ASRock WiFi-802.11n Module Operation Guide

1. Introduction

ASRock WiFi-802.11n module is an easy-to-use wireless local area network (WLAN) adapter to support WiFi+AP function. With ASRock WiFi-802.11n module, you can easily create a wireless environment and enjoy the convenience of wireless network connectivity. Therefore, from anywhere within the signal range, you will be able to play LAN games, connect to the internet, access and share printers, and make Internet phone calls easily. Please read this operation guide carefully before you start to set up ASRock WiFi-802.11n module.

Standard	- IEEE 802.11n
Data Rate	- 15, 30, 45, 60, 90, 120, 135, 150Mbps
Security	- AES, TKIP, WEP
Network Architecture Types	- Access Point mode (AP mode)
	- Station mode: Infrastructure mode and
	Ad-Hoc mode
Frequency Band	- 2.4GHz ISM radio band
Operating Range	- Indoor: 330ft (100m)
	- Outdoor: 980ft (300m)
	* The range varies in different
	environments
Number of Connected Devices	- up to 16 stations
(AP Mode)	
Antenna	- ASRock WiFi-802.11n
	omni-directional antenna
LED	- Green data transmission (AIR) LED
Support OS	- Windows [®] XP / XP 64-bit / Vista TM /
	Vista TM 64-bit
Compatibility	- Full compatible with IEEE 802.11n
	standard products
Software Support	- ASRock WiFi-802.11n Wizard

1.1 Specifications

1.2 LED Indicators and Antenna Ports

ASRock WiFi-802.11n module has a green LED for transmission status mounted onboard, and two antenna ports for connection to the external antennas.



LED Status	Indication
On	Power on, transmit/receive/site survey
Off	Power off, no wireless connection

1.3 Signal Range

The signal range of ASRock WiFi-802.11n module varies from the operating environment. Obstacles such as walls and metal barriers could reflex and absorb ratio signals. Devices like microwave ovens may also interfere with the wireless network greatly.

Signal range: Indoor 330ft (100m), outdoor 980ft (300m)

By default, ASRock WiFi-802.11n module should automatically adjust the data rate. The closer the wireless stations are the better the signal and transmission speed they will receive.

Note:

* To reach higher data rate, we advise users to adjust the channel bandwidth of Wireless AP to 40MHz instead of 20MHz. However, under the circumstances of a noisy environment, users may adjust the setting back to 20MHz, which may get less interference.

2. Hardware & Software Installation

2.1 System Requirements

Before installing ASRock WiFi-802.11n module to your motherboard, please make sure your system satisfies the following requirements.

 ASRock motherboard with a USB/WiFi (yellow), WiFi (black) or WiFi/E (black) header. (Please refer to ASRock motherboard manual for the location of USB/WiFi, WiFi or WiFi/E header.)





USB/WiFi Header (2 x 6 Pin) WiFi Header (2 x 6 Pin)

WiFi/E Header (2 x 8 Pin)

- 2. A minimum of 256MB system memory
- 3. Operating system: Windows $^{\circ}$ XP / XP 64-bit / Vista TM / Vista TM 64-bit
- 4. An optical drive / CD-ROM for driver and utility installation

2.2 Installing ASRock WiFi-802.11n Module and Antennas

After you make sure your system satisfies the requirements above, please follow below steps for installing your ASRock WiFi-802.11n module. If the motherboard you purchase is equipped with ASRock WiFi-802.11n module, which is screwed next to the audio jack of the I/O panel, please skip step 2 to 6.

- 1. Shut off the PC before installing ASRock WiFi-802.11n module.
- 2. Move out your motherboard from the chassis.
- 3. Fasten the bracket to the proper position of the chassis with screws.
- 4. Plug ASRock WiFi-802.11n module with its connector-side to the USB/WiFi (yellow), WiFi (black) or WiFi/E (black) header on the motherboard. (The location of the USB/WiFi, WiFi or WiFi/E header may vary on motherboard models. Please refer to your motherboard manual for the motherboard layout.)



5. Fasten ASRock WiFi-802.11n module to the motherboard with screws.

- 6. Place your motherboard to the chassis.
- 7. Connect the cable-end from the antennas to the antenna ports on ASRock WiFi-802.11n module.



