WiFi-AP Solo™ Onboard 3-in-1 Wireless LAN Adapter 54 Mbps



User Guide

E2564

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About this quide

This user guide contains the information you need to install and configure your ASUS WiFi-AP Solo[™] 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-AP Solo™ wireless solution. The chapter also presents the LED indications, and recommended WiFi-AP Solo™ 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.

٠ Chapter 3: Setting up

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

Appendix .

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

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.

WiFi-AP Solo™ specifications summary

Standard	IEEE 802.11b/g			
Data rate	802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11b: 1, 2, 5.5, 11Mbps			
Security	WEP 64-bit encryption WEP 128-bit encryption WPA (Wi-Fi Protected Access) WPA2 (Station mode only)			
Network architechture types	Access point mode Station mode: Infrastructure mode and Ad-Hoc mode			
Frequency band	2.4~2.5GHz			
Operating distance	802.11g Indoor: 80ft (30m) Outdoor: 200ft (60m) LOS* 802.11b Indoor: 130ft (40m) Outdoor: 1000ft (310m) LOS*			
	The range varies in different environments			
Number of connected devices (AP mode)	up to 64 stations			
Antenna	ASUS WiFi-AP Solo [™] omni-directional antenna			
LED	Green data transmission (AIR) LED			
Support OS	Windows [®] 2000, 2003, XP, XP-64bit, 2003-64bit			
Compatibility	Fully compatible with IEEE802.11b/g standard products			
ASUS special features	Supports 64 stations connection Supports ASUS EZ WiFi mode: Running wireless network in sleep mode (only on ASUS Digital Home motherboards except for P5LD2-VM DH and N4L-VM DH)			
Software support	ASUS WiFi-AP Solo™ Wizard ASUS WiFi-AP Solo™			

* LOS=Light of Sight

* The specifications are subject to change without notice.



Chapter 1

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

Product introduction

1.1 Welcome!

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

The WiFi-AP Solo[™] 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-AP Solo[™] 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-AP Solo[™] is backward compatible with the earlier IEEE 802.11b standard allowing seamless integration of both wireless LAN standards in a single network.

The WiFi-AP Solo[™] 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-AP Solo™ employs both 64-bit/128-bit Wired Equivalent Privacy (WEP) and Wi-Fi Protected Access (WPA) encryptions.

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

1.2 Features

No hardware installation

Because the WiFi-AP Solo[™] wireless LAN adapter comes embedded in your ASUS 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-AP Solo[™] breaks the wireless data transmission speed barrier to give you faster Internet connection and file sharing capabilities.

Easy integration

The WiFi-AP Solo[™] is compatible with all IEEE 802.11b devices so you can still use your IEEE 802.11b devices in the WiFi-AP Solo[™] 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-AP Solo[™] into a Software Access Point (Soft AP). In Soft AP, WiFi-AP Solo[™] can support up to 64 stations with wireless LAN adapters making it an ideal solution for homes and offices with single Internet connection or network printer.

WiFi-AP Solo[™] can perform the AP functions even the computer dozes off; therefore, the wireless stations that have connected to the WiFi-AP Solo[™] can access Internet, play on-line games, share the network printer so long your computer is turned on.

Moveable omni-directional antenna

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

1.3 LED and antenna port

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







The location of the WiFi-AP Solo[™] data transmission LED and antenna port may vary on motherboard models.

LED indicator

Refer to the table below for LED indication.

LED	Status	Indication
AIR	On Off Blinking quickly Blinking slowly	Power on but no data activity. Power off or no wireless connection. Transmitting and/or receiving data. Site survey.

1.4 Choosing an appropriate wireless network

You can use the ASUS WiFi-AP Solo[™] in various wireless network configurations. It is recommended that you select the most appropriate configuration for your home or office network before setting up the WiFi-AP Solo[™].



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

1.4.1 Software Access Point (Soft AP)

If you wish to share the Internet access with the wireless stations in your environment, you can configure the WiFi-AP Solo[™] as a software access point (Soft AP). In this mode, the WiFi-AP Solo[™] becomes the wireless access point that provides local area network and Internet access for your wireless stations.

Requirements of using soft AP function:

- 1. Windows® XP/Windows® Server 2003 operating system;
- 2. Onboard Ethernet LAN adapter with driver properly installed.

The Soft AP feature is ideal for home/SOHO networks with several computers, a shared printer and a shared Internet connection.



