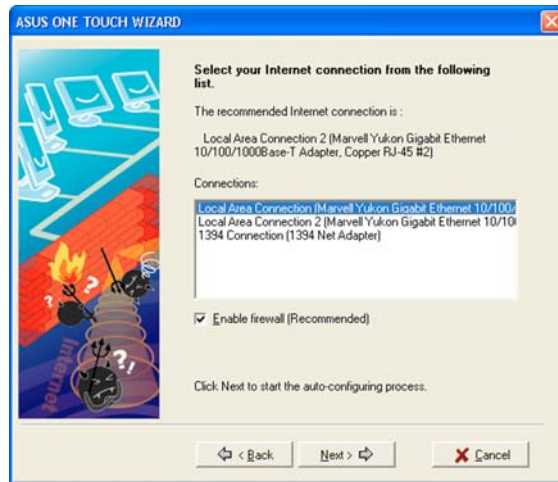

- Enabling the Internet firewall protects your home network from unauthorized access by computers outside your network.

- Some anti-virus applications prevent Internet firewall activation. Disable all anti-virus applications before you enable this feature.

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10. A warning message appears. When you click **OK**, the wizard bridges the WiFi-g™ and the selected Internet connection.
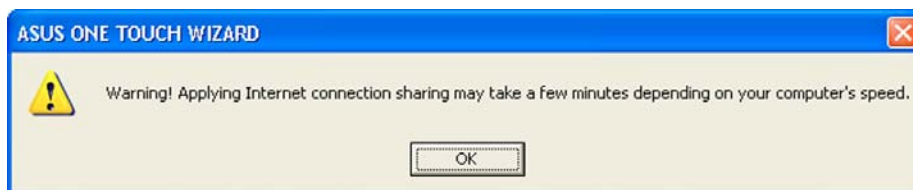

11. A window displays the WiFi-g™ settings. Write down the SSID and encryption settings in a piece of paper for reference.

All computers in your home network (with wireless capability) must have the same settings as that of the WiFi-g™ to establish connection to the Internet. Click ✕ to close the window.
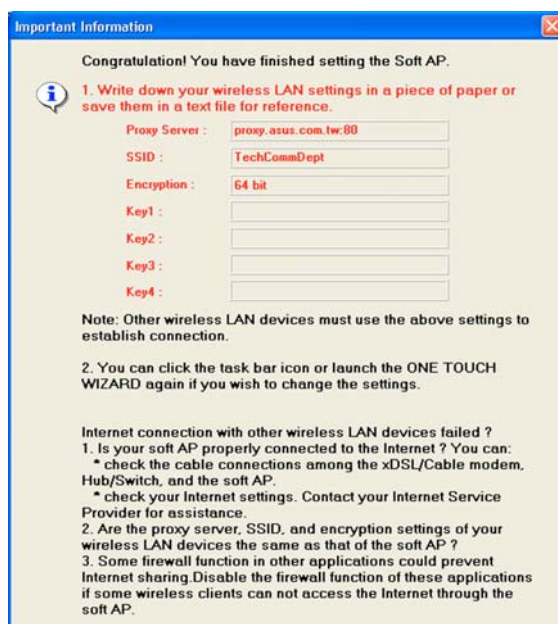
3.2.3   Connecting to an access point

If you have an existing access point in your home network, follow these
instructions to connect the WiFi-g™ to the access point.

