# 802.11b/g Mini Wireless LAN USB 2.0 Adapter

**User's Manual** 

### **Regulatory Approvals**

#### **FCC Statement**

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 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.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

This device has been tested and meets the FCC RF exposure guidelines. The maximum SAR value reported is 0.21w/kg

#### Channel

The Wireless Channel sets the radio frequency used for communication.

- Access Points use a fixed Channel. You can select the Channel used. This allows you to choose a Channel which provides the least interference and best performance. In the USA and Canada, 11 channel are available. If using multiple Access Points, it is better if adjacent Access Points use different Channels to reduce interference.
- In "Infrastructure" mode, Wireless Stations normally scan all Channels, looking for an Access Point. If more than one Access Point can be used, the one with the strongest signal is used. (This can only happen within an ESS.)
- If using "Ad-hoc" mode (no Access Point), all Wireless stations should be set to use the same Channel. However, most Wireless stations will still scan all Channels to see if there is an existing "Ad-hoc" group they can join.

### **Table of Contents**

INTRODUCTION	1
Features	1
SOFTWARE INSTALLATION	2
STEP 1: INSTALL THE DRIVER & UTILITY	2
HARDWARE INSTALLATION	5
WINDOWS 2000/XP	5
WINDOWS 98/ME	6
NETWORK CONNECTION	8
In Windows 98SE/ME	8
IN WINDOWS 2000/XP	11
IP Address	13
Configuration Utility	14
STATION	16
Access Point	
Appendix	
SOFT AP CONFIGURATION	

# INTRODUCTION

The **802.11b+g Wireless LAN USB Adapter** is designed for a USB type A port of a laptop or desktop computer for creating a wireless workstation. It is USB 2.0 compliant which connects to any available USB port on a notebook or desktop computer.

The **802.11b+g Wireless LAN USB Adapter** complies with **IEEE 802.11g** standard that offers a data rate up to **54Mbps** in a wireless LAN environment. It is backward compliant with IEEE 802.11b specification. The high-speed wireless network card can plug into your notebook or desktop PC and accesses to the LAN or peer-to-peer networking easily without wires or cables. Whether you're at your desk or in the boardroom, it allows you to share printers, files, and other network resources.

#### Features

- > Complies with IEEE 802.11g standard for 2.4GHz Wireless LAN
- USB 2.0 compliant
- > USB Plug & Play
- > Interoperable with existing network infrastructure
- Secure information transmission
- > Freedom to roam while staying connected
- > Compatible with specialty wireless products and services
- > Up to 54 Mbps data rate
- > Antenna is built in the card with LED indication
- Low power consumption
- Easy to install and configure

## **SOFTWARE INSTALLATION**

### Step 1: Install the Driver & Utility

#### For Windows 98, 2000, ME and XP users

#### Caution!

Do not insert the wireless LAN adapter into your computer until the procedures in "Install the Driver& Utility" have been performed.

- 1. Exit all Windows programs. Insert the included CD-ROM into your computer. The CD-ROM will run automatically.
- 2. When the Main Menu screen appears, click " **Driver & Utility Installation**" to continue.



3. When the Welcome screen appears, click Next to continue.



4. The installation program will start running automatically. Follow the on-screen instruction to proceed.

802.11b+g USB Wireless LAN Adapter 🛛 🛛 🛛 🔊	×
Choose Destination Location Select folder where Setup will install files.	
Setup will install 802.11b+g USB Wireless LAN Adapter in the following folder.	
To initial to this folder, click Next, To install to a different folder, click Browse and select another folder.	
Destination Folder	
C:\Program Files\WLAN\802.11b+g USB WLAN Browse	
InstallShield	
< Back Next> Cancel	

5. Click **Finish** to complete the software installation.



# HARDWARE INSTALLATION

#### Windows 2000/XP

**Note**: Before you install the device to your computer, make sure you have installed the **driver** and **utility** as described in the previous section.

Windows XP

- 1. Locate your USB host and insert the USB Adapter.
- 2. Once the device has been inserted to your computer, Windows will detect the new hardware.
- 3. When the following screen appears, select **Install the software automatically** (Recommended).





