# **User Manual**

Wireless USB Adapter Model: 5B07

SHEN ZHEN XIN HUA TIAN TECHNOLOGY CO., LTD

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the 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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to

the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **Chapter 1. Introduction**

Thank you for purchasing the wireless 802.11b/g/n/a/ac USB adapter! This adapter is mini size design and you are able to plug it into the USB port. Excepting common wireless standards 802.11b/g/n, this wireless adapter is also 802.11ac compatible - data transfer rate is 150/433Mbps, and that's three times faster than 802.11g wireless network!

## **1.1 Product Features**

- ◆ Complies with IEEE 802.11ac , IEEE 802.11a, IEEE 802.11n, IEEE 802.11g and IEEE 802.11b standards
- Provides USB2.0 port
- Provides 150/433Mbps receiving rate and 150/433Mbps sending rate
- Supports 20MHz/40MHz/80MHz frequency width
- Auto-detects and changes the network transmission rate
- Provides two work modes: Infrastructure and Ad-Hoc
- Supports Soft AP to establish your wireless LAN networking
- Supports 64/128-bit WEP, WPA, WPA2 encryption methods and 802.1x security authentication standard
- Supports WPS (Wi-Fi Protected Setup) encryption method to free you from remembering long passwords
- Easy-to-install, plug and play
- Supports Windows XP/VISTA/Win7/ Win8/Linux/Macintosh

## **1.2 Package contents**

The following contents should be found in your box:

- One Wireless 802.11b/g/n/a/ac USB adapter
- One CD (include driver/utility/user manual)

**Note**: If any of the listed contents are damaged or missing, please contact the retailer from whom you purchased the product for assistance.

# **1.3 Indicator Description**

There is a LED indicator blinking when data communication is going on.

# **CHAPTER 2: Quick Installation Guide**

This chapter is to assist you how to use the included CD-ROM which comprises the Driver and the Client Utility Interface.

## 2.1 Driver Installation

Please follow the following instructions to install your new wireless USB Adapter:

#### 2.1.1

Insert the USB wireless network card into an empty USB 2.0 port of your computer when computer is switched on. Never use force to insert the card, if you feel it's stuck, flip the card over and try again.

#### 2.1.2

The following message will appear on your computer, click `Cancel / Close'.



#### **Under Windows XP**

#### **Under Windows Vista and Windows 7**

Driver Software Installation		<b>*</b>
Installing device driver so	oftware	
802.11 n WLAN	Waiting for user input	
		Close

#### 2.1.3

Insert the driver CD into your CD-ROM. You can see autorun screen below. if not, you can double click `**autorun.exe**' on CD.



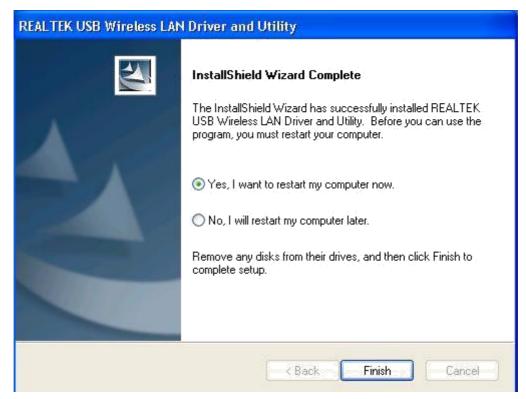
Click '**Install Driver**' to start the installation procedure **2.1.4** 

Installation descriptions shown. Click `<u>Next</u>' to continue



## 2.1.5

Once the installation is finished the computer will be asked to reboot. you can click `**<u>Finish</u>**' and reboot the computer to finish the installation of driver files.



#### 2.1.6

A new icon will appear near the clock of system tray:



Left-click the icon will launch wireless network configuration utility, and you can right-click the icon to show the quick menu of configuration utility. This icon also uses different color to show the status of wireless connection:

alli Wireless connection is established, good signal reception.

Wireless connection is established, weak signal reception.

Connection is not established yet.



Wireless network card is not detected.

For detailed instructions of wireless network configuration utility, please see next chapter.

## **2.2 Connect to Wireless Access Point**

To use wireless network, you have to connect to a wireless access point first. You can either use Client utility (comes with network card driver), or Windows Zero Config utility (comes with Windows operating system).

#### 2.2.1 Using Client Utility

Please follow the following instructions to use Client configuration utility to connect to wireless access point.

1. Left-click the Client configuration utility icon located at lower-right corner of computer desktop, and configuration menu will appear:



 Wireless utility will appear. Click `<u>Available Network</u>' menu to search for wireless access points nearby.

Realtek RTL8811	General Profile Available Net	work Statu	s Statistics \	Wi-Fi Protect Setup				
87.0	Available Network(s)							
	SSID	Channel				Туре	BSSID	Mode
	1 <sup>99</sup> ChinaNet-5s3k		AES	WPA Pre-Shared Key	100%		48:28:2F:2F:88:96	N,G
	L <sup>o</sup> D-Link_DIR-820L		TKIP/AES	WPA Pre-Shared Key/	100%	Infrastructure	CARLS IN CONTRACTOR AND	
	I"Tenda_43EDA0		AES	WPA Pre-Shared Key			CB:3A:35:43:ED:A0	
	I" 123		None	Unknown	92%		F0:7D:68:43:7D:76	
	I <sup>9</sup> TP-LINK_34A982		TKIP/AES	WPA2 Pre-Shared Key	72%		BC:D1:77:34:A9:82	
	I"rd		TKIP/AES	WPA Pre-Shared Key/			00:E0:4C:00:00:43	
	1º JCG-8C65C0		AES	WPA Pre-Shared Key			00:E0:4B:8C:65:C0	
	I OURLINK HIGHPO		None	Unknown	100%		00:E0:4C:19:F3:DA	
	1°°QA		AES	WPA2 Pre-Shared Key			00:E0:4C:02:0C:BB	
	I <sup>®</sup> Tenda_3EBEC8		AES	WPA Pre-Shared Key	0%	Infrastructure	C8:3A:35:3E:BE:C8	N,G
	1"D-Link_DIR-820L	36	TKIP/AES	WPA Pre-Shared Key/	100%	Infrastructure	CB:D3:A3:72:A5:57	AC,N,A
	Refrest	1		Add to Profile	]			
	Double dick on item t	o join/creat	te profile.					
>	1							
Show Tray Icon		Disable Ad	lapter					
Radio Off		and the second	Zero Config					