1. Launch the **One Touch Wizard**
   from the Windows® taskbar.

2. Select the **Connect to other
   Wireless LAN (Station)** option
   from the setup wizard window,
   then click **Next**.
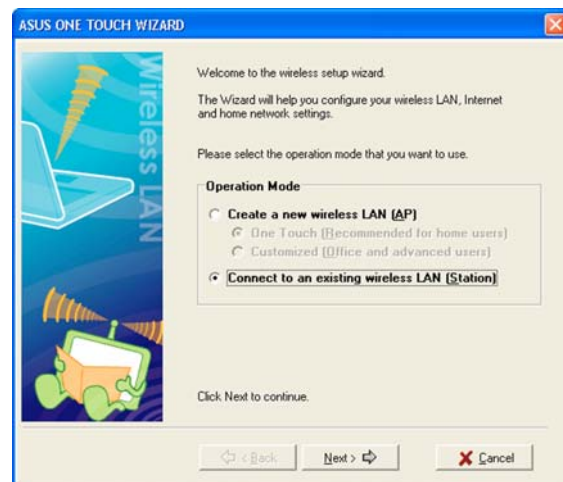
3. The WiFi-g™ scans available
   access point(s) and wireless
   devices within its operating
   range. Select an AP [   ] from
   the list, then click **Next**. The
   wizard connects the WiFi-g™ to
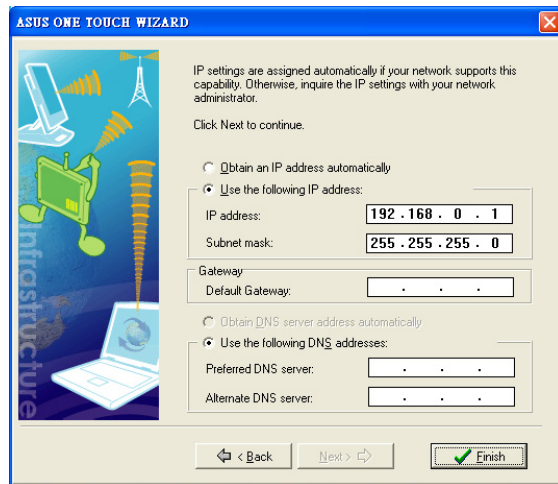   the selected AP.
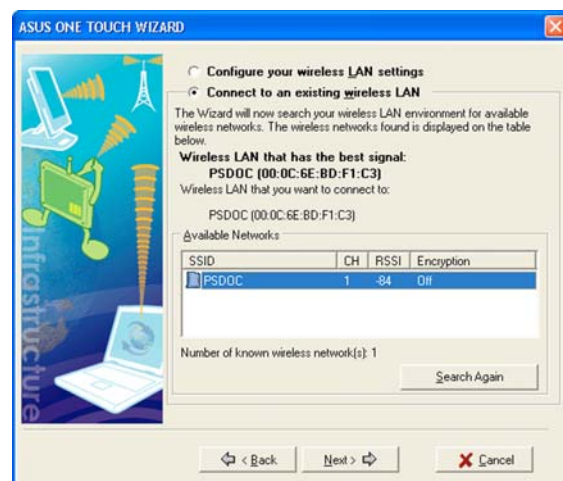
4. The wizard displays whether the
   WiFi-g™ is connected to the
   selected AP.

   If the WiFi-g™ fails to connect
   with the selected AP, click the
   Back button to scan other
   access point(s), then repeat the
   process.

   If connection is established,
   click **Next** to configure the
   TCP/IP settings.

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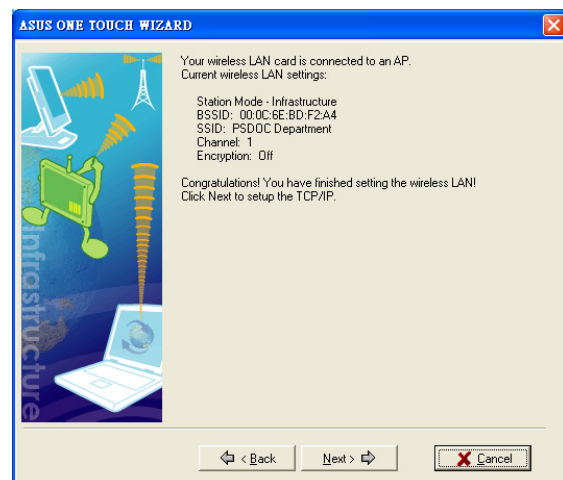
5. Configure the WiFi-g™ TCP/IP settings, then click **Finish** to close the wizard.

> If the AP has an enabled DHCP server, select **Obtain an IP address automatically**. Otherwise, assign the IP address manually by entering the values in the IP address field. Inquire the correct IP address with your network administrator.

3.2.4   Connecting to another wireless device

If no access point or Internet connection is present in your home network, you can use the wizard to connect the WiFi-g™ to other WLAN-enabled computers for file or printer sharing. This is called an **Ad-hoc** network.

To connect to another WLAN-enabled computer:

1. Launch the **One Touch Wizard** from the Windows® taskbar.

2. Select the **Connect to other Wireless LAN (Station)** option from the setup wizard window, then click **Next**.
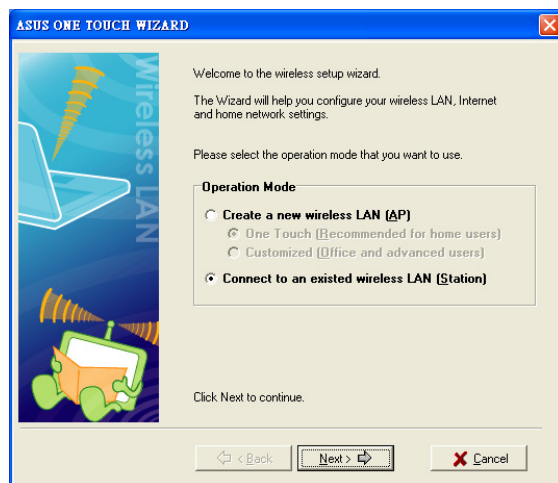
3. The WiFi-g™ scans the available access point(s) and wireless devices within its operating range. Select a wireless device [ ] from the list, then click **Next**. The wizard connects the WiFi-g™ to the selected wireless device.