1.4.2 Infrastructure mode

An Infrastructure wireless network is centered on a wireless access point (AP) that provides Internet access and LAN commnunication for the wireless stations. In Infrastruncture mode, the wireless LAN stations communicate with each other via the wireless AP.

In this mode, your WiFi-AP Solo[™] functions as a wireless adapter. It communicates with the LAN computers and accesses Internet through the wireless AP.

1.4.3 Ad-hoc mode

In the Ad-hoc mode, the WiFi-AP Solo[™] acts as a wireless card and connects directly to other wireless device within its operating range. In the Ad-Hoc mode, your computer commnunicate with other wireless stations without an access point (AP).





Chapter 2

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

Installation

2.1 Installation

2.1.1 System requirements

Before installing the WiFi-AP Solo[™] drivers and utilities, make sure that your system meets the following requirements.

- ASUS motherboard with WiFi-AP Solo™ onboard solution
- 300MHz or higher
- Minimum 128MB system memory
- Operating system: Windows[®] 2000/ XP/ XP-64bit/ Server 2003/ Server 2003 64-bit
- · Optical drive for utilities and driver installation

2.1.2 Installing the antenna

The WiFi-AP Solo[™] wireless solution comes with an omni-directional and moveable antenna to maximize the WiFi-AP Solo[™] coverage.

To install the antenna:

- 1. Locate the wireless LAN antenna port on the motherboard rear panel.
- Connect the antenna twiston connector (female) to the wireless LAN antenna port (male).



3. Place the antenna at an elevated location to enhance your wireless LAN coverage.



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

2.1.3 Signal range

The signal range of WiFi-AP Solo[™] depends on the operating environment. Obstacles such as walls and metal barriers could reflect or absorb radio signals. Devices such as microwave stove can also greatly interfere the wireless network.

Signal range:

802.11g: Indoor 80ft (30m), outdoor (LOS, Light-Of-Sight) 200ft (60m)

802.11b: Indoor 130ft (40m), outdoor (LOS, Light-Of-Sight) 1000ft (310m)

By default, the device automatically adjusts the data rate and the closer wireless station is, the better signal and transmit speed it receives. To improve your wireless transmission, move your wireless stations closer to the WiFi-AP Solo[™].

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 use a Windows[®] operating system, your computer auto-detects the WiFi-AP Solo[™] when system boots and displays an Add New Hardware Wizard window. Click Cancel then proceed with the following instructions.

To install the WiFi-AP Solo™ driver and utilities:

- 1. Place the motherboard support CD to the optical drive.
- The CD automatically displays the **Drivers** menu if Autorun is enabled in your computer. Click the wireless driver and follow screen instructions to install the WiFi-AP Solo[™] driver.
- 3. Select **Utilities** menu of the support CD and click to install the WiFi-AP Solo™ utility.



If Autorun is disabled in your computer, locate the **Wireless** folder under the root directory of the support CD, then double click the **Setup.exe** file to begin installation.



To use soft AP function, you may need to install Ethernet adapter driver.

Chapter 3

This chapter provides information on how to set up the WiFi-AP Solo[™] in your home or office network.

Setting up

3.1 About the setup utilities

After you have installed the WiFi-AP Solo[™] drivers and utilities to your system, you are now ready to setup the WiFi-AP Solo[™] in your network.



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



Make sure you have connected the supplied antenna to the antenna connector on the motherboard, or the WiFi-AP Solo™ may not be able to detect other wireless devices in your environment.

The WiFi-AP Solo[™] provides two configuration approaches: the setup wizard and the setup utility. The former scheme provides an easy approach to the most frequently used functions while the later allows configuring all the functions, including the advanced settings.

The setup wizard helps you to:

- 1. configure the WiFi-AP Solo[™] as an access point, or wireless station (in either Infrastructure or Ad-hoc mode);
- 2. create a network profile (when setting up Ad-hoc).

The setup utility helps you to:

- 1. configure the WiFi-AP Solo[™] as an access point, or wireless station (in either Infrastructure or Ad-hoc mode);
- 2. create, edit and delete a network profile;
- switch to Windows[®] Zero Configuration Service (Windows XP only) to configure the wireless station function;
- 4. enable or disable the WiFi-AP Solo™;
- 5. show statistics.

To launch the setup utility in the Windows[®] desktop, double-click the desktop shortcut.