4. Click Continue Anyway → Finish to complete the hardware installation.



#### Windows 2000

Insert the USB adapter into the USB port of your computer and then click Yes to

complete the hardware installation.



#### Windows 98/ME

In Window 98/ME, you only have to insert the USB adapter into the USB port of

your computer to complete the hardware installation.

#### Verify

To verify if the device exists in your computer and is enabled, go to Start  $\rightarrow$  Settings  $\rightarrow$  Control Panel  $\rightarrow$  System ( $\rightarrow$  Hardware)  $\rightarrow$  Device Manager. Expand the Network Adapters category. If the 802.11b+g USB Wireless LAN Adapter is listed here, it means that your device is properly installed and enabled.



# **NETWORK CONNECTION**

Once the device driver is well installed, a network setting described in the following should be also established.

### In Windows 98SE/ME

- 1. Go to Start  $\rightarrow$  Settings  $\rightarrow$  Control Panel  $\rightarrow$  Network.
- 2. Make sure that all the required components are installed. If any components are missing, click on the **Add** button to add them in.

etwork	? X
Configuration Identification Access Control	
The following network components are installed:	
Clear for Microsoft Networks Microsoft Family Logon Microsoft Family Logon 2002: The JUSB Wreless: LAN Adapter Clear Logo 2011b-g USB Wreless: LAN Adapter Clear Do 2011b-g USB Wreless: LAN Adapter Clear Po Dial-Up Adapter	
Pinaya Remote Logon	
Ele and Print Sharing	-
Description	
OK Ca	ncel



3. For making your computer visible on the network, enable the File and Print Sharing.

🖪 Cie	ent for Microsoft Networks
E Ba	//Up Adapter altek. RTL8139(A)-based PCI Fast Ethernet Adapter
TO TO	РЛР -> Dial-Up Adapter
10	P/IP -> Realtek RTL8139(A)-based PCI Fast Ethernet Ac
	Add Remove Properties
Primary	Network Logon:
Cienci	OF MICLOUGH HEIWORKS
Ele	and Print Sharing
Desc	ription

4. Click the **Identification** tab. Make up a name that is unique from the other computers' names on the network. Type the name of your workgroup, which should be the same used by all of the other PCs on the network.

Network	7
Configuration Ide	ntification Acress Control
Windo compu descrip	ws uses the following information to identify your ter on the network. Please type a name for this ter, the workgroup it will appear in, and a short ston of the computer.
Computer name:	Jane
Workgroup:	WORKGROUP
Computer Description:	Jane
	0K Cancel

5. Click the Access Control tab. Make sure that "Share-level access control" is selected. If connecting to a Netware server, share level can be set to "User-level access control."



6. When finished, restart your computer to activate the new device.

#### In Windows 2000/XP

#### 1. (In Windows 2000)

Go to Start  $\rightarrow$  Settings  $\rightarrow$  Control Panel  $\rightarrow$  Network and Dial-up Connections  $\rightarrow$  Local Area Connection  $\rightarrow$  Properties.

#### (In Windows XP)

Go to Start  $\rightarrow$  Control Panel  $\rightarrow$  Network and Internet Connections  $\rightarrow$  Network Connection  $\rightarrow$  Wireless Network Connection Enabled USB Wireless Network Adapter.



2. Make sure that all the required components are installed.

802.11b+	g USB Wireless LAN Adapt	er
C <u>o</u> mponents che	cked are used by this conr	<u>C</u> onfigure
Client for Band	Microsoft Networks Printer Sharing for Microsof	t Networks
M 3 Internet	Protocol (TCP/IP)	
<u>I</u> nstall	<u>U</u> ninstall	Properties
Description	/	
Allows your co network.	imputer to access resource	s on a Microsoft

3. If any components are missing, click on the **Install...** button to select the **Client/Service/Protocol** required. After selecting the component you need, click **Add...** to add it in.