The window design changes from Wireless LAN to Ad Hoc when you highlight a wireless device from the list.
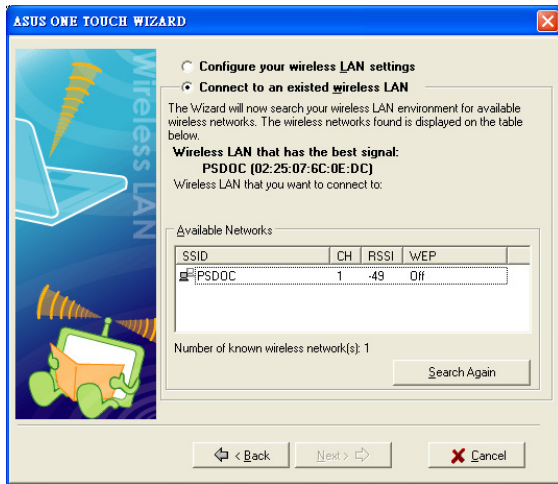
4. The wizard displays whether the WiFi-g™ is connected to the selected wireless device.

   If no connection is established, click the **Back** button to scan other wireless device(s), then repeat the process.

   If connection is established, click **Next** to configure the TCP/IP settings.
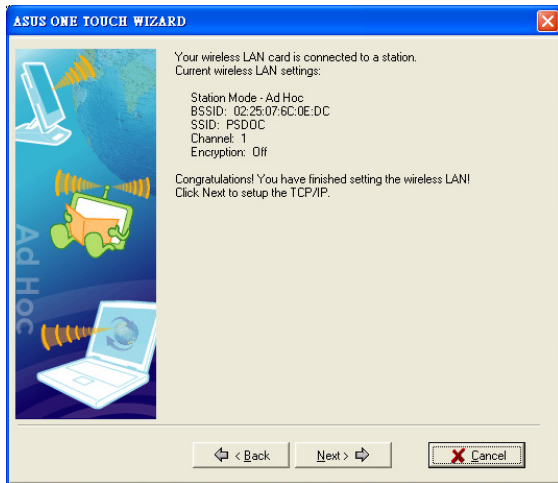
5. Configure the WiFi-g™ TCP/IP settings, then click **Finish** to close the wizard.
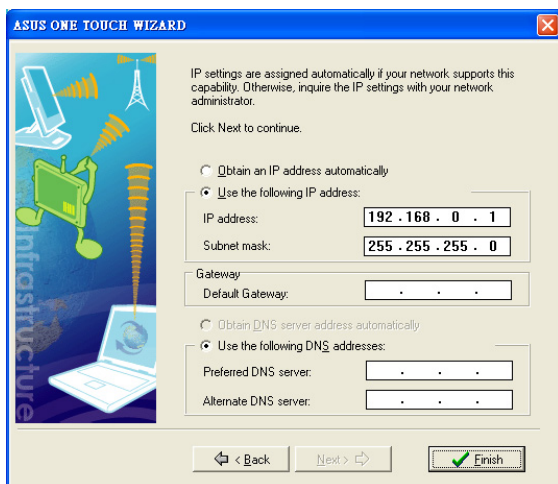
In an Ad-hoc network, you must specify the WiFi-g™ IP address manually. Make sure that the IP address of the WiFi-g™ is on the same sub-domain as that of the wireless device to establish connection (e.g. If the wireless device IP is 192.168.0.1, then the WiFi-g™ IP must be 192.168.0.X, where X = 2 ~ 255).

ASUS WiFi-g™ onboard wireless solution

3.3 Customized setup

If you are familiar with wireless network settings, you can configure the WiFi-g™ using the **Customized (Office and Advanced Users)** option in the setup wizard.

To setup the WiFi-g™ using the customized option:

1. Launch the setup wizard following the instructions in section 3.2.1.

2. When the setup wizard welcome window appears, select **Create a new wireless LAN (AP)** from the **Operation Mode** field, then select **Customized (Office and advanced users)**.