8. Place the antennas at an elevated location. A wide and open position will enhance the operating range.

Note:

* You may connect two antennas to ASRock WiFi-802.11n module. However, please place the two antennas apart for a distance of at least 50cm and put them on different elevation of height to avoid interference of each others.

2.3. Driver and Utility Installation

After you finish the hardware installation, you need to install WiFi driver and utility to your system. Please boot your system and follow below steps to install the WiFi driver and utility.

- 1. Insert ASRock motherboard support CD to the optical drive.
- The system will automatically display the driver menu. Click "ASRock WiFi-802.11n Driver and Utility" and follow screen instructions to finish the driver installation.

After above steps, the WiFi driver and utility are installed to your system simultaneously.

Note:

* Microsoft[®] had released a hotfix to improve the connectivity and performance of wireless network in Windows[®] Vista-based system. To download the hotfix, please go to: http://support.microsoft.com/kb/928152/en-us

* Microsoft[®] had also released three hotfix to improve the connectivity for transferring large file in Windows[®] Vista-based system. Please go to:

• <u>http://support.microsoft.com/kb/932045/en-us</u> to download the necessary hotfix when this

situation happened: "The connection has been lost" – this error message may occur when you try to copy a large file from one Windows[®] Vista-based computer to another Windows Vista-based computer.

- <u>http://support.microsoft.com/kb/932170/en-us</u> to download the necessary hotfix when this situation happened: When you copy large files to or from earlier operating systems, the copy operation may be slower than expected on some Windows[®] Vista-based computers.
- <u>http://support.microsoft.com/kb/931770/en-us</u> to download the necessary hotfix when this situation happened: The copy process may stop responding when you try to copy files from a server on a network to a Windows[®] Vista-based computer.

2.4 Utility Setup

After you have installed the driver and utility to your system, now you are ready to set up the utility in your network. ASRock WiFi-802.11n module supports two kinds of wireless network mode: Access Point Mode (AP Mode) and Station Mode. Please refer to below introduction and select the most appropriate mode when setting it up.

A. Access Point Mode (AP Mode)

If you want to share the Internet access with the wireless stations in your environment, such as PC, notebook and other devices, you can configure ASRock WiFi-802.11n module in an access point mode (AP mode). In this mode, ASRock WiFi-802.11n module becomes the wireless access point that provides local area network and Internet access for your wireless stations. The AP Mode feature is ideal for home/SOHO networks with several computers, a shared printer, and a shared Internet connection.



B. Station Mode

If you do not plan to use AP function with ASRock WiFi-802.11n module, but just want to use the wireless function to connect the access point (AP), or connect with other stations in the wireless range instead, please set up ASRock WiFi-802.11n module in station mode. There are two choices provided in station mode: Infrastructure mode and Ad-hoc mode. Please read below introduction for the differences of these two modes.

B-1. Infrastructure Mode

If you have a present access point (AP) in your wireless network environment for this station to join, you can set up ASRock WiFi-802.11n module in Infrastructure mode. In this mode, ASRock WiFi-802.11n module acts as a wireless adapter. In other words, it is centered on an AP that provides Internet access and LAN communication for the wireless stations, such as PC, notebook and other devices.



B-2. Ad-hoc Mode

If you don't have a present access point in your wireless network environment, you can set up ASRock WiFi-802.11n module in Ad-hoc mode. The wireless network brings together workstations, PC, notebook and other devices for wireless communication.



3. General Setup with ASRock WiFi-802.11n Wizard

If you want to easily set up ASRock WiFi-802.11n for general use, please use ASRock WiFi-802.11n Wizard and follow below procedures according to the mode you choose.

Here we take Windows[®] VistaTM for example in the following pictures. Since the setup procedures are quite similar in different operating systems, please refer to below procedures when setting up ASRock WiFi-802.11n wizard under other operating systems.

icon on the Windows[®] taskbar and

3.1 Setting up the AP Mode

1. Move your mouse cursor to the right-click the icon.



2. Select **Wizard** to launch the WiFi setup wizard.



3. Select Create a wireless access point and click Next.

ireless Net	twork Setup Wizard	-
	/ISRo	d
Weld	come to the Wireless Network Setup Wizard	
	This wizard helps you set up a security-enabled wireless network let your computer connect through a wireless access point, or join an existing wireless network	
	Create a wireless access point	
	Join an existing wireless network	
	< Back Next > Canc	el

4. The system will automatically generate a SSID for the AP mode. You can rename the SSID if you want.

Wireless N	etwork Setup Wizard		X
	Give your network a	name, using up to 32 characters	/ISRock
	Network Name (SSID):	200223	
	Assign a network key		
	Network Security:	None	•
	To prevent outsiders from we recommend you assin	accessing your network, g a network key to your network	
		< Back	Next > Cancel

5. Select a Network Security level for your AP mode. The configurable options are **None, WEP, WPA-Personal** and **WPA2-Personal**. Select an appropriate level and click **Next**.