Select Network Component Type
Click the type of network component you want to install:
Service
Description A protocol is a language your computer uses to communicate with other computers.
Add Cancel

4. For making your computer visible on the network, make sure you have installed **File and Printer Sharing for Microsoft Networks**.

### **IP Address**

Note: When assigning IP Addresses to the computers on the network, remember to have the IP address for each computer set on the same subnet mask. If your Broadband Router use DHCP technology, however, it won't be necessary for you to assign Static IP Address for your computer.

- 1. To configure a dynamic IP address (i.e. if your broadband Router has the DHCP technology), check the **Obtain an IP Address Automatically** option.
- To configure a fixed IP address (if you broadband Router is not DHCP supported, or when you need to assign a static IP address), check the Use the following IP address option. Then, enter an IP address into the empty field, for example, enter 192.168.1.1 in the IP address field, and 255.255.255.0 for the Subnet Mask.

Internet Protocol (TCP/IP) Properties	Internet Protocol (TCP/IP) Properties ? 🗙
General	General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Dtain an IP address automatically	O Obtain an IP address automatically
O Uge the following IP address:	Use the following IP address:
[P address:	IP address: 192.168.1.1
Sybnet mask:	Subnet mask: 255 . 255 . 255 . 0
Default gateway:	Default gateway:
Obtain DNS server address automatically	O Obtain DNS server address automatically
C Use the following DNS server addresses:	Use the following DNS server addresses:
Ereferred DNS server.	Preferred DNS server:
Alternate DNS server.	Alternate DNS server:
Adyanced	Advanced
OK Cancel	OK Cancel

# **Configuration Utility**

After the Wireless adapter has been successfully installed, users can use the included Configuration Utility to set their preference.

Go to Start→ Program→802.11b+g Wireless LAN → 802.11b+g USB Wireless LAN Utility



For **Windows 2000/XP**, the Configuration Utility icon will also appear in the taskbar. You can open the Configuration Utility by clicking the icon.



Note: There will be two modes	- Station and Access Point for you to
10 802 11 bro USB Wireless I A	
Network Adapter: 802.11b+g USB Wirele	Mode: Station
Available Network: SSID Strength	Current Network Information Channel: 1 Type: Infrastructure SSID: WAP404-1
Refresh	Tx Rate: 11 Mbps Encrypt: None More Setting
Link Status: Connected t Signal Strength: Link Quality: Tx Frame: 32	to Access Point. BSSID=00 E0 98 11 22 33 49% 42% Rx Frame: 28
Terrer to a second s	

# Station

Select **Station** mode, and you will see the following figure.

🧏 802.11b+g USB Wireless LAN	1 Utility	
Network Adapter:	Mo	de: Station
802.11b+g USB Wireles	s LAN Adapter	<b>_</b>
Available Network:	Current Network Infor	mation
	Channel: 6	
	Type: Infrastruc	ture
	SSID: Allen904	
	Tx Rate: 11 Mbps	
Refresh	Encrypt: None	More Setting
Link Status: Connected to	Access Point, BSSID=1	00 90 CC 12 12 99
Signal Strength:		78%
Link Quality:		70%
Tx Frame: 211	Rx Frame: 238	

Channel	Shows the selected channel that is currently in use. (There are 14 channels available, depending on the country.)	
Туре	The <b>infrastructure</b> is intended for the connection between wireless network cards and an Access Point. With the wireless adapter, you can connect wireless LAN to a wired global network via an <b>Access Point</b> The <b>Ad-hoc</b> lets you set a small wireless workgroup easily and quickly. Equipped with the wireless adapter, you can share files and printers between each PC and laptop.	
SSID	The <b>SSID</b> is the unique name shared among all points in your wireless network. The name must be identical for all devices and points attempting to connect to the same network. It shows the current SSID setting of the Wireless USB Adapter.	