**3.** Please wait for a while, and all wireless access points which can be reached by this wireless network card will be displayed here.

		the statement of the st						
HyComputer Q Reabel RTL8811	General Profile Available Networ	k. Status	Statistics V	vi Fi Protect Setup				
C Reaker HILDOIT	Available Network(s)							
	SSID	hannel	Encryption	Network Authentication	Signal	Type	BSSID	Mode
	I <sup>®</sup> ChinaNet-5s3k		AES	WPA Pre-Shared Key	100%	Infrastructure	48:28:25:25:88:96	NG
	I"D-Link_DIR-620L	1	TKIP/AES	WPA Pre-Shared Key/	100%	Infrastructure	CR:D3:A3:72:A5:55	NG.
	I <sup>®</sup> Tenda_43EDA0	-4	AES	WPA Pre-Shared Key	48%	Infrastructure	CR:3A:35:43:ED:AD	N.G
	<b>5</b> "123	6.	None	Unknown	92%	Infrastructure	F8:7D:68:43:7D:76	N,G
	1 <sup>0</sup> TP-LINK_34A982	6.	TKIP/AES	WPA2 Pre-Shared Key	72%	Infrastructure	BCID1:77:34:A9:82	N.G.
	1 <sup>0</sup> rd	6	TKIP/AES	WPA Pre-Shared Key/	100%	Inhastructure	00:E0:4C:00:00:43	N/G
	10 JCG-906500	11	AES	WPA Pre-Shared Key	48%	Infrastructure	00:E0:48:90:65:00	N,G
	CURLINK HIGHPO	11	None	Unknown	100%	Inhastructure	00:E0:40:19:F3:0A	N,G
	<b>I</b> <sup>®</sup> QA	11	AES	WPA2 Pre-Shared Key	68%	Infrastructure	00;E0:4C:02:0C:BB	N/G
	1 <sup>9</sup> Tends_3EBEC8	11	AES	WPA Pre-Shated Key	0%		CR:3A:35:3E:9E:08	
	PD-Link_DIR-820L	36	TKIP/AES	WPA Pre-Shared Key/	100%	Infrastructure	CB:D3:A3:72:A5:57	AC,N,
	Refesh		)	Add to Profile	]			
	Roftech Note Double dick on item to p	ciny/create	e protile.	Add to Profile	)			
Show Tray Icon	Note Double click on item to p	oin/create		Add to Profile	)			

If the wireless access point you wish to connect does not appear here, you can click `**Refresh**' button to scan for wireless access points again; if the wireless access point you're looking for still not appear, try to move the computer closer.

When the access point you're looking for is on the list, left-click it and then double click it or click `**Add to Profile**'.

4. If a password (a.k.a. 'Network Key') is required to access the wireless access point, please input it in '<u>Network key</u>' (and input it again in '<u>Confirm network key</u>' for confirmation). Click '<u>OK</u>' when password is properly inputted.

**NOTE**: Network security type (`<u>Network Authentication</u>' and `<u>Data encryption</u>') will be selected automatically based on wireless access point's security setting. It's not required to change these settings by yourself.

Profile Name:	D-Link_DIR-020LW-5G	902.1x configure		
artwork Name(SSID):	Decision personal for	EAP TYPE :		
The ella computor to accesi points are no	o computer (ad hoc) network; wweless k land.	GTC Tunnel (	Privision Mode :	9 19
	36 (51020-92)	Usemane :		
Wreless network sect	atty .			
This network requires	a key for the following:	Identity :		
Notv	vork Authentication: WPA2-PSK			
	Data encryption: AES	Doman :		
REASCE REPAY	SPHACE	Password :		
Key index (advanced	e Frank	Certificate :		
Network key:				8
******		PAC : Auto	Select PAC	
Confirm network key:				38
••••••		No.		
20 84				

All options in this page will be filled automatically according to the access point you wish to add to profile. However, you can still modify any of them to meet your requirement.

Profile name	You can give a name to this profile, so you can remember its purpose easily. It can be any phrase to help you remember.
Network Name (SSID)	The SSID (Service Set IDentifier, i.e. access point's name). This field will be filled as the access point you selected when SSID is not hidden and grayed out. If SSID is hidden, you have to input correct SSID you yourself.
This is a computer-to-computer (ad hoc) network	Check this box if you wish to connect to another computer / network device by ad hoc method. When not accessing to wireless access point, you have to check this box.
Channel	Select wireless channel for ad hoc connection. This option only appears when you're using ad hoc connection.
Network Authentication	Select the network authentication type from drop-down menu. This setting must be identical with the setting of wireless access point you with to connect.

Data encryption	Select the data encryption type from drop-down menu. This setting must be identical with the setting of wireless access point you with to connect.
ASCII / PASSPHRASE	When the encryption type is 'WEP', it's required to input a set of 'passphrase' to connect to wireless access point. Check 'ASCII' or 'PASSPHRASE' depends on the security setting of access point, and input it in the box; if you select 'PASSPHRASE' you also need to select the length of the key.
	The passphrase must be identical with the setting of wireless access point you with to connect.
Key index	Select WEP key index. For most of access points you can select '1', but please refer to the setting of the access point.
Network key / Confirm network key	When the encryption type is 'WPA' or 'WPA2-PSK', it's required to input a set of 'passphrase' to connect to wireless access point. Please input the same passphrase in two boxes for confirmation.
EAP TYPE / Tunnel / Provision Mode	When authentication type is any of 802.1X, you have to select EAP type, tunnel, and provision mode from dropdown menu. This setting must be identical with your 802.1x authentication server.
Username / Identity /	Please input 802.1x related authentication
Domain / Password	information here.
Certificate	If certification is required to authenticate with 802.1x authentication server, please select a local certificate from dropdown list.
PAC	Check this box and PAC (Privilege Access Certificate) will be automatically selected.