3. Click **Next**.

4. The wizard displays the computer SSID and channel information. Click **Next**.

   > By default, the wizard selects the channel with the clearest signal. To change this, uncheck the **Auto Channel Selection**, then select a channel from the drop-down list.
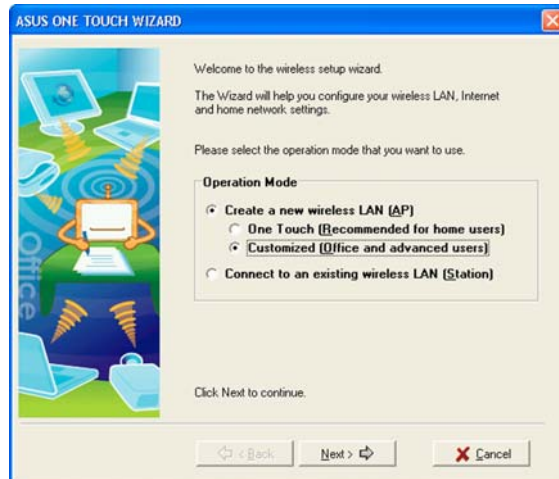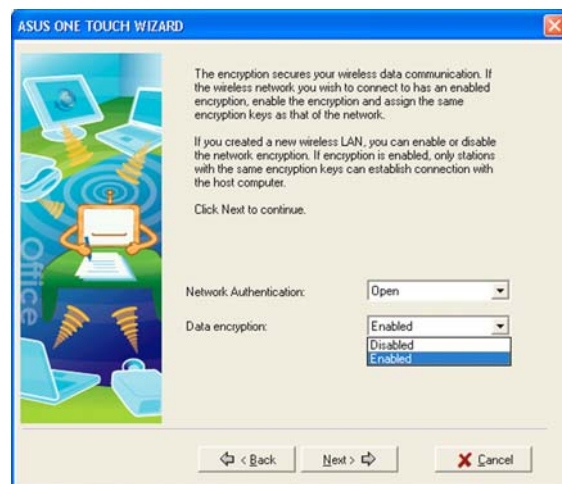
5. Set the **Network Authentication** to Open, Shared, or WPA-PSK. Refer to the table on the next page for a comparison of network authentication methods.
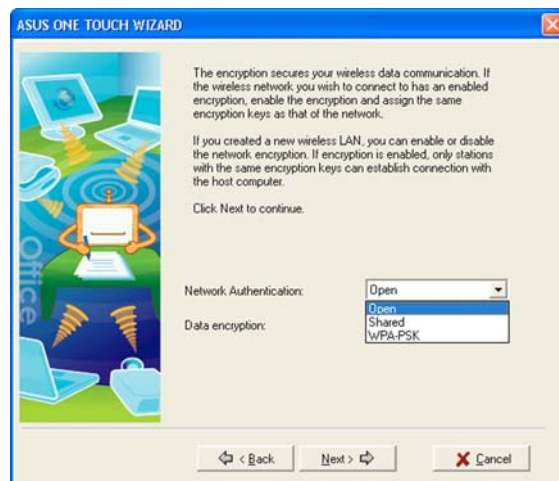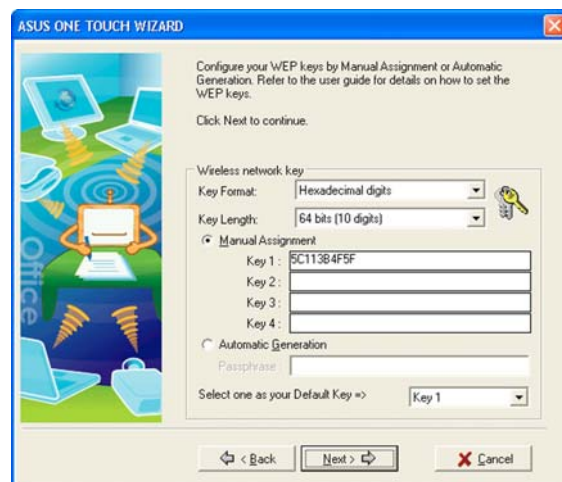
Network Authentication methods

Method	Description
Open system or shared key	This method allows the WiFi-g™ to accept connection requests from any wireless device within its operating range.
Shared Key	Only wireless device(s) with the same encryption are allowed connection to the WiFi-g™.
WPA-PSK	Only wireless device(s) with the same TKIP encryption settings are allowed connection to the WiFi-g™.

6. Enable **Data Encryption**, then click **Next**.

7. The wizard prompts you to set the encryption keys when you selected **Shared Key** as the Wifi-g™ **Network Authentication** method.

    Set the WEP encryption keys, then click **Next**. Refer to the table on the next page for details on WEP encryption settings.

When you selected **WPA-STK** as the Wifi-g™ **Network Authentication** method, the wizard prompts you to enter the network key on the field.

Set the network key, then click **Next**. Refer to the table below for details on network key settings.
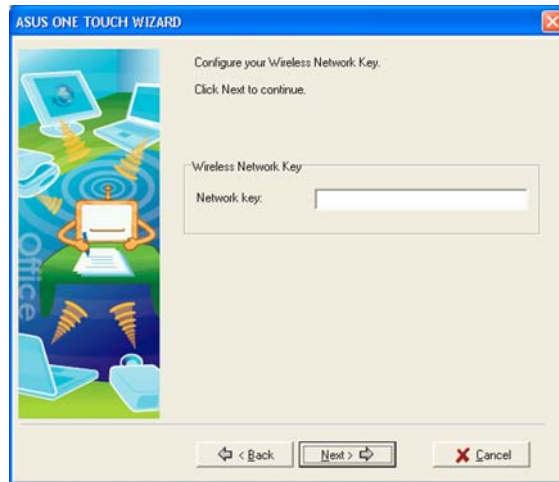
Encryption settings

Method	Encryption	Description
Open system	None	No encryption
Shared Key	64-bit WEP*	Contains 10 hexadecimal digits or 5 ASCII characters
	128-bit WEP	Contains 26 hexadecimal digits or 13 ASCII characters
WPA-PSK	TKIP**	Contains 8 to 63 alpha-numeric characters

* **Wired Equivalent Privacy**
** **Temporal Key Integrity Protocol**

8. The wizard shows the WiFi-g™ wireless LAN settings. Click **Finish** to close the wizard or **Next** to setup your Internet and home network settings.