Tx Rate	Click the down arrow ▼ to select the Tx Rate from Auto, 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54 Mbps, you can select up to 54 Mbps.
Encrypt	WEP is a data privacy mechanism based on a 64-bit/128-bit shared key algorithm.
More Setting	Click the <b>More Setting</b> button to configure, see the following figure (Refer to the More Setting part on the next page for more information about this figure) : <b>setting</b> <b>General Connection Setting</b> <b>rany</b> <b>Retwork Type Infrastructure</b> <b>encryption Disable</b> <b>Authentication Mode Auto</b> <b>Profile</b> <b>Profile</b> <b>Profile</b> <b>Profile</b> <b>Profile</b> <b>Channel</b> <b>Information</b> <b>Advanced Setting Information</b>
Link Status	Displays the information about the status of the communication between the Wireless USB Adapter and the Access Point.
Signal Strength	Displays the signal strength of the connection between the Wireless USB Adapter and the Access Point it connects.
Link Quality	Displays the link quality of the connection between the Wireless USB Adapter and the Access Point it connects.

Tu Fromo	The quantities for the wireless network card transmit.	
I x Frame	(Frame: The unit of packet)	
D F	The quantities for the wireless network card receive.	
KX Frame	(Frame: The unit of packet)	

### More Setting...

etting	×		
General Connection Setting Channel 🔄 Tx Rate Auto 🖃 🌠			
SSID 🛛 🗸 any			
Network Type Infrastructure			
Encryption Disable			
Authentication Mode Auto			
Encryption Setting			
WEP Encryption Key Setting WPA Encryption Setting			
Profile Profile name:			
Load Save Current Delete			
Other			
For more advanced setting, information			
Advanced Setting Information			

Channel	The Channel will change automatically according to AP's setting.			
	Click the down arrow $\mathbf{\nabla}$ to select the Tx Rate from Auto, 1, 2,			
Tx Rate	5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54 Mbps, you can select up to 54			
	Mbps.			
	The SSID is the unique name shared among all points in your			
SSID	wireless network. The name must be identical for all devices and			
	points attempting to connect to the same network.			
Any	You may select to have SSID by choosing any, the SSID will be			
	obtained automatically from whichever Access Point with the			
	optimal signal for this device. If any is left unchecked, it means			
	you will have to enter the SSID manually.			