Please click `OK' when ready.

5. Network card will attempt to connect to access point now, this may require few seconds to minutes, please be patient. When the `<u>Status</u>' become `<u>Associated</u>', your computer is connected to access point you selected. Click `<u>Close</u>' to close configuration menu.

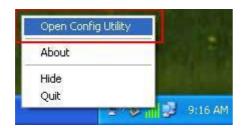
🛸 REALTEK 11n USB W	/ireless LAN Utility	
Refresh(R) Mode(M) Abou	ut( <u>A</u> )	
🖃 🚽 MyComputer	General Profile Available Network Status Statistics Wi-Fi Protect Setup	
	Status: Associated	
	Speed: Tx:433.5 Mbps Rx:433.5 Mbps	
	Type: Infrastructure	
	Encryption: AES	
	SSID: D-Link_DIR-820LW-5G	
	Signal Strength: 100%	
	Link Quality:	
	Network Address:	
	MAC Address: 00:E0:4C:88:22:56	
	IP Address: 192.168.0.100 Subnet Mask: 255.255.25	
	Gateway: 192.168.0.1	
	ReNew IP	
		_
Show Tray Icon	Disable Adapter	
Radio Off	Windows Zero Config	
🛃 start 🔰 😘	📀 🥌 🤔 🔭 🧶 REALTEK 11n USB Wi 🤤 友讯科技股份有限	

**NOTE**: If you connected to an access point but the connection has been dropped soon, please check security settings and re-check password spelling.

#### 2.2.2 Using Windows Zero Configuration

Windows XP and Vista has a built-in wireless network configuration utility, called as '**Windows Zero Configuration**' (WZC). You can also use WZC to configure your wireless network parameter:

 Right-click Client configuration utility icon, and click <u>Open</u> <u>Config Utility</u>'.



2. Check '<u>Windows Zero Config</u>' box.

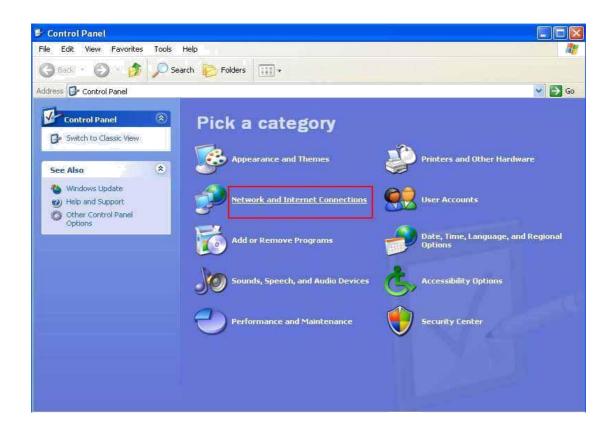
	(A)
frest(B) Mode(B) Abou MrComputer	Terrend Profile Available Network Status Statistics WrFi Protect Setup  Status: Associated Speed: Tx:433.5 Mbps Rx:433.5 Mbps Type: Infrastructure Encryption: AES SSID: D-Link_DIR-820LW-5G Signal Strength: Link Quality:  MAC Address: 00:E0:4C:88:22:56 IP Address: 192.168.0.100 Submet Mask: 255.255.0 Gateway: 192.168.0.1  ReNew IP
Show Tray Icon	Deable Adapter     Windows Zero Config

**3.** A message indicating that you've been switched to Windows Zero.

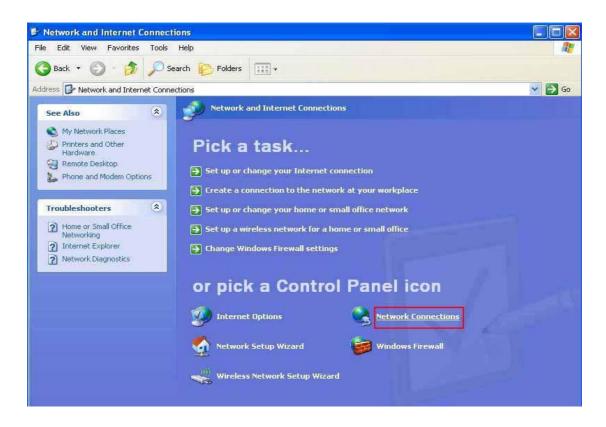
Window	s Zero Config	
(į)	You are in Windows Zero C	onfig mode !!
	ОК	

**NOTE**: To return to use Client utility, uncheck 'Windows Zero Config' box.

 Click <u>Start</u> button (should be located at the bottom-left corner of windows desktop), click <u>Control Panel</u>, then click <u>Network</u> <u>and Internet Connections</u> in Control Panel.



5. Double click 'Network Connections'.

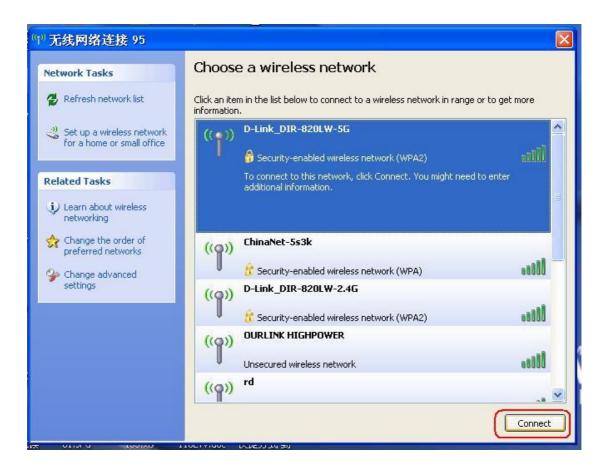


6. Right-click 'Wireless Network Connection' (it may have a

number as suffix if you have more than one wireless network card, please make sure you right-click the Wireless LAN 802.11ac USB Network Adapter), then select `<u>View Available</u> <u>Wireless Networks</u>'.

Local Area Connection 2	(cp) Dicable View Available Wireless Networks
Local Area Connection	Repair Bridge Connections
	Create Shortcut Delete Rename
	Properties

7. All wireless access points in proximity will be displayed here. If the access point you want to use is not displayed here, please try to move your computer closer to the access point, or you can click 'Refresh network list' to rescan access points. Click the access point you want to use if it's shown, then click '<u>Connect</u>'.