	/ISRoo
Give your network a	name, using up to 32 characters
Network Name (SSID):	QQQ.PC
Assign a network key	
Network Security:	None 👻
To prevent outsiders from	WEP Lac WPA-Personal a WPA2-Personal

Note:

- * If your operating system is Windows[®] XP with Service Pack 2, it is required to install the Microsoft hotfix in order to support WPA2-Personal function. Please go to this link to download the necessary hotfix:
 <u>http://www.microsoft.com/downloads/details.aspx?familyid=662BB74D-E7C1-48D6-95EE-145923</u> <u>4F4483&displaylang=en</u>
- 6. If you select **WEP**, **WPA-Personal** or **WPA2-Personal**. You need to input a password. Follow the wizard guidelines for key entry rules. Then click **Next** to continue.

	/ISR
Enter a WEP key for your wireless networ	k
The WEP key must meet one of the following guidine	151
- Exactly 5 or 13 characters	
- Exactly 10 or 26 characters using 0-9 and A-F	
2222022200	1
Network key:	
Confirm network key:	
Sector Market Party Sector Sector	

7. Select your Internet connection and click Next.

	(10.5)		
Select the connection t	hat connects directly t	o your network	
Network Name	Device Na	ane	1
Local Area Connect Re	altek RTL8168/8111 Family	PCI-E Gigabit Ether	

Note:

- * You need to have another LAN connector connected to your ADSL / cable modem, and already set it up for Internet access. Please refer to the manual from your ISP for detailed setup steps.
- 8. The AP mode configuration is complete. Record the setup information on your note and click **Finish** to quit the wizard.



3.2 Setting up the Station Mode

Note:

* Please be noted that the wizard for WiFi-802.11n Module does not provides Ad-Hoc mode. If you want to set up Ad-Hoc mode, please refer to page 26 - page 36 for advanced setup.

3.2.1 Setting up the Infrastructure Mode

1. Move your mouse cursor to the *icon* icon on the Windows[®] taskbar and right-click the icon.



2. Select **Wizard** to launch the WiFi setup wizard.



3. Select Join an existing wireless network and click Next.

Wireless Network Setup Wizard	
	/ISRock
Welcome to the Wireless Network Setup Wizard	Contraction of the second
This wizard helps you set up a security-enabled wirele let your computer connect through a wireless access an existing wireless network	ess network point, or join
Create a wireless access point	
Join an existing wireless network	
	Next > Cancel

4. Click **Finish** to exit the wizard.



5. Move your mouse cursor to the **Wireless Network Connection** icon icon on the Windows[®] taskbar and right-click the icon. Click **Connect to a network** to select available internet network.

	Connect to a network
11	Turn on activity animation Turn off notification of new networks
	Diagnose and repair Network and Sharing Center
	😣 🔜 🔤 🕄 🕲 🔜 😣

6. Choose an available internet network and click **Connect**.

Show All	•	
Mingus	Security-enabled network	lte.
ANY ANY	Security-enabled network	lee.
bu1-PC_AP	Unsecured network	lee
		10

- * If you choose a security-enabled wireless network, you have to input the network key.
- 7. Your system is now connecting to a network.



8. You have connected to internet wireless network successfully. If you want to start the connection automatically next time, you may save the network by checking **Save this network** box, and click Close.

🚱 🔨 Connect to a network	_ D • X •
Successfully connected to wireless	
 ✓ Save this network ✓ Start this connection automatically 	
	Close

4. Advanced Setup in ASRock WiFi-802.11n Utility

If you want to set up ASRock WiFi-802.11n module for advanced use, please follow below procedures according to the mode you choose. For general users, it is unnecessary to read below advanced setup of ASRock WiFi-802.11n module. Here we take Windows[®] VistaTM for example in the following pictures. Since the setup procedures are quite similar in different operating systems, please refer to below procedures when setting up ASRock WiFi-802.11n wizard under other operating systems.