	The <b>infrastructure</b> is intended for the connection between wireless network cards and an Access Point. With the wireless			
	adapter, you can connect wireles	ss LAN to a wired global network		
Network Type	via an Access Point			
	The Ad-hoc lets you set a small	ll wireless workgroup easily and		
	quickly. Equipped with the wir	reless adapter, you can share files		
	and printers between each PC and laptop.			
	You can only set your Securi	ty preference when Change is		
	selected and then all fields a	re active for change. To save		
Encryption	settings, press <b>Apply</b> when you	are done with the settings. Select		
	from the pull-down menu, the	ere are four options including		
	Disable, WEP, TKIP and AES.			
Authentication	You can select the Authentication	n Mode from the pull-down men,		
Mode	including Auto, Open System,	Shared Key, WPA and WPA		
	PSK.			
	WEP Encryption Setting	WPA Encryption Setting :		
	WEP Key Setting	WPA Setting		
	WTF kcy Setting ■ WEF Kcy Setting Key Length: □ 128 bit □ 256 bit	WPA Setting		
	WEP Key Setting	WPA Setting X		
	WEP Key Setting WEP Key Setting Key Length: @ 64 bit	WPA. Settling X		
	WEP Key Setting. WEP Key Setting Key Length: © 64 bit   120 bit   256 bit Default Key ID: #1	WPA. Settling Connect. Infomation Protocol: User Name: Password: Pre-shared Key		
	WEP Key Setting.         ©           WEP Key Setting            Key Length:         © 64 bb. ^ 120 bb. ^ 256 bb.           Default Key ID:         #1           Key Format:         © Hendedmail           Key Value:         #1           # 21         ************************************	WPA Setting		
Encryption	WEP Key Setting	WPA Setting		
Encryption	WEP Key Setting	WPA Setting		
Encryption Setting	WEP Key Setting	WPA Setting		
Encryption Setting	WEP Key Setting     ©       WEP Key Setting        Key Length:     © 64 bt ^ 120 bt ^ 256 bt       Default Key ID:     #1       Key Format:     © Hendedmail ^ ASCII       Key Value:     #1       #21     #21       #22     #21       #41     #41	WPA Setting		
Encryption Setting	WEP Key Setting       ©         WEP Key Setting       ©         Key Longits:       © 64 bit       ° 120 bit       ° 256 bit         Default Key ID:       #1       •       •         Key Value:       #1       •       •       •         #2:       •       •       •       •       •         #2:       •       •       •       •       •       •         #2:       • <th>WPA Setting</th>	WPA Setting		
Encryption Setting	Ver Key Setting Ver Langth: @ 64 bh 128 bh 256 bh Default Key ID: #1 @ Key Value: #11 #22 #21 The key is provided via 802.1x authentication Apply You can only set your Security pr	WPA Setting       Connect Infomation         Protocol:       TLS         User Name:       Password:         Password:       Password:         Pre-shared Key       Pre-shared Key         Pre-shared Key       Pre-shared Key         Certificate       Image: ASCII:         Certificate       Image: Apply         reference when Change is       Image: Apply		
Encryption Setting	Very Longht:       0         Very Longht:       0 </th <th>WPA Setting         Connect Information         Protocol:         TEG         Passoword:         Passoword:</th>	WPA Setting         Connect Information         Protocol:         TEG         Passoword:		
Encryption Setting	You can only set your Security presented and then all fields are act press Apply when you are done was	WA Setting         Connect Information         Protocol:         III:         Preserved:         Preserved:         Preserved:         Preserved:         Passeved:         Control to the settings.		
Encryption Setting	You can only set your Security presented and then all fields are ac press Apply when you are done w	WPA Setting         Protocol:         TLS         Password:         Pre-shared Key         Pre-shared Key         Certificate         Certificate         Certificate         Ender         Is         tive for change. To save settings, with the settings.		
Encryption Setting	You can only set your Security presented in the all fields are according set you are done with the set of the	WPA Setting         Connect Infomation         Protocol:         Tuber Name:         Password:         Pre-shared Key         Pre-shared Key         Certificate         Certificate         Certificate         Certificate         Endpoint         Certificate         Certificate		

 <b>Default Key ID</b> : You can set your default key ID at #1~#4.
Key Format : Select Hexadecimal if you are using hexadecimal
numbers ( <b>0-9, or A-F</b> ).
Select ASCII if you are using ASCII characters
(case-sensitive).
10 hexadecimal digits or 5 ASCII characters are needed if
64-bit WEP is used; 26 hexadecimal digits or 13 ASCII
characters are needed if 128-bitWEP is used 58 hexadecimal
digits or 29 ASCII characters are needed if 256-bitWEP is
used.
Key Value:
<b>#1~#4</b> This setting is the configuration key used in accessing
the wireless network via WEP encryption. You can specify up to
4 different keys to <i>encrypt</i> or <i>decrypt</i> wireless data.
The Key is provided via 802.1x authentication
Please query your network manager about the currently used
security protocol, if 802.1x authentication is currently used, then
you can check this item to enable 802.1x security protocol. The
take offeet
wra Encryption Setting
Protocol: This panel enables you to select an authentication
protocol.
User Name : Type in the user name assigned to the certificate.
Password: This panel is available when EAP-TLS is not selected
(either MSCHAP V2 over PEAP is selected with WEP or LEAP
is selected for CCX). This panel enables you to enter a login
name and password or request that the driver prompt for them
when you connect to a network.
<b>Passphrase</b> : Enter the key that you are sharing with the network
for the WLAN connection.
Kay Format · Salaat Hay if you are using hound-simely much
<b>Rey Format</b> • Select <b>nex</b> if you are using nexadecimal numbers $(0, 0, \dots, k, E)$
(U-У, ОГ А-Г).
Select ASCII if you are using ASCII characters.