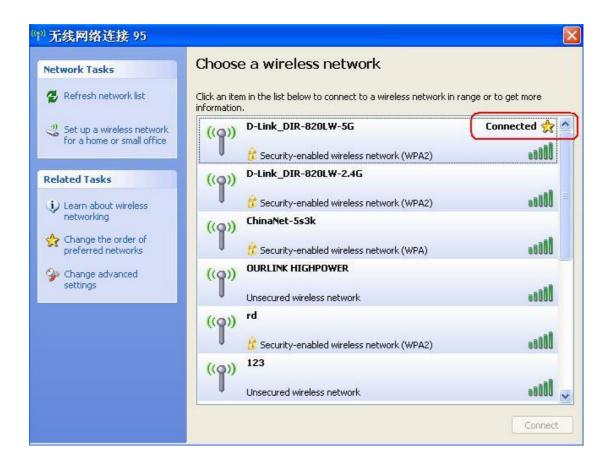


**8.** If the access point is protected by encryption, you have to input its security key or passphrase here. It must match the encryption

setting on the access point. If the access point you selected does not use encryption, you'll not be prompted for security key or passphrase.

Wireless Network Con	nection 🛛 🔀
	20LW-5G' requires a network key (also called a WEP key or WPA prevent unknown intruders from connecting to this network. ck Connect.
Network key:	•••••
Confirm network key:	••••••
	Connect Cancel

 If you can see <u>Connected</u>' message, the connection between your computer and wireless access point is successfully established.

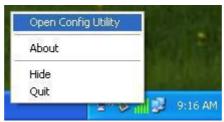


# **CHAPTER 3: Client Utility**

**3.1 Connection Profile Management** 

If you need to connect to different wireless access points at different time, like of access point of your home, office, cybercafe, or public wireless service, you can store the connection parameters (encryption, passphrase, security etc, etc.) as a profile for every access point, so you don't have to input these parameters every time when you want to connect to a specific wireless access point.

To manage profiles, right-click the Client configuration utility icon located at lower-right corner of computer desktop, then click **Open Config Utility**'.



Click the 'Profile' menu.

Reakek RTL8811	General Profile Available Network Status Statistic	Wi-Fi Protect Setup	
- Antonio antonio a	Available Profile(s)		
	Profile Name	s [	Add
	CD-Link_DIR-820LW-5G	0	
		L	Remove
			Edit
		C	Duplicate
		5	Set Default
5		3	
Show Tray Icon	Disable Adapter		

#### 3.1.1 Add a new profile

By this function you can setup the connection parameters for a specific wireless access point in advance, without contacting it first.

If you want to create a new profile, click `**Profile**' menu, then click `**Add**' button.

sh(R) Mode(M) About(A)			
MyComputer General	Profile Available Network Status St	atistics Wi-Fi Protect Setup	
	ble Profile(s)		
	file Name	e l	Add
(C)D	-Link_DIR-820LW-5G	D	
			Remove
			- 10
		Le.	Edit
		[	Duplicate
			Set Default
		<u>&gt;</u>	
· · · · · · · · · · · · · · · · · · ·			

You'll be prompted to input connection parameters for the wireless access point you wish to connect:

Profile Name:	4.6 2
(Contraction of the second sec	802.1x configure
latwork Name(SSID):	EAP TYPE :
	GTC
This is a computer-to-computer(ad hoc) networ	Tunnel : Privision Mode :
access points are not used.	
Channel: 1 (24128442) V	Usemanie :
Wreless network security	
This network requires a key for the following:	Identity :
Network Authentication: Open 5	The second se
Data encryption: Disable	d Domain :
CASCE CPASSPHRASE	Password :
Key index (advanced):	Ortificate :
Network key:	
	PAC : Inuto Select PAC
Confirm network key:	P
ОК	4

Required parameters are:

Profile name	You can give a name to this profile, so you
	can remember its purpose easily. It can be
	any phrase to help you remember.
Notwork Name (SSID)	
Network Name (SSID)	The SSID (Service Set IDentifier, i.e. access
	point's name). This must be identical with
	the SSID of the access point you wish to
	connect.
This is a	Check this box if you wish to connect to
computer-to-computer	another computer / network device by ad
(ad hoc) network	hoc method. When not accessing to
	wireless access point, you have to check
	this box.
Channel	Select wireless channel for ad hoc
	connection. This option only appears when
	you're using ad hoc connection.
Network	Select the network authentication type
Authentication	from drop-down menu. This setting must
	be identical with the setting of wireless
	access point you with to connect.
Data encryption	Select the data encryption type from
	drop-down menu. This setting must be
	identical with the setting of wireless access
	point you with to connect.
ASCII / PASSPHRASE	When the encryption type is 'WEP', it's
	required to input a set of 'passphrase' to
	connect to wireless access point. Check
	`ASCII' or `PASSPHRASE' depends on the
	security setting of access point, and input it
	in the box; if you select 'PASSPHRASE' you
	also need to select the length of the key.
	The passphrase must be identical with the
	setting of wireless access point you with to
	connect.
Key index	Select WEP key index. For most of access
	points you can select '1', but please refer to
	the setting of the access point.
Network key / Confirm	When the encryption type is 'WPA' or
network key	WPA2-PSK', it's required to input a set of
	'passphrase' to connect to wireless access
	point. Please input the same passphrase in
	two boxes for confirmation.
EAP TYPE / Tunnel /	When authentication type is any of 802.1X,
Provision Mode	you have to select EAP type, tunnel, and
	provision mode from dropdown menu. This

	setting must be identical with your 802.1x authentication server.
Username / Identity /	Please input 802.1x related authentication
Domain / Password	information here.
Certificate	If certification is required to authenticate
	with 802.1x authentication server, please
	select a local certificate from dropdown list.
PAC	Check this box and PAC (Privilege Access
	Certificate) will be automatically selected.

When all required parameters are set, click ` $\underline{OK}'$  to create and save a new profile.