To switch to the setup wizard, right click the WiFi-AP Solo tray icon and select **WiFi-AP Solo wizard**. To switch back to the setup utility, select **Config**.

Config		
WiFi-AP Solo Wizard		
Access Point Mode		
About		
Quit		
<u>()</u>	シ℁ֈֈֈֈ֍֍ֈ֎	6:25 A

3.2 Setting up a wireless access point (Soft AP)

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

- 1. your computer is connected to the Internet;
- the operating system of your computer is Windows[®] 2000/ XP/ XP 64-bit/ Server 2003/ Server 2003 64-bit.

Config WiFi-AP Solo Wizard

About

Access Point Mode

3.2.1 Setting up Soft AP using setup wizard

- Open the WiFi-AP Solo[™] setup wizard by right-clicking the system tray icon ② and selecting WiFi-AP Solo Wizard.
- 2. Select Access Point and click Next.

Quit			
	- (<) 🖯 📑		👷 🤨 - 6:25 A
ASUS WiFi-AP Solo Wizard			? 🛛
Select Wireless Network (Choose the desired network co	Configuration	1	ISUS
Please select one from the follo	wing network type	s:	
 Access Point 	◯ Stati	on	
Choosing the access point conf LAN to allow other wireless netw	iguration, you are vork device node t	going to establish o join it.	a wireless
	Next>	Cancel	

- The system automatically generates an SSID for the soft AP. You can rename the SSID, if desired.
- 4. Select a Network Security level for your soft AP. The configurable options are **Open**, **Share-WEP**, and **WPA-PSK**. Select an appropriate level and click **Next**.



- If you select Share-WEP or WPA-PSK in Step 4, you are required to input a password. You can choose to configure the password in either ASCII or HEX mode. If you choose HEX mode, input 10 hex digits for 64-bit encrytion, or 26 hex digits for 128-bit encryption. Click Next to continue.
- 6. Select your Internet connection and click **Next**.

 The soft AP configuration is complete. Record the setup information on your note and click **Finish** to quit the ASUS WiFi-AP Solo[™] wizard.



ASUS WiFi-AP Solo Wize Internet Connection Enables this computer to	ard Reference on the second se
Connection	Device Name
< Prev	Next > Cancel



 The default IP address of WiFi-AP Solo[™] is 192.168.0.1. To modify the IP settings, double-click the wireless network icon in the system tray -> click **Properties** -> double-click **Internet Protocol (TCP/IP)**.

neral			
ou can get IP settings as is capability. Otherwise, j e appropriate IP settings.	signed automatically if your network supports ou need to ask your network administrator for		
Obtain an IP address	automatically		
Use the following IP a	ddress:		
IP address: 192.168.0.1			
Subnet mask:	255 . 255 . 255 . 0		
Default gateway:	192 . 168 . 131 . 225		
O Obtain DNS server a	fdress automatically		
Use the following DN	S server addresses:		
Preferred DNS server:			
Alternate DNS server:			
Alternate DNS server:			

3.2.2 Setting up Soft AP using setup utility

The setup utility contains six buttons - Status, Config, Survey, Statistics, Advanced and ICS in the left column. The Survey button is greyed out in soft AP mode and the ICS button is greyed out in station mode.

- Open the setup utility and click Config button. Click the AP/ Station Mode switch button - To Access Point Mode. The WiFi-AP Solo[™] is switched to soft AP mode in several seconds.
- Status: Associated ad: 54 Mhos Type: Infrastructure tion: WEP SSID: default ingth: Statistic Mar address: 00:13:D4:42:08 MAC Address: 00:13:D4:A2:06
 IP Address: 192.168.2.3
 Subnet Mask: 255.255.255.0
 Gateway: 192.168.2.1 ر Advance Refresh 3 To Access Point Mode Show Tray Icon Windows Zero Config Radio Off Disable Adapter Close
- Click ICS button to configure your Internet connection which you wish to share. Select the correct connection and click Apply button.

 Click Config button and enter the Network Monitor tab. Click Setup button to enter the Wireless Network Properties page of the soft AP.