4.1 Setting up the AP Mode

If you want to set up ASRock WiFi-802.11n module for advanced use in AP mode, please use ASRock WiFi-802.11n utility and follow below steps according to the operating system you install.



1. Double-click the utility shortcut

on the desktop or double-click the



icon on your Windows[®] taskbar to open the setup utility.



2. Refer to the mode indicator on the top-right corner of the main window to know which mode ASRock WiFi-802.11n is in. If it is in station mode, click the mode switch button to switch it to AP mode.

HONDER MIT ODE TEN			111-1	
				Bock
			///////////////////////////////////////	Meeth
A	Status:	Disconnected		Cliept
	SSID:			
and the second se	Channel:		BSSID:	To Access Point Mode
	Network Type:			AP = R
	Authentication			Client
	Encryption:			
52	Link Speed:	Tx (Mbps)	Rx (Mbps)	
	Link Quality:			
	Signal Strength:			

3. The system will automatically generate a SSID for the AP mode. You can rename the SSID if you want.



 Select a Network Authentication for your AP mode. The configurable options are Open System, Shared Key, WPA-PSK and WPA2-PSK. Select an appropriate one.

ASRock WiFi-802.11n	(((5))	11/1		
//////			ASR	ock
<i>B</i>	BSSID: 00-15-4 Network Name(SSID): DDD00 Channel: 6	AF-#D-CS-F7 07		AP
	Authentication: Open 3 Data encryption: Shared Key Length: WPA-P	System 🛩 System I Key SK Sev	GHest	APIR
- Č	Network key: Confirm network key: Key index (edvariced):	2		
		Apply		

Note:

* If your operating system is Windows[®] XP with Service Pack 2, it is required to install the Microsoft hotfix in order to support **WPA2-Personal** function. Please go to this link to download the necessary hotfix:

http://www.microsoft.com/downloads/details.aspx?familyid=662BB74D-E7C1-48D6-95EE-145923 4F4483&displaylang=en

5. If you select **Open System**, the configurable options of Data Encryption are **None** and **WEP** for you to choose. This option allows you to select Key Length.

ASRock WiFi-802.11n)////	ock
BSSID: Network Name(SSID): Channel: Authentication: Data encryptio	00-15-AF-4D-C5-F7 DDD007 6 V Open System V None V	AP
Key Lengt Hotwark lengt Confirm notwark lengt Key Index (advanced)	WEP Apply	

6. If you select **Shared Key**, the configurable options of Data Encryption is **WEP** only. This option allows you to select Key Length.

ASRock WiFi-802.11n		11/		ock
	ESSID: 00-15-A Network Name(SSID): ASROC Charnel: Authentication Shared) Data encryption Key Length: 64 Bis Network key: Confirm network key: Key index (advanced): 1		© Hex	

7. If you select **WPA-PSK**, the configurable option of Data Encryption is **TKIP** only. You can't select Key Length in this option.



8. If you select **WPA2-PSK**, the configurable option of Data Encryption is **AES** only. You can't select Key Length in this option either.

ASRock WiFi-802.11n			/ISRo	ck
	BSSID: 0 Network Name(SSID): Channel: 6 Authentication Data encryption Ricy Length Network key: Confirm network key: Key index (advance():	0-15-AF-40-68-A3 ASROOK-PC 5 MPA2-PSK VES VES VABIS OKACII	C Hex	AP Market

9. In this case, we select **Open System** for the rest of the setups. If you select WEP, please select the Key Length. The configurable options are **64 Bits** and **128 Bits**. (However, if you select **None** in the **Data Encryption**, you will not be able to choose the Key Length.)

🔜 ASRock WiFi-802.11n		
		lock
	BSSID: 00-15-AF-4D-C5-F7 Network Name(SSID): DDD007 Channel: 6 • Authentication: Open System • Data encryption: WEP •	AP
- Č	Key Length 64 Bits 64 Bits Network key Confirm network key: Key index (advanced): 1	
	Apply	





11. Click **ICS** (Internet Connection Sharing) button on the left-bottom corner of the main window.



12. Select the correct internet connection and click **Apply**.

ASRock WiFi-802.11n	/ISRock
ß	Internet Connection Sharing (ICS) Please choose the LAN port that you want to do internet connection sharing
	Network Name Device Name Local Area Conne Realizek R11.8166/8111 Family PCT-E Gglobit EL
	Public Sharing Network Realtek RTL8168/8111 Family PCI-E Ggabit Ethernet NIC (NDIS 6.0) Apply ((Q))

Note:

- * You need to have another LAN connector connected to your ADSL / cable modem, and already set it up for Internet access. Please refer to the manual from your ISP for detailed setup steps.
- 13. The AP mode configuration is completed.