#### 3.1.2 Remove an existing profile

When you no longer need an existing profile, you can remove it.

If you want to remove a profile, click '**Profile**' menu, then select an existing profile which you wish to remove, and then click '**Remove**' button.

🧟 REALTEK 11n USB Wi	ireless LAN Utility	
Refresh(R) Mode(M) Abou	t( <u>A</u> )	
WyComputer     Realtek RTL8811	General Profile Available Network Status Statistics Wi-Fi Protect Setup Available Profile(s) Profile Name	Add
	To-Link_DIR-820LW-5G	Remove
		Edit Duplicate
		Set Default
Show Tray Icon	<ul> <li>Disable Adapter</li> <li>Windows Zero Config</li> </ul>	Close

#### 3.1.3 Edit an existing profile

If you have added a profile before, and you wish to change the content of the profile, you can use this function. Please select a profile from the list first, then click '**Edit**' button. You'll be provided with the contents of selected profile, and you can edit them. Click '**OK**' to save changes, or click '**Cancel**' to discard changes.

Profile Name: Crosscontraction   Network Name(SSED): D-KHK_OIR-B20X.W-50     The is a compaction to compact to the following:   Channel: Instruments and sector   Channel: Instruments and sector   Ohannel: Instruments and sector <tr< th=""><th>Ireless Network Properties:</th><th></th><th></th><th></th></tr<>	Ireless Network Properties:			
The is a computer list too I network; when it   Channel:   Dannel:   Dannel:   Data encryption:   Data encryption:   Data encryption:   Data encryption:   Deta encryption:   <	Profile Name: 010/8_005-0000.94-93	B02.1x configure		
The is a consolute the computer last local instructs, ventees access constant and local instructs, ventees access constant access ventees access constant access ventees access constant access ventees access constant access ventees ventees access ventees access ventees access ventees ven	Network Name(SSID): D-Link_DIR-820LW-5G	EAP TYPE :		
The operation of the following:				
Channel: DE 15100441 *********************************		Turnel :	Privision Mode	*
Wreles network security         The network security         Network Authentication WPA2 Plac         Data encryption (AES         Data encryption (AES         Network (advanced):         Key index (advanced):         Authority         Confirm network key:	access points are ref. used.		1941 1941	
The network requests a key for the following: Network Authentication: WPA2-PSK V Data encryption: AES V Data encryption: AES V Dense: - Password : Password : Confirm network key: Confirm network key:	Channel: (30.051009441.04)	Usersame :		
Network Authentication WPA2-Plac	Weekes network security			
Data encryption (AES         Domain :           Network key:         Domain :           Confirm network key:         Domain :	This network requires a key for the following:	Identity :		
Confirm network key:     Paceword :	Network Authentication: WPA2-PSA:			
Key index (advanced):   Key index (advanced):   Advanced):   Advanced):   Advanced):   Advanced():	Data encryption (AES	Doman :		
Network key: PAC 2 Auto family Pac	CARCE DAVISAGE	Password :		
Confirm network key:	Key index (advanced):	Certificate :		
PAC : Auto Tamer Pac				
	******	PAC : Man	n Tamiet Plac;	
( The second sec				
	(assessment)			

#### 3.1.4 Make a copy of existing profile

If you need to make a copy of a specific profile, you can use this function. This function is very convenient when you need to build a new profile which parameters are similar to any existing profile.

To do this, select an existing profile, then click `**Duplicate**' button.

🐣 REALTEK 11n USB Wi	reless LAN Utility	
Refresh( <u>R)</u> Mode( <u>M</u> ) About	( <u>A</u> )	
Show Tray Icon	Disable Adapter	-
Radio Off	Uisable Adapter     Windows Zero Config	Close

You'll be prompted to input a profile name, please use an identical name that does not exist in profile list.

#### 3.1.5 Set as default profile

If you wish to use a specific profile as default connection, you can select a profile in the list, and click '<u>Set Default</u>'. Selected profile will become default selection and Client configuration utility will attempt to connect to selected access point.

🕺 REALTEK 11n USB W	ireless LAN Utility		
Refresh( <u>R</u> ) Mode( <u>M</u> ) Abou	ıt( <u>A</u> )		
Yy Computer     Sealtek RTL8811	General Profile Available Network Status Statistics W Available Profile(s)	i-Fi Protect Setup	
	Trofile Name	D	Add
			Remove
			Edit
			Duplicate
			Set Default
	< <u></u>	<u>s</u>	
Show Tray Icon	Disable Adapter		Close
Radio Off	Windows Zero Config		Cluse

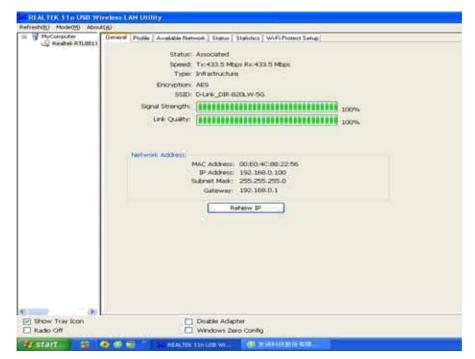
## 3.2 View Network Statistics, General Information,

## and Status

The configuration utility provides information about network statistics and link status. If you want to know how your wireless network card works, you can use these functions to get detailed information about the wireless connection you're using.

#### 3.2.1 General Information

If you want to know the general information of the access point you're connecting to, click `**General**' menu:

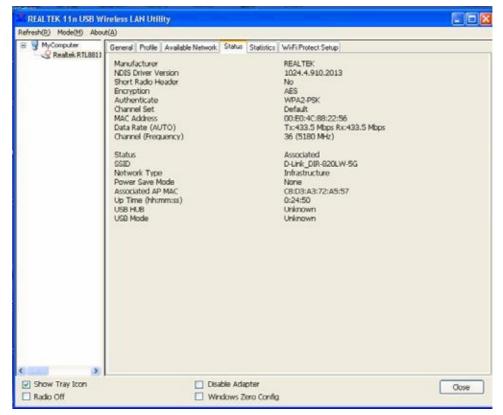


All general information like signal strength and link quality will be displayed here. These information are very useful when you encounter some problem on connecting to access point.