Launch the wizard again if you wish to change the WiFi-g™ SSID, channel, and encryption settings.
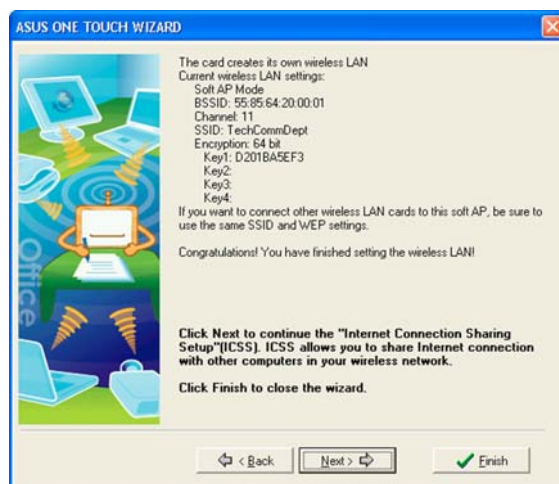
9. The wizard checks your Internet connection. Select the **Check my Internet connection or create a new one** option to check an existing or create a new Internet connection. Otherwise, select the **My computer is connected to the Internet. Start the ICSS setup now.** option to continue.

    Click **OK** when finished.
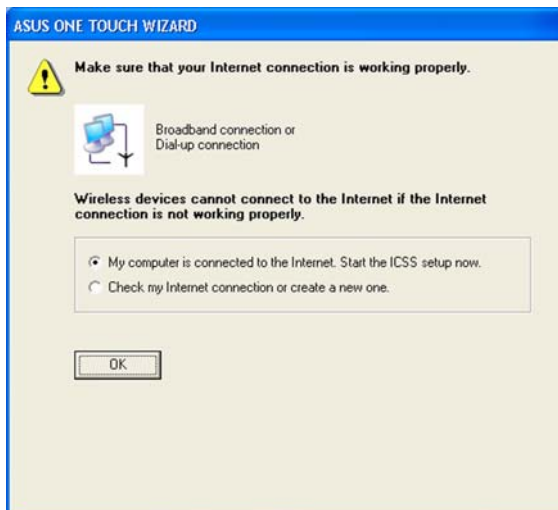
10. A window displays the WiFi-g™ settings. All wireless-enabled computers in your home network must have the same settings as that of the WiFi-g™ to establish connection. Click ☒ to close the window.
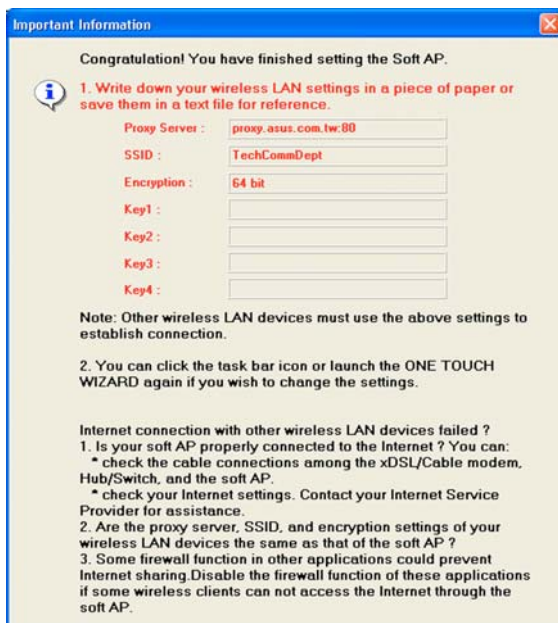
    The Windows® **Network Setup Wizard** appears. Use this utility to configure your Internet connection, files, and printer sharing settings.
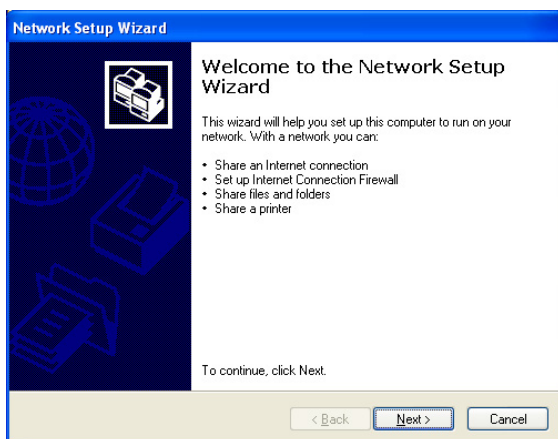
Chapter 4

This chapter provides information on several software applications included in the WiFi-g™ support CD.

Software support

4.1 Support CD information

The WiFi-g™ software application package contains useful utilities for configuring and setting-up the WiFi-g™ in your home or office network. The following applications are automatically installed when you install the WiFi-g™ drivers and utilities to your system.

Control Center

Use this utility to launch the Wireless Settings, Mobile Manager, and Site Monitor applications. This utility also provides Internet connection and link quality icon indications in the Windows® taskbar. See the following page for details.