Status Coofig Survey	onfor k Name: asus-55f19fadae_AP BSSID: 00:13:D4:A2:08:68 2harnel: 1 ve Table: MAC address 00:12:F0:59:13:19	Jfe Time	tup
AlD 1	MAC address L 00:12:F0:59:13:19	ife Time	
Statistics Advance		20:00	
	AP/Station Mode To Station Mode	Wireless M B02.11g/b	

4. You are directed to the Wireless Network Properties page to setup the soft AP. In this page, you can change the SSID, select the commnunication channel and specify the network security. When configuration is complete, click Finish to apply the settings and return to the setup wizard.

	Wireless Network properties						
F	Profile Name Access Point Mode						
P	letwork Name(SSID) asus-55f19fadae_AP						
0	Channel 1 (2412MHz) V AUTO_Channel Wireless Network Security settings This network requires a key for the follwing						
	Network Authentication Open System						
	Data Encryption Disabled						
	O ASCII O Hex O Passphrase						
	Key Length 64 Bits						
	Network key						
	Comfirm Network Key						
	Key Index 1						
	Finish Cancel						

 The default IP address of WiFi-AP Solo[™] is 192.168.0.1. To modify the IP settings, double-click the wireless network icon in the system tray -> click **Properties** -> double-click **Internet Protocol (TCP/IP)**. You can change the IP address, subnet mask and default gateway of WiFi-AP Solo[™].

neral	
ou can get IP settings assigned a is capability. Otherwise, you nee ne appropriate IP settings.	automatically if your network supports d to ask your network administrator fo
Obtain an IP address automa	tically
Use the following IP address:	
IP address:	192.168.0.1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192 . 168 . 131 . 225
O Obtain DNS server address a	a tomaticalla
Use the following DNS serve	r addresses:
Preferred DNS server	
Abarrata DNC service	
Mitemate DNS server.	

 The soft AP configuration is finished. You can view in the Associate Table of the Config page all the wireless stations that have connected to the WiFi-AP Solo™ (Soft AP).

🛄 ASUS WIFI-AP Sol		×
Status Config	Network Monitor Network Name: asus-SS119fadae_AP BSSD: 0013304/A208/68 Channel: 1 Associate Table: Setup	
Survey	AID MAC.4ddress Life Time 1 00:12:F0:59:13:19 20:00	
Statistics Advance		
CS ICS	AP(Station Mode Wireless Mode S02:11g/b V S02:11g/b V	
Summer and the second	LINAUU Off LUSable Adapter Lose	J

3.3 Setting up a wireless card (Infrastructure)

In the Infrastructure mode, you can connect to the LAN or Internet, or both, through a wireless AP.

3.3.1 Setting up infrastructure using setup wizard

 Open the WiFi-AP Solo[™] setup wizard by right-clicking the system tray icon and selecting WiFi-AP Solo Wizard.



- 2. Select Station and click Next.
- ASUS WIFI AP Solo Wizard Select Wireless Network Configuration Choese the desired network configuration Please select one from the following network types: O Access Point O Station Choosing the station configuration, this device becomes a wirless network node; and you should in other present wireless LAN to access internet. In next step, you have to choose ulurther network type. Next Cancel
- 3. Select Infrastructure and click Next.



4. The wizard searches for available networks. To search again, click **Refresh** button. Select the wireless network you want to join and click **Next**.

ASUS WiFi-AP Solo Wizard			? 🛛
The users should select one from	n the found site(s)	as connection	point.
User should select one access po	int from the followi	ng list:	
Network Name(SSID)	Security	channel	Signal
1 default	WEP	1	58%
<]			
Refresh			
< Prev	Next>	Cancel	

 Configure the security settings (if have) in the Wireless Network Property page. Select the key type, key length and input the keys. Click **Finish** to apply the settings and return to the setup wizard.

Wireless Network properties		? 🛛
Vrifels Network properties Profe Name defaut Network Name(SSD) of suit Otherse And Carses And And Carses And	B02.1x Configure EAP Typo AEDS Tunne User Name Idenkty Pessewrd Certificate	

S

Ask your network administrator for the wireless AP settings. The WiFi-AP Solo™ settings must be identical with the wireless AP it connects to.

6. Setting up the TCP/IP for your computer. If DHCP server function is enabled on the AP, you can automatically get the IP address, subnet mask, gateway and DNS server from the AP by selecting Automatically obtain IP address and Automatically obtain IP address and Automatically obtain DNS server. If DHCP server is disabled or not supported on the AP, you must manually input these parameters. When the settings are complete, click Finish to exit the setup wizard.