If you wish to get a new IP address from DHCP server, you can click **<u>ReNew IP</u>**' button.

#### 3.2.2 Status

If you want to know the status of your wireless network card, click `<u>Status</u>' menu:



#### **3.2.3 View Network Statistics**

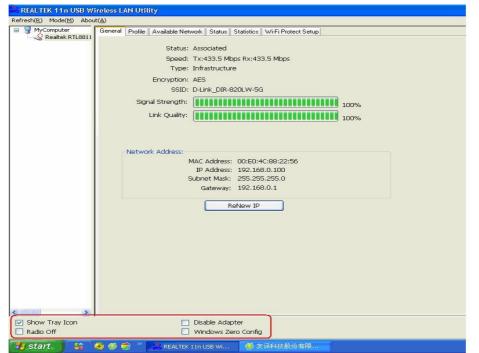
To view the statistical data of wireless network card, click **Statistics**' menu, and the statistics of wireless connection will be displayed:

Reaker RTL8811	al Profile Available Network Status Statutics W	/i-Fi Protect Setup	
	Counter Name Tr. OK Tr. Error Rr. OK Rr. Packet Count Rr. Rotty Rr. ICV Error	Value 4042 0 8830 8830 8830 8830 8830 8820 522 0	
	Reset		

All connection-related statistics is displayed here. You can click `**Reset**' button, to reset the statistics of all items back to 0.

## **3.3 Miscellaneous Settings**

There are few functions provided by Client configuration utility, you can access these functions from the bottom of configuration menu:



The descriptions of these function are listed as follow:

Show Tray Icon	Check this box to show an icon on system tray.
	💷 <sup>10</sup> 🖏 📶 🐷 9136 AM
	HÈRE!
	Uncheck this box to hide it.
Radio Off	Switch wireless radio off. Wireless network
	functionalities are disabled.
Disable Adapter	Disable wireless network adapter. All
	functionalities of configration menu will disappear.
	To resume, unckeck 'Disable Adapter'.
Windows Zero	Use Windows Zero Configuration to manage
Config	wireless connections. See section 2.2.2.

## 3.4 Establish secure connection with AP by WPS

Wi-Fi Protected Setup (WPS) is the latest wireless network technology which makes wireless network setup become very simple. If you have WPS-enabled wireless access point, and you want to establish a secure connection to it, you don't have to configure the wireless access point and setup data encryption by yourself. All you have to do is to go to the WPS setup page of this wireless card, click a button, and then press a specific button or enter a set of 8-digit code on the wireless access point you wish to establish a secure connection - just three simple steps!

For older wireless access points, it's possible to perform a firmware upgrade to become a WPS-enabled access point. Since they may not have a hardware button to press for WPS setup, you can use an alternative WPS setup method - input the pin code. Every WPS-compatible wireless network card support pin code configuration method; you can just input the code to wireless access point, and the wireless access point and wireless network card will do the rest for you.

This wireless network card is compatible with WPS. To use this function, the wireless access point you wish to connect to must support WPS function too. Now, please follow the following instructions to establish secure connection between WPS-enabled wireless access point and your wireless network card.

This wireless network card supports 2 kinds of WPS: PIN code

and Push-Button.

Please follow the following instructions to setup WPS:

 Right-click Client configuration utility icon, and click <u>Open</u> <u>Config Utility</u>'.



#### 2. Click 'Wi-Fi Protect Setup' menu.

REALTEK 11n USB W	
Refresh( <u>R)</u> Mode( <u>M)</u> Abou	
Realtek RTL8811	General Profile Available Network Status Statistics Wi-Fi Protect Setup
	Status: Associated
	Speed: Tx:433.5 Mbps Rx:433.5 Mbps
	Type: Infrastructure
	Encryption: AES
	SSID: D-Link_DIR-820LW-5G
	Signal Strength: 100%
	Link Quality:
	100%
	Network Address:
	MAC Address: 00:E0:4C:88:22:56
	IP Address: 192.168.0.100
	Subnet Mask: 255.255.0
	Gateway: 192.168.0.1
	ReNew IP
Show Tray Icon Radio Off	<ul> <li>Disable Adapter</li> <li>Windows Zero Config</li> </ul>
🛃 start 🔰 😘 👘	😔 🥌 🌮 🕺 🧏 REALTEK 11n USB Wi 🧕 😌 友讯科技股份有限 🛛

**3.** You can use PIN code or Push-Button configuration, and WPS-compatible wireless access point must use the same type of WPS. For instructions on setup each type of WPS, see next 2 chapters for detailed instructions.

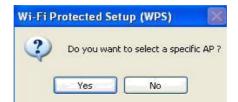
🚽 MyComputer	General Profile Available Network Status Statistics Wi-Fi Protect Setup
Realtek RTL8	Wi-Fi Protected Setup (WPS) An easy and secure setup solution for Wi-Fi network Pin Input Config (PIN) After pushing the PIN button.Please enter the PIN code into your AP.
	PIN Code: 35229414
	Pin Input Config (PIN)
	Push Button After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.
	Push Button Config (PBC)
	Disable Adapter
Show Tray Icon	Li Disable Adapter Close

#### 3.4.1 PIN Code

To use PIN Code, please click 'Pin Input Config (PIN)' button:

REALTEK 11n USB W Refresh(R) Mode(M) Abou		
Refresh(R) Mode(M) Abou	(A)         General       Profile       Available Network       Status       Statistics       Wi-Fi Protect Setup         Wi-Fi       Profile       Available Network       Status       Statistics       Wi-Fi Protect Setup         Wi-Fi       Profile       Available Network       Status       Statistics       Wi-Fi Protect Setup         Wi-Fi       Protected       Setup       (WPS)         An easy and secure setup solution for Wi-Fi network       Pin Input Config (PIN)         After pushing the PIN button.Please enter the PIN code into your AP.       PIN Code : 35229414         Pin Input Config (PIN)       Pin Input Config (PIN)         Push Button       After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.	
	Push Button Config (PBC)	
Show Tray Icon     Radio Off	<ul> <li>Disable Adapter</li> <li>Windows Zero Config</li> </ul>	Close

You'll be prompted to select an access point you wish to connect. If you know its SSID, click '**Yes**', otherwise click '**No**'.