Wireless Settings

This utility allows you to configure the WiFi-g™ basic and advanced settings. Refer to page 4-4 for details.

Mobile Manager

The Mobile Manager allows you to create, edit, and activate a network configuration for a particular location. This application allows mobile users to easily select and switch from one network configuration to another depending on their location. Refer to page 4-5 for details.

Site Monitor

This utility provides real-time monitoring of the link and signal quality of the wireless LAN where the WiFi-g™ is connected. Refer to page 4-6 for details.

These bundled software applications are subject to change without notice. Visit the ASUS website for updates.

4.2   Control Center

The Control Center utility is an
application launcher and Internet
connection/link quality indicator in
one. During system startup, the
Control Center launches automatically and displays an icon in the
Windows® taskbar.
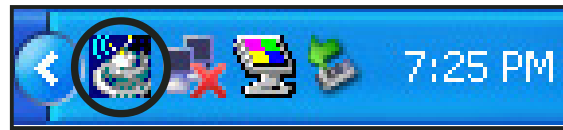
4.2.1   Control Center icons

The Control Center icon changes automatically to indicate the WiFi-g™
mode, Internet connection status, and link quality to an access point or
wireless device. Refer to the table below for Control Center icon
indications.

Infrastructure mode (WiFi-g™ to an access point)

	Excellent link quality and connected to the Internet		Excellent link quality but not connected to the Internet
	Good link quality and connected to the Internet		Good link quality but not connected to the Internet
	Fair link quality and connected to the Internet		Fair link quality but not connected to the Internet
	Poor link quality but connected to the Internet		Poor link quality and not connected to the Internet
	Not linked but connected to the Internet		Not linked and not connected to the Internet

Ad-hoc mode (WiFi-g™ to other wireless device)
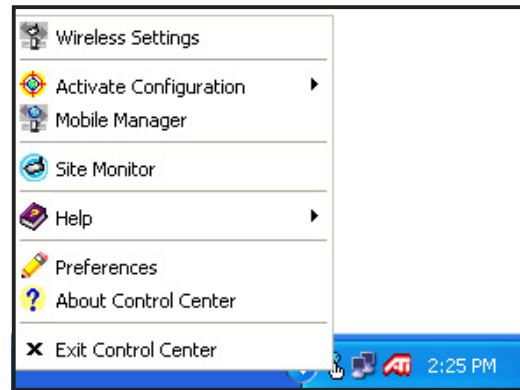
	The WiFi-g™ is connected to a wireless device.
	The WiFi-g™ is connected to a wireless device.
	Connected to the Internet

Access point mode

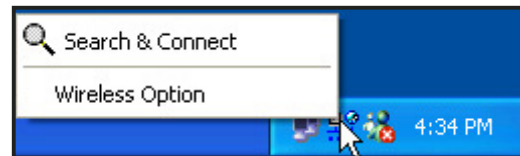|	
	The WiFi-g™ is in access point mode.

4.2.2 Right-click menu

Right-clicking the Control Center icon displays the WiFi-g™ software applications. Refer to the succeeding sections for details on these applications.
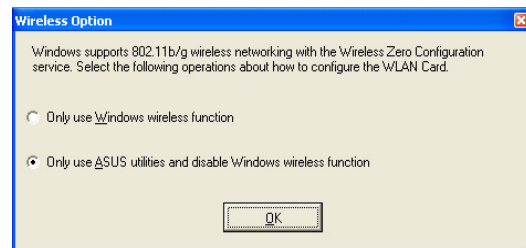
4.2.3 Left-click menu

Left-clicking the Control Center icon displays the left-click menu.

Search & Connect – View available wireless networks within range.

Wireless Option – This window allows you to select the utility to use in the configuring the WiFi-g™. Select **"Only use ASUS utilities and disable Windows wireless function"** to avail all WiFi-g™ features.

4.3 Wireless Settings

The Wireless Settings is the main interface that allows you to control the WiFi-g™. Use the Wireless Settings to view the operational and connection status, or to modify the WiFi-g™ configuration.