4.2 Setting up the Station Mode

There are two choices provides in station mode: **Infrastructure mode** and **Ad-hoc mode**. For the differences of Infrastructure mode and Ad-hoc mode, please refer to page 5 and 6 for details.

If you want to set up ASRock WiFi-802.11n module for advanced use in station mode, please use Windows[®] configuration and follow below steps according to the mode you choose and the operating system you install.

4.2.1 Setting up the Infrastructure Mode

For Windows[®] XP / XP 64-bit:

1. Move your mouse cursor to **Wireless Network Connection** icon icon on the Windows[®] taskbar and right-click the icon.



2. Select View Available Wireless Networks.



3. Choose an available wireless network. Click Connect.



4. If you choose a security-enabled wireless network, input the network key and click **Connect**.

Wireless Network Cor	mection	×
The network 'Mingus' requinetwork key helps preven	ires a network key (also called a WEP key or WPA key). A t unknown intruders from connecting to this network.	
Type the key, and then d	ick Connect.	
Type the key, and then di Network key:	ick Connect.	-

5. You are now connected to a internet wireless network successfully.

Network Tasks	Choose	e a wireless network	
S Refresh network list	Click an iter information	m in the list below to connect to a wireless network	in range or to get more
Set up a wireless network for a home or small office	((၀))	DLink-DIR-635	Acquiring network
Related Tasks	((0))	DLink_DWL-700	Automatic 💅
(i) Learn about wireless		Security-enabled wireless network	
networking	((g))	Mingus	
Change the order of preferred networks		😚 Security-enabled wireless network (WPA)	+130
Se Change advanced	((0))	EDIMAX_BR-6504N	
settings		😚 Security-enabled wireless network	ter.
	((@))	Buffalo_WHR-G54S	
		😚 Security-enabled wireless network	1884
	_		

For Windows[®] VistaTM / VistaTM 64-bit:

1. Click Start. Click Settings. And select Control Panel.



2. Click Network and Internet.



3. Click Network and Sharing Center.



4. Click Connect to a network.



5. Choose an available network and click Connect.

Show All	•	
Mingus	Security-enabled network	ller.
	Security-enabled network	lte.
bul-PC_AP	Unsecured network	Iter
-		

6. If you choose a security-enabled wireless network, input the network key and click **Connect**.

	Connect to a network		
Type The pe	e the network security key or passphrase for Ming erson who setup the network can give you the key or passphrase	gus e.	
Securit	ity key or passphrase:		
Dis Dis	iplay characters		
9	If you have a <u>USB flash drive</u> with network settings for Mingu	us, insert it now.	
		Connect	cel

7. You have connected to internet wireless network successfully. If you want to start the connection automatically next time, you may save the network by checking **Save this network** box, and click Close.

Connect to a network	
Successfully connected to wireless	
 ✓ Save this network ✓ Start this connection automatically 	
	Close

4.2.2 Setting up the Ad-hoc Mode

For Windows[®] XP / XP 64-bit:

1. Move your mouse cursor to **Wireless Network Connection** icon on the Windows[®] taskbar and right-click the icon.



2. Select View Available Wireless Networks.



3. Click Change advanced settings.



4. Switch to Wireless Networks tab and click Advanced.

- Wire	less Network Con	nection Properties	?
Gener	Wireless Networks	Advanced	
🔽 Us	e Windows to configure	e my wireless network settings	
Avai	lable networks:		
To c abou	onnect to, disconnect ut wireless networks in	from, or find out more information range, click the button below.	on
		View Wireless Netwo	orks
Auto belo	matically connect to av w: DLink-DIR-635 (Auton DLink-DWL-700 (Auto	vailable networks in the order li	sted
	DEIRK_DWE-700 (Add	Move d	own
	Add Remo	ve Properties	
Learr <u>confi</u>	n about <u>setting up wirel</u> guration.	ess network	ced
		ОК	Cancel

 Select Computer-to-computer (ad hoc) networks only and clear the Automatically connect to non-preferred networks box if it is selected. Click Close.