If you select '<u>Yes</u>', a list of all WPS-compatible AP nearby will be displayed; you can click '<u>Refresh</u>' to rescan, then select an AP and click '<u>Select</u>' button.

VPS AP Name	WPS AP MAC
GRouter LY	00:0C:43:30:52:E8 00:E0:4C:81:96:C1
Select	Refresh

If you select '**No**', wireless network card will prompt you to enter 8-digit PIN code into your AP, without selecting an AP in advance.

After you select '**Yes**' or '**No**' in previous step, network card will attempt to connect to WPS-compatible AP, and an 8-digit number will appear. Please input this number to AP's configuration menu within 2 minutes, and network card will establish secure connection with AP automatically.

To stop this procedure before connection is established, click  $\mathbf{Cancel}'$ .

Wi-Fi Protect	ed Setup - PIN me	thod	
Wi-Fi Protec	cted Setup - PIN m	ethod	
Please enter 1	the following PIN co	de into your AF	<sup>1</sup> .
	PIN Code	35229414	(
Status : I	nitial WPS		
	••		
			Cancel

#### 3.4.2 Push Button

To use Push-Button WPS configuration, please click '<u>Push</u> <u>Button</u> <u>Config (PBC)</u>' button. This is the easiest way to establish secure connection by WPS, but if there're more than one WPS-compatible AP using Push-Button config, please use PIN Code instead.

MyComputer	
Realtek RTL88	General Profile Available Network Status Statistics Wi-Fi Protect Setup
	Wi-Fi Protected Setup (WPS)
	An easy and secure setup solution for Wi-Fi network
	Pin Input Config (PIN)
	After pushing the PIN button.Please enter the PIN code into your AP.
	PIN Code: 35229414
	Pin Input Config (PIN)
	Push Button
	After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.
	al visual battori or the WHS coming page.
	Push Button Config (PBC)

After you click "**Push Button Config(PBC)**", a message box will appear:

Wi-Fi Protected Setup - PBC method	×
Wi-Fi Protected Setup - PBC method	
If there is more than one AP on the PBC mode, there will be [Session Overlap].Please use PIN method or wait for a while and use PBC method again	i.
Status : AP Sitesurvey	
Complete :	14
Push Button Config (PBC) Cancel	

Please activate Push-Button function on wireless access point now, and wireless network card will establish secure connection with access point within one minute.

# **CHAPTER 4** Soft-AP Function

Excepting become a wireless client of other wireless access points, this wireless adapter can act as a wireless service provider also! You can switch this wireless adapter's operating mode to 'AP' mode to simulate the function of a real wireless access point by software, and all other computers and wireless devices can connect to your computer wirelessly, even share the internet connection you have!

Please follow the instructions in following chapters to use the AP function of your wireless card.

## 4.1 Switch to AP Mode and Station Mode

The operating mode of the wireless card is 'Station Mode' (becoming a client of other wireless access points) by default.

Please follow the following instructions to switch to AP mode:

 Right-click Client configuration utility icon, and click <u>'Open Config Utility</u>'.



2. Select 'Mode', and then select 'Access Point'.

Refresh(F	D)	Mode(M)	About(A)	Ľ.			
■ 🛃 MyC 🗸 Station			er	eral	Profile	Availabl	

It requires few seconds to switch to AP mode, please be patient.

REALTEK 11n USB W		
Refresh(R) Mode(M) Abou MyComputer Realtek RTL88	General Advanced Statistics ICS	
	SSID: microsof-35426b_AP	
	BSSID: 00:E0:4C:00:00:13	
	Association Table	
	AID MAC Address Life Time	
	Config	
<		
Show Tray Icon	Disable Adapter	Close
Radio Off		

After mode switch is complete, you'll see general information of software AP, which shows AP's SSID and connected wireless clients.

🖃 🚽 MyComputer	ut(A)	
	General Advanced Statistics ICS	
S Realtek RTL88		
	SSID: microsof-35426b_AP	
	BSSID: 00:E0:4C:00:00:13	
	Association Table	
	AID MAC Address Life Time	
	Config	
< · · · · · · · · · · · · · · · · · · ·		
Show Tray Icon	Disable Adapter	Clos
Radio Off		
	e icon :	
Software Al		
Software Al	P icon:	
Software Al	P icon: 9:48 AM ure SSID and Channel	
Software Al	P icon:	
Software Al	P icon: 9:48 AM <b>are SSID and Channel</b> e software AP, click ` <u>Config</u> ' button:	
Software Al . <b>.1 Configu</b> To configur	P icon: <b>Ire SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: <b>Ire SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility	
Software Al . <b>1 Configu</b> To configur Refresh(R) Mode(M) About	P icon: <b>are SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A)	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: <b>are SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A)	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: <b>are SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: <b>are SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: <b>are SSID and Channel</b> e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click ` <u>Config</u> ' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click 'Config' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table AID MAC Address Life Time	
Software Al <b>.1 Configu</b> To configur Refresh(R) Mode(M) About MyComputer	P icon: are SSID and Channel e software AP, click 'Config' button: reless LAN Utility (A) General Advanced Statistics ICS SSID: microsof-35426b_AP ESSID: 00:E0:4C:00:00:13 Association Table AID MAC Address Life Time	

The 'Wireless Network Properties' is displayed.

Profile Name:	Access Point Mode
Network Name(SSID):	microsof-35426b_AP
- This is a computer-t	o-computer(ad hoc) network; wireless
access points are no	
Channel:	1 (2412MHz) 🖌
Wireless network sec	urity -
This network requires	a key for the following:
Netv	vork Authentication: Open System 🛛 👻
	Data encryption: Disabled
ASCII PAS	SPHRASE
	1.4
Key index (advanced	N. 6-18-1
Network key:	): 1 💌
Confirm network kev:	
Committi network key:	

Please note that Ad-Hoc mode is not available when network card is in AP mode. The description of major setup items are listed below:

Network Name (SSID)	Please input the SSID (the name used to identify this wireless access point) here. Up to 32 numerical characters can be accepted here, excepting space.
Channel	Please select the wireless channel you wish to use, from 1 to 13.