US WiFi-AP Solo Wizard		
TCD/ID Address		
 Automatically obtian 	IP address:	
OUse the following IP:	address:	
IP address:		
Subnet mask:		
Gateway:		
DNS		
 Automatically obtain 	DNS server:	
OUse the fillowing DN	S server:	
Primary DNS:		
Other DNS:		
< Prev	Finish	

(m)

If DHCP server is disabled on the wireless AP in your network, refer to your network administrator for a valid IP address.

3.3.2 Setting up Infrastructure using setup utility

You can setup the wireless card connection (Infrastructure) with a wireless AP and save the settings to a profile.

 Open the setup utility. Click Survey button to search for available wireless networks. Double-click the AP you want to join.

I ASUS WIFI-AP So	• 7
Basister Bistister Bistister Advance	Europ of Maagor Available Maagor SSID Chan., Except., Authentication i default 1 Will William Unknown i default 11 Nore Unknown Reflesh Add to profile Nate Double cick on item to gan/create profile
Show Tray Icon	Windows Zero Config Radio Off Disable Adapter Close

 Configure the security settings (if have) in the Wireless Network Properties page. Select the key type, key length and input the keys. Click Finish to apply the settings and return to the setup utility.

ofile Name default				
stwork Name(SSID)				
Infrastructure				
ad-hoc				
nannel 1 (2412MHz) 💌		802.1x Confi	gure	
This network requires a key for	or the following	EAP Type	MDS	
Network Authentication	Open System 🔽	Tunnel		
Data Encryption	WEP	User Name		
ASCII OHex	Passphrase	Identity		
Key Length		Password		
Network key see	*	Certificate		
Comfirm Network Key	+			

(m)

Ask your network administrator for the wireless AP settings. The WiFi-AP Solo™ settings must be identical with the wireless AP it connects.

 Setting up the TCP/IP for your computer. If the DHCP server function is enabled on the AP, you can automatically get the IP address, subnet mask, gateway and DNS server from the AP by selecting Obtain an IP address automatically and Obtain DNS server address automatically. If DHCP server is disabled or not supported on the AP, you must manually input these parameters.

ou can get IP settings assigned is capability. Otherwise, you ne e appropriate IP settings.	l automatically if your network supports ed to ask your network administrator for	
Obtain an IP address auton	natically	
 Use the following IP addres 	\$	
IP address:	192.168.0.2	
Subnet mask:	255 . 255 . 255 . 0	
Default gateway:	192 . 168 . 131 . 225	
Obtain DNS server address	automatically	
Use the following DNS service	er addresses:	
Preferred DNS server:		
Alternate DNS server:	· · · ·	
	Advanced.	



If DHCP server is disabled on the wireless AP in your network, refer to your network administrator for a valid IP address.

 Click the Status button to view the information of the WiFi-AP Solo[™]. The connection setup is complete.



5. You can save the settings to a profile for future use. With profiles, it would be much easier to roam among different sites, for example, a home network and an office wireless LAN. When roaming from office to home, double-click the home profile and you are connected to the home network.

Click **Config** button and enter the **Profile Manager** tab. You can see the wireless AP that you currently connect to is in the list. In this page, you can add, remove, edit the profiles, and appoint a default profile.

 To add a profile, click Add button and enter the Wireless Network Properties page. After you

💷 ASUS WIFI-AP Sol	0		7
Blakes Config Survey Blakistics Advance	Nanuci Muniu Pidle Meru Avalitik Politie Politie Nano © defaut	or Network Name(defaut	Add Remove Edt Duplicate Set Default
Show Tray Icon	Windows Zero Config	Radio Off Disable	Adapter Close

complete the settings and click **Finish**, the configurations are saved to a profile and the profile is listed in the **Available Profile** window.

- To delete a profile, select the profile you want to delete and click Remove.
- To edit an existing profile, select the profile and click Edit button to enter the Wireless Network Property page and modify the settings.
- To duplicate a profile, select the profile from the list and click Duplicate.
- To set a profile as default, select the profile and click Set Default.

3.4 Setting up a wireless card (Ad-hoc)

If there is no wireless access point in your environment, you can switch your WiFi-AP Solo[™] to the Ad-hoc mode to connect and communicate with other wireless-enabled computers. Refer to section 1.4.3 for network topology.