6. On the **Wireless Networks** tab, click **Add**. In the **Wireless Network Properties** dialog box, specify a Network name (SSID). Click **OK** to close all dialog boxes.

wireless Networks Advanced Use Windows to configure my wireless network settings Available networks: To connect to, disconnect from, or find out more information about wireless networks in range, click the button below. View Wireless Networks Preferred networks: Automatically connect to available networks in the order lister below: Plink-DIR-635 (Automatic) Move up DLink_DWL-700 (Automatic) Move down Add Remove Properties .earn about setting up wireless network Advanced OK Car eless network properties sociation Authentication Connection etwork name (SSID): Wireless network key This network requires a key for the following: Network Authentication: Open Data encryption: WEP Network key: Confirm network key: Key index (advanced): 1 The key is provided for me automatically	Vireless Network Con	nection Properties	
Use Windows to configure my wireless network settings Available networks: To connect to, disconnect from, or find out more information about wireless networks in range, click the button below. View Wireless Networks: Automatically connect to available networks in the order lister below: Peferred networks: Automatically connect to available networks in the order lister below: Add Remove Properties earn about setting up wireless network configuration. Add Remove OK Car Add Car Configuration Authentication Connection etwork name (SSID): Wireless network key This network requires a key for the following: Network Authentication: Den Data encryption: WEP Network key: Confirm network key: Key index (advanced): This is a computer-to-computer (ad hoc) network; wireless access points are not used	neral Wireless Networks	Advanced	
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Add Remove Properties Learn about setting up wireless network Advanced configuration. OK Car OK Car cociation Authentication Connection etwork name (SSID): wireless network key This network requires a key for the following: Network Authentication: Open Data encryption: wEP Network key: Confirm network key: Key index (advanced): 1 The key is provided for me automatically This is a computer-to-computer (ad hoc) network; wireless access points are not used	P DLink-DIR-635 (Autor	tomatic) Mov	ove up ve down
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Data encryption: WEP Network key:	eless network proper sociation Authentication etwork name (SSID): Wireless network key This network requires a ke	DK (Cance
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Confirm network key: Key index (advanced): 1 Image: The key is provided for me automatically This is a computer-to-computer (ad hoc) network; wireless access points are not used	eless network proper sociation Authentication etwork name (SSID): Wireless network key This network requires a ke Network Authentication: Data encryption:	DK (Cance
Key index (advanced): 1	eless network proper sociation Authentication etwork name (SSID): Wireless network key This network requires a ke Network Authentication: Data encryption: Network key:	DK (Cance
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This is a computer-to-computer (ad hoc) network; wireless access points are not used	eless network proper sociation Authentication etwork name (SSID): Wireless network key This network requires a ke Network Authentication: Data encryption: Network key: Confirm network key: Key index (advanced):	DK (Cance
	eless network proper sociation Authentication etwork name (SSID): Wireless network key This network requires a ke Network Authentication: Data encryption: Network key: Confirm network key: Key index (advanced): Image: The key is provided for	OK ties Connection I ay for the following: Open WEP Image: State St	Cance Cance
	eless network proper sociation Authentication etwork name (SSID): Wireless network key This network requires a ke Network Authentication: Data encryption: Network key: Confirm network key: Key index (advanced): Image: The key is provided for Confirm set or provided for This is a computer-to-con access points are not use	DK	Cance Cance

7. Select the **Network Authentication** for advanced setups. The configurable options are **Open**, **Shared** and **WPA2-None**. Select an appropriate one.

netess ne	monk brob	erties				Ŀ
Association	Authentication	n Conr	nection			
Network <u>n</u> a	me (SSID): network key —					
This netw	vork requires a	key for t	he follov	ving:		
Network	Authentication		Open			*
<u>D</u> ata enc	ryption:		Open Shared WPA-I	d None		
Network	key:					
C <u>o</u> nfirm n	etwork key:					
Key inde <u>s</u>	; (advanced);	1	A V			
<mark>.</mark> ▼ T <u>h</u> e k	ey is provided I	ior me a	utomatic	ally		
This is a access (computer-to-c points are not u	omputer ised	(ad hoc) network	; wireles	is
			-		-	-

8. If you select **Open**, the configurable option of Data Encryption is **WEP** only. You may select **Disabled** or **WEP**. This option allows you to select Key Index.