Tabbed property sheets

Property window

The Wireless Settings window is composed of the property window and tabbed property sheets. Click the icons in the property window to display their tabbed property sheets.
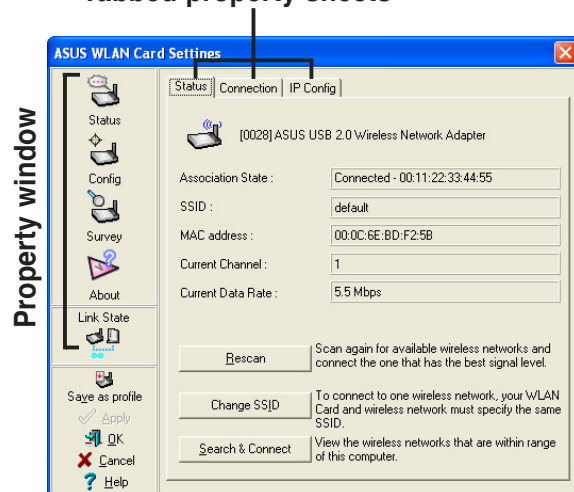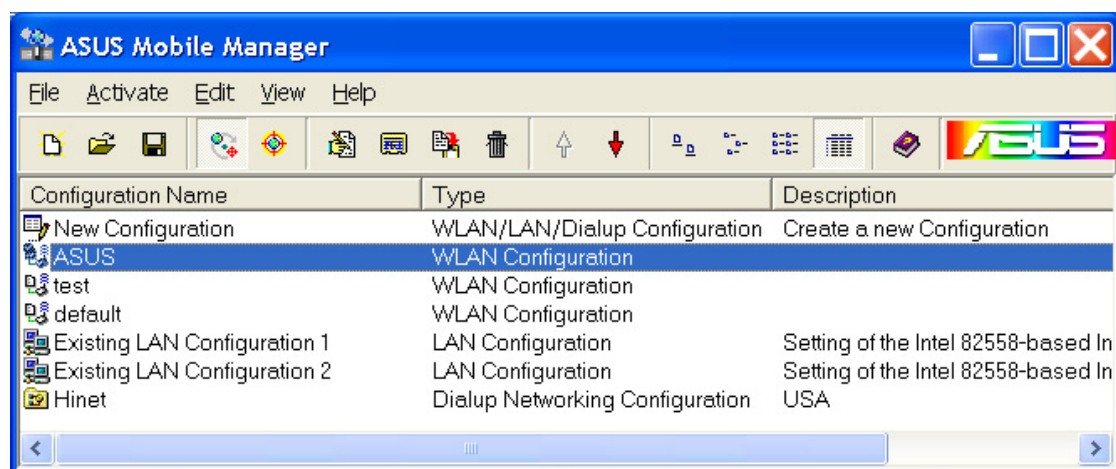
4.4   Mobile Manager

The **Mobile Manager** is a convenient tool to setup and manage network location settings. This utility allows users to configure multiple alternative configurations for different locations. You must set up this utility once so you can easily switch configurations when changing locations.

To launch the Mobile Manager utility:

1. Click the Windows® **Start** button. Select **All Programs** > **ASUS Utility** > **WLAN Card** > **Mobile Manager**, or right-click the **Control Center** icon on the Windows® taskbar, then select **Mobile Manager.**

2. The Mobile Manager main window appears.

You may use the Mobile Manager utility main window to create, edit, or activate a configuration. The main window displays the menu bar, tool bar, and existing configurations.

Click the toolbar buttons to access common commands in the Mobile Manager utility. All toolbar button commands are also available from the menu bar.

4.5   Site Monitor

The **Site Monitor** utility measures the signal-to-noise (SNR) values of all available wireless networks. Use this utility to determine the best location to place the WiFi-g™.

To launch the Site Monitor:

1. Click the Windows® **Start** button, then select **Programs** > **ASUS Utility** > **WLAN Card** > **Site Monitor**, or

    Right-click the **Control Center** icon on the Windows taskbar, then select **Site Monitor**.

2. Click **OK** when the Site Survey Message window appears.
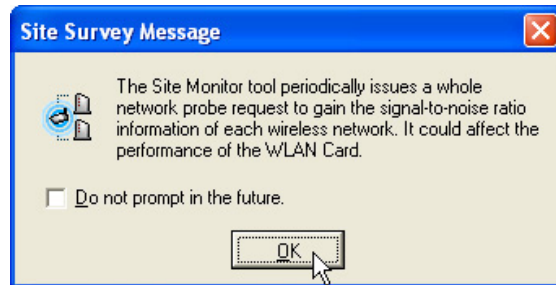
The Site Monitor main window displays the available wireless connections and the signal-to-noise (SNR) value of a selected connection.
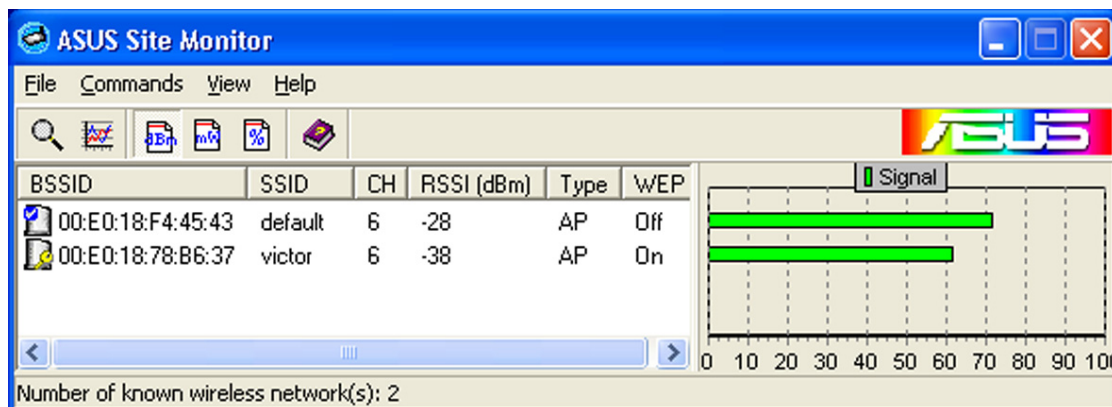
Some AP disable their SSID broadcasting to hide themselves from the Site Monitor. You can join these APs if you specify the same SSID.