3.4.1 Setting up Ad-hoc with setup wizard

Win

Profile

💿 ad-h Chann

Comfirm Network Key Key Index

Finish

Cancel

- 1. Open the WiFi-AP Solo[™] setup wizard by right-clicking the system tray icon and selecting WiFi-AP Solo Wizard.
- 2 Select Station and click Next

Select Ad-hoc and click Next. If there is no Ad-hoc node in your environment, you are directed to Wireless Network Properties page to create an Ad-hoc profile so that you can be detected and connected by other wireless stations



u 10	Please select one from the	he following two network types:	
es	O Infrastructure	● Ad-hoc	
file and	In Ad-Hoc mode, the wire computers to act as serv	eless network bring together workstations and ers to all other users on the network.)	
	Prev	V Next > Cancel	
Wireless Network r	roperties		7
in the clear the thronk of	nopernea		
ofile Name ad-hoc			
etwork Name(SSID)			
Infrastructure			
ad-hoc			
nannel 11 (2462MHz)	•	- 802 1v Conference	
Wireless Network Securi	ty settings	EAD Turne	10001
This network requires a	key for the follwing	EAP Type MDS	×
Network Authentication	Open System	V Turnel	~
Data Encryption	Disabled	User Name	
O ASCII O I	tex O Passphrase	Identity	
		Password	
Mohunde kou		Certificate	~

ork type of this wi



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Config WiFi-AP Solo Wizard

About ... Ouit

ASUS WiFi-AP Solo Wizard

Select Network Type

Access Point Mode

- 5. Select the profile from the list and click **Next**.
- AUS WIFI AP Solo Wizard
- Setting up the TCP/IP for your computer. In an Ad-hoc network, you must manually specify IP address for the WiFi-AP Solo™. Make sure that the IP address of the WiFi-AP Solo™ is within the same subnet as that of the other ad-hoc node (e.g. If the IP address of the other Ad-hoc node is 192.168.0.1, then the IP address of WiFi-AP Solo™ must be 192.168.0.X, where X = 2 ~ 254). When the setup is complete, click Finish to quit the setup wizard.

ASUS WiFi-AP Solo Wizard	×
TCP/IP Address	
 Automatically obtian I 	IP address:
OUse the following IP a	address:
IP address:	
Subnet mask:	
Gateway:	
DNS	
 Automatically obtain 	DNS server.
OUse the fillowing DNS	3 server:
Primary DNS:	
Other DNS:	
< Prev	Finish

3.4.2 Setting up Ad-hoc with setup utility

This section describes how to set up WiFi-AP Solo[™] as an Ad-hoc node and let other wireless station to connect, and how to connect an existing Ad-hoc node.

Setting up WiFi-AP Solo™ as an Ad-hoc node

 Open the setup utility and click the **Config** button. Select **Profile Manager** tab. Click **Add** button to create a profile.

ASUS WIFI-AP Sol	0	2 🗆 🖬 🛛
Status Oconfig Survey Survey	Netlieck klostor Poffe Manger Avslade Profile Profile None Netliwolk Name(⊈ default default	Add Remove Edt Dupikate Set Default
Advance		
Show Tray Icon	Windows Zero Config Radio Off Disable	Adapter Close

 Setup the operation channel and the wireless network security settings. When configuration is complete, click Finish to apply the settings and return to the utility. The WiFi-AP Solo™ is an Ad-hoc node now.

ofile Name ad-hoc				
twork Name(SSID)				
Infrastructure				
ad-hoc				
annel 11 (2462MHz) 🗸		802.1x Confi	igure	
This network requires a key f	or the following	EAP Type	MD5	
Network Authentication	Open System 🐱	Tunnel		
Data Encryption	Disabled 🗸	User Name		
ASCII O Hex	O Passphrase	Identity		
		Password		
Network key		Certificate		
Comfirm Network Key				
(ev Index				



Refer to Appendix-A for the available wireless LAN channels in your country or region.

 The default IP address of WiFi-AP Solo[™] is 192.168.0.1. To modify the IP address for your WiFi-AP Solo[™] , double-click the wireless icon in the system tray -> click **Properties** -> double-click Internet Protocol (TCP/ IP).