To save changes, click `<u>OK</u>'; otherwise click `<u>Cancel</u>' to leave this menu and keep settings untouched.

#### 4.1.2 Setup Soft - AP Security

To setup security options for Soft-AP, configure 'Wireless Network Security' section as follow:

ireless Network Prope	erties:	
Profile Name:	Access Point Mode	
Network Name(SSID):	microsof-35426b_AP	
This is a computer-to access points are not Channel:	-computer(ad hoc) network; wireless : used. 1 (2412MHz)	0
Wireless network secu		
Netw	ork Authentication: Open System	~
	Data encryption: Disabled	~
	SPHRASE	
Key index (advanced) Network key:	1	
Confirm network key:		
ОК	Cancel	

The description of setup items about wireless security are listed below:

Network	Select network authentication mode from
Authentication	dropdown menu.
Data Encryption	Select data encryption method from dropdown
	menu.
ASCII /	If the encryption method is WEP, check either
PASSPHRASE	'ASCII' or 'PASSPHRASE' box and input it in the
	box as WEP passphrase.
Key Index	Select WEP key index (1-4). If you don't know
	which one you should use, select 1.
Network key /	IF network authentication mode is WPA, please
Confirm network	input WPA passphrase in both box.
key	

To save changes, click  $\underline{OK}'$ ; otherwise click  $\underline{Cancel}'$  to leave this menu and keep settings untouched.

## 4.2 Advanced Settings

If you want to setup advanced settings of software access point, select '**Advanced**' menu. If you don't know the meaning and affects of these settings, keep them untouched.

REALTEK 11n USB Wi	reless LAN Utility	
Refresh(R) Mode(M) Abou	t(A)	
Additional and rear and the second second		
<ul> <li>✓ Conc</li> <li>✓ Show Tray Icon</li> <li>□ Radio Off</li> </ul>	Disable Adapter	Close

The description of all setup items are listed below:

Beacon Interval	Please input wireless beacon time interval here.
DTIM Period	Please input DTIM (Delivery Traffic Indication Message) here.
Preamble Mode	Select wireless frame preamble mode (long or short) from dropdown menu.
Set Defaults	Reset all settings back to factory default value.
Apply	Save changes.

If you changed any setting here and cause problem on communicating with wireless clients, click '<u>Set Defaults</u>' to reset all settings back to default setting.

## 4.3 Wireless Statistics

Select `**Statistics**' menu and the data statistics about software access point will be displayed.

MyComputer Gen	eral Advanced Statistics ICS		
	Counter Name	Value	
	Тх ОК	172	
	Tx Error	0	
	Rx OK Rx Packet Count	1960 1960	
	Rx Packet Count Rx Retry	9	
0	Rx ICV Error	Ő	
	· · · · · · · · · · · · · · · · · · ·	·	
		1	
	Reset	J	

Click '**Reset**' to reset the value of every item back to '0'.

# 4.4 Internet Connection Sharing (ICS)

In this page, you can assign a network card on your computer as the path for all wireless clients to get connected to Internet.

If you have only one network card (except this software access point), you don't have to select network card here; if you have more than one network card, select the one you wish to be used as Internet gateway.

General Advanced Statistics IC:	S
Setting Internet Connection	Sharing (ICS)
ConnName	Device Name
	Realtek RTL8139 Family PCI Fast Ethernet NIC #2 Realtek RTL8139 Family PCI Fast Ethernet NIC
Public Network	
Local Area Connection Real	tek RTL8139 Family PCI Fast Ethernet NIC #2
L	Apply
	Setting Internet Connection ConnName Cola Area Connection Cola Area Connection Cola Area Connection

Click '**Apply**' to save changes ('**Apply**' is grayed out when no changes are made in this page).

# **CHAPTER 5: Troubleshooting**

If you encounter any problem when you're using this wireless network card, don't panic! Before you call your dealer of purchase for help, please check this troubleshooting table, the solution of your problem could be very simple, and you can solve the problem by yourself !

Scenario	Solution
I can't find any	1. Click 'Rescan' for few more times and see if
wireless access	you can find any wireless access point or
point / wireless	wireless device.
device in ` <u>Site</u>	2. Please move closer to any known wireless
Survey' function.	access point.
	3. Ad hoc' function must be enabled for the
	wireless device you wish to establish a direct wireless link.
	4. Please adjust the position of network card
	(you may have to move your computer if
	you're using a notebook computer) and click
	` <u>Rescan</u> ' button for few more times. If you
	can find the wireless access point or wireless
	device you want to connect by doing this, try
	to move closer to the place where the wireless
	access point or wireless device is located.
Nothing happens	<b>1.</b> Please make sure the wireless network card is
when I click	inserted into your computer's USB port.
` <u>Open Config</u>	<b>2.</b> Reboot the computer and try again.
<u>Utility</u> '	<ol> <li>Remove the card and insert it into another USB port.</li> </ol>
	4. Remove the driver and re-install.
	5. Contact the dealer of purchase for help.
I can not establish	<ol> <li>Click `<u>Add to Profile</u>' for few more times.</li> </ol>
connection with a	2. If the SSID of access point you wish to
certain wireless	connect is hidden (nothing displayed in `SSID'
access point	field in ` <u>Site Survey</u> ' function), you have to
	input correct SSID of the access point you
	wish to connect. Please contact the owner of
	access point to ask for correct SSID.
	<b>3.</b> You have to input correct passphrase /
	security key to connect an access point with
	encryption. Please contact the owner of
	access point to ask for correct passphrase /
	security key.

	4. The access point you wish to connect only allows network cards with specific MAC address to establish connection. Please go to ` <u>Status</u> ' menu and write the value of `MAC Address' down, then present this value to the owner of access point so he / she can add the MAC address of your network card to his / her access point's list.
The network is slow / having	<ol> <li>Move closer to the place where access point is located.</li> </ol>
problem when transferring large files	<ol> <li>There could be too much people using the same radio channel. Ask the owner of the access point to change the channel number.</li> </ol>
	Please try one or more solutions listed above.