4.6   Other menu options

4.6.1   Activate Configuration

This option allows you to select the wireless profile to use.

4.6.2   Help Menu

The Control Center utility has a Help menu to guide you in using the Control Center and Wireless Settings applications. Right-click the Control Center icon, select **Help**, then select an application to display the help window.

4.6.3   Preferences

The **Preferences** window allows you to customize the Control Center settings.
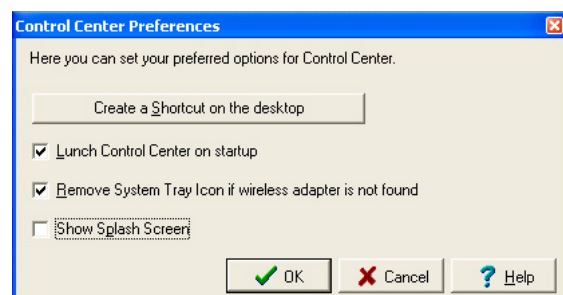
4.6.4   About Control Center

Select the **About Control Center** option to display the Control Center software version and copyright information.

Appendix

The Appendix lists the wireless LAN
channels available for use in your
country or location.

Wireless LAN channels

Wireless LAN channels

The IEEE 802.11b/g standard for wireless LAN allocated the 2.4 GHz frequency band into 13 overlapping operating channels. Each channel corresponds to a different set of frequencies. The table below shows the center frequencies of each channel.

Channel	Center Frequency	Channel	Center Frequency
1	2.412 GHz	8	2.447 GHz
2	2.417 GHz	9	2.452 GHz
3	2.422 GHz	10	2.457 GHz
4	2.427 GHz	11	2.462 GHz
5	2.432 GHz	12	2.467 GHz
6	2.437 GHz	13	2.472 GHz
7	2.442 GHz		

> If several Wi-Fi devices are operating in the same vicinity, the distance between the center frequencies of channels used must be at least 25MHz to avoid interference.

The number of channels available for the wireless LAN adapter varies by country/region. Refer to the table below to determine the number of channels available in your location.

Country/Region (Regulating Body)	Available Channels
Australia (ACA)	Channels 1 to 13
Belgium (RTT&E/EMC/LVD)	Channels 1 to 13
Bulgaria (RTT&E/EMC/LVD)	Channels 1 to 13
Canada (CSA/cUL 950 3rd Edition)	Channels 1 to 11
China (MII)	Channels 1 to 11
Cyprus (RTT&E/EMC/LVD)	Channels 1 to 13
Czech Republic (RTT&E/EMC/LVD)	Channels 1 to 13
Denmark (RTT&E/EMC/LVD)	Channels 1 to 13
Finland (RTT&E/EMC/LVD)	Channels 1 to 13
France (RTT&E/EMC/LVD)	Channels 1 to 13
Germany (RTT&E/EMC/LVD)	Channels 1 to 13
Greece (RTT&E/EMC/LVD)	Channels 1 to 13
Hong Kong (OFTA)	Channels 1 to 13

(continued next page)

Country/Region (Regulating Body)	Available Channels
Hungary (RTT&E/EMC/LVD)	Channels 1 to 13
Iceland (RTT&E/EMC/LVD)	Channels 1 to 13
Ireland (RTT&E/EMC/LVD)	Channels 1 to 13
Italy (RTT&E/EMC/LVD)	Channels 1 to 13
Japan (TELEC)	Channels 1 to 13
Luxembourg (RTT&E/EMC/LVD)	Channels 1 to 13
Malaysia (SIRIM/CMC)	Channels 1 to 13
Mexico	Channels 9 to 11
Netherlands Antilles (RTT&E/EMC/LVD)	Channels 1 to 13
Netherlands/Holland (RTT&E/EMC/LVD)	Channels 1 to 13
New Zealand (PTC)	Channels 1 to 13
Norway (RTT&E/EMC/LVD)	Channels 1 to 13
Portugal (RTT&E/EMC/LVD)	Channels 1 to 13
Saudi Arabia	Channels 1 to 13
Singapore	Channels 1 to 13
South Korea (KS)	Channels 1 to 13
Spain (RTT&E/EMC/LVD)	Channels 1 to 13
Sweden (RTT&E/EMC/LVD)	Channels 1 to 13
Switzerland (RTT&E/EMC/LVD)	Channels 1 to 13
Taiwan (DGT)	Channels 1 to 11
Turkey (TTAS)	Channels 1 to 13
United Kingdom (RTT&E/EMC/LVD)	Channels 1 to 13
United States (FCC)	Channels 1 to 11

Channels 1, 6 and 11 are independent and do not overlap each other. We recommended that you tune your wireless LAN adapter to these channels.