- Wireless Network Connection Properties 🛛 🛛 🔀
General Advanced
Connect using:
Bealtek RTL8187 Wireless 802.11g Configure
This connection uses the following items:
☑ ■ QoS Packet Scheduler ☑ S ⁺ AEGIS Protocol (IEEE 802.1x) v3.4.5.0 ☑ S ⁺ Internet Protocol (ICP/IP)
<
Instal Uninstal Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected Notify me when this connection has limited or no connectivity
OK Cancel

 To connect WiFi-AP Solo[™] from another wireless station, make sure that the IP address of the station is within the same subnet as that of the WiFi-AP Solo[™] (e.g. If the IP address of the WiFi-AP Solo[™] is 192.168.0.1, then the IP address of the station must be 192.168.0.X, where X = 2 ~ 254). When the setup is complete, click **OK**.

neral			
ou can get IP settings assign iis capability. Otherwise, you r re appropriate IP settings.	ed automatically if your network supports need to ask your network administrator for		
Obtain an IP address auto	omatically		
Use the following IP address	ess:		
IP address:	192.168.0.2		
Subnet mask:	255 . 255 . 255 . 0		
Default gateway:	192 . 168 . 131 . 225		
O Abtain DNS server addre	ss automaticallu		
 Use the following DNS se 	rver addresses:		
Preferred DNS server:			
Alternate DNS server:			
	(Advanced		

 Click the Status button of the setup utility to check whether the connection is established.



Connecting WiFi-AP Solo™ to an existing Ad-hoc node

 Open the setup utility and click the **Survey** button to search for available Ad-hoc nodes. Doubleclick the Ad-hoc node you wish to connect.

📖 ASUS WIFI-AP Sol	• 🛛 🗖 🗖 🗖 🗖
Budus Config Survey Blasistes Advance	Sono Lastin Maxoo Available Nativosis SSD Chart Encrypt Authentication i default 1: WEP Utknown i default 1: NEP Utknown i default 1: NEP Utknown i default 1: NEP Utknown
Show Tray Icon	Windows Zero Config Radio Off Disable Adapter Close

 Setup the operation channel and the wireless network security settings. The operation channel and security settings must be identical with the Adhoc nodes you want to connect. Click Finish to apply and return to the setup utility.

Wireless Network prop	perties			?
rofile Name ad-hoc				
etwork Name(SSID)				
) Infrastructure				
ad-hoc				
nannel 11 (2462MHz) 🗸	- 10	802.1x Confi	gure	
This network requires a key	for the follwing	EAP Type	MDS	
Network Authentication	Open System 💌	Tunnel		
Data Encryption	Disabled 💌	User Name		
O ASCII O Hex	O Passphrase	Identity		
Key Length 64 B		Password		
Network key		Certificate		
Comfirm Network Key				
Key Index 1				
Finish	Cancel			



Refer to Appendix-A for the available wireless LAN channels in your country or region.

 To connect an Ad-hoc node, you must manually setup the IP address of WiFi-AP Solo[™]. Double-click the wireless icon in the system tray -> click **Properties** -> double-click Internet Protocol (TCP/IP) to open the IP configuration page.

Make sure that the IP address of the WiFi-AP SoloTM is within the same subnet as that of the station (e.g. If the IP address of the station is 192.168.0.1, then the IP address of WiFi-AP Solo T^M must be 192.168.0.X, where X = 2 ~ 254). When the setup is complete, click **OK**.

meral	
'ou can get IP settings assigned his capability. Otherwise, you ne he appropriate IP settings.	automatically if your network supports ed to ask your network administrator for
Obtain an IP address autor	atically
Use the following IP addres	\$
IP address:	192.168.0.2
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192 . 168 . 131 . 225
Obtain DNS server address	automatically
 Use the following DNS serv 	er addresses:
Preferred DNS server:	
Alternate DNS server:	
	Advanced

5. Click the **Status** button of the setup utility to check whether the connection is established.

MASUS WIFI-AP Sol	0		
Config Datast Config Durway Bladistics Advance	Network State Arau WrisAP Solo Version Marufactus Biot Stado Header Biot Stado Header Biot Stado Header Biotryston Charmel Son Address Address Charmel Son Address Add	n.6.4.20.1 + 6405 + 5.122.4.12.2000 + Ne - Control - Control	
Show Tray Icon	Windows Zero Config	Radio Off Disable Adapter Clos	je 🛛



Appendix

The Appendix-A lists the wireless LAN channels available for use in your country or location, and safety warning statements

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	Channel	Center	
	Frequency		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	14	2.484 GHz	

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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.

Safety statements

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.

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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.

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 bodyworn 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.