Association	Authentication	Connection	
Network na	ame (SSID):	open	
Wireless	network key		
Network	Authentication:	Open	~
Data en	cryption:	WEP	~
Network	key:	Disabled WEP	
Confirm r	network key:		
Key inde	x (advanced):	1	
The k	ey is provided fo	r me automatically	
This is a access	a computer-to-cor points are not us	nputer (ad hoc) network; wire ed	less

9. If you select **Shared**, the configurable option of Data Encryption is **WEP** only. You

may select **Disabled** or **WEP**. This option allows you to select Key Index.

Association	Authentication	Connection
Network <u>n</u> a	ame (SSID):	open
-Wireless	network key	u far blan fallau inar
Network	Authentication:	Shared V
<u>D</u> ata en	- cryption:	WEP 🗸
Network	<u>k</u> ey:	Disabled WEP
C <u>o</u> nfirm r	network key:	
Key inde;	<u>x</u> (advanced):	1
T <u>h</u> e k	ey is provided fo	me automatically
↓ ↓ This is a	a <u>c</u> omputer-to-cor	nputer (ad hoc) network; wireless
access	points are not us	ed

10. If you select **WPA-None**, the configurable options of Data Encryption are **TKIP** and **AES**. You may select either **TKIP** or **AES**. You can't select Key index in this option.

Association	Authentication	Connection
Network <u>n</u> a	ame (SSID):	open
Wireless	network key	
This netv	vork requires a ke	ey for the following:
Network	Authentication:	WPA-None 💉
<u>D</u> ata end	cryption:	AES 🗸
Network	<u>k</u> ey:	TKIP AES
C <u>o</u> nfirm r	network key:	
Key inde	g (advanced):	1
The k	ey is provided fo	me automatically
access	a <u>computer-to-cor</u> points are not us	nputer (ad hoc) network; wireless ad

11. Launch **View Available Wireless Networks** again. You are now in Ad-hoc network, you may wait for other users to connect you or you may select the desired ad-hoc network and click **Connect**.



For Windows[®] VistaTM / VistaTM 64-bit:

1. Click Start. Click Settings. And select Control Panel.



2. Click Network and Internet.



3. Click Network and Sharing Center.



4. Click Manage wireless networks.



5. In the Manage wireless networks that use (Wireless Network Connection) window, click Add.



6. Click Create an ad hoc network.



7. In the Set up a wireless ad hoc network window, click Next.



8. Specify a network name, select the security type. The configurable options are **No Authentications (Open), WEP** and **WPA2-Personal**.

Give your networ	c a name and choose security options	E.
Network name:	123	
Security type:	No authentication (Open)	me choose
Security key/Passphras	s Dis	splay characters
Save this netwo	nk	

Give your networ	t to a wireless network	se security options
one you nemor		a secondy opinions
Network name:	123	
Security type:	WEP	 delp me choose
Security key/Passphras	e	Display characters
Save this netwo	ork	
		Next

Give your networ	c a name and choose security of	options
Network name: Security type: Security key/Passphras	123 WPA2-Personal •	t elp me chapse
Save this netw	ork	

9. Select an appropriate one, and key in the security password. Then click Next.

Network name:	123	
Security type:	WPA2-Personal	+ felp.me.shcose
Security key/Passphras	e	Display characters
Save this nature	ork	
D save this netwo		

10. You have completed setting up an Ad-hoc network. Click **Close** to exit.

1	Manually connect to a wireless network	
The 1	23 network is ready to use	
This ne discon to con	etwork will appear in the list of wireless networks and will stay active until everyone nects from it. Give the network name and security key (if any) to people you want nect to this network.	
	Wireless network name: 123	
	Network security key:	
To sha	re files, open Network and Sharing Center in Control Panel and turn on file sharing.	
Recom	mended options:	
1 S	urn on Internet connection sharing	
Share a	in Internet connection on an ad hoc network	
		-

11. You are now in Ad-hoc network, you may wait for other users to connect you or you may select the desired ad-hoc network.

Show All		
4 123	Waiting for users to connect	llter
💐 wireless	Unsecured network	llter
Jink dlink	Unsecured network	llter
		-1