	<b>Certificate :</b> Please query your network manager about the certificate, select the same certificate as the certification server.		
Load	You may select already saved file from the <b>"Profile name"</b> list, and then press <b>"Load "</b> . The setting status will then be restored."		
Save Current	You may save current setting to profile and add one new item in "Profile name".		
Delete	Delete the files in the " <b>Profile name</b> "		
Advanced Setting	Click the Advanced Setting button to configure the following figure (Refer to the Advanced Setting part on the next page to see more information about the Advanced Setting) :		
Information	Click the Information button to show the Driver Version, Utility Version and MAC Address of the system.		

#### **Advanced Setting**

User Interface Language: English English Country Roaming Traditional C World Mode Simplified C User Select Japan	Power Consumption Setting     Continuous Access Mode (CAM).     Maximum Power-Saving Mode.     Chinese
Fragmentation Threshold	<pre>&lt; 2346 (Disable) &gt; 2346</pre>
0	<pre></pre>

#### **User Interface**

Language	Select English or Traditional Chinese.

#### **Power Consumption Setting**

Continuous Access Mode	When this mode is selected, the power supply will			
(CAM)	be normally provided even when there is no			
	throughput.			
Maximum Power-Saving	When this mode is selected, this device will stay in			
Mode	power saving mode even when there is high volume			
	of throughput.			
Fast Power-Saving Mode	When this mode is selected, the power mode will			
_	switch between CAM and Maximum Power-Saving			
	Mode depending on the volume of throughput. The			
	device driver checks the total bytes (only data			
	frame) every 4 seconds to decide the power mode.			
	If the total bytes sent exceed 10k bytes, the device			
	driver will choose "CAM". If the total bytes are			
	less than 10k bytes, however, the device driver will			
	choose "Maximum Power-Saving Mode".			

#### **Country Roaming**

World Mode	This function is only enabled and effective with 802.11d standard.
User Select	Enable this function to select the country you are now locating.

Engennentetten Thussheld	The mechanism of Engenerated in Threaded discussed		
Fragmentation Inresnoid	The mechanism of Fragmentation Threshold is used		
	to improve the efficiency when high traffic flows		
	along in the wireless network. If your 802. Wireless		
	LAN Adapter often transmit large files in wireless		
	network, you can enter new Fragment Threshold		
	value to split the packet. The value can be set		
	from 256 to 2346. The default value is <b>2346</b> .		
<b>RTS/CTS</b> Threshold	RTS/CTS Threshold is a mechanism implemented		
	K15/C15 Threshold is a mechanism implemented		
	to prevent the "Hidden Node" problem. If the		
	"Hidden Node" problem is an issue, users have to		
	specify the packet size. The RTS/CTS mechanism		
	will be activated if the data size exceeds the value		
	<i>you set.</i> . The default value is <b>2347</b> .		
	This value should remain at its default setting of		
	<b>2347</b> . Should you encounter inconsistent data		
	flow, only minor modifications of this value are		
	recommended.		

#### **Access Point**

To set your 802.11g Wireless LAN USB Adapter as an Access Point (AP). In access point mode, the 802.11g Wireless LAN USB Adapter will function as an access point. This allows you to set up your wireless networks without using a dedicated AP device. Up to 16 wireless stations can associate to the 802.11g Wireless LAN USB Adapter.

To the **802.11g Wireless LAN USB Adapter** to bridge your wired and wireless network, the following requirements must be met :

- 1. The **802.11g Wireless LAN USB Adapter** must be installed on a computer connected to the wired network.
- 2. Either configure network sharing (refer to the appendix for an example) or bridge the two interfaces (wireless and wired) on the computer.
- 3. Set the wireless station's IP address to be in the same subnet as the computer in which the **802.11g Wireless LAN USB Adapter** is installed. Refer to **Configuring the Wireless Station Computer**.

Select the Access Point mode, and you will see the following figure.

802.11	b+g USB Wireless LA	N Utility		
Ne	etwork Adapter:	Mod	(	Access Point 💌
8	02.11b+g USB Wirele	ss LAN Adapter		•
Connect S Station M	station List: MAC Address	Current Network Settin Channel: 6 SSID: WLAN_AP WEP: Disable Tx Power: Level 0	ng —	
			м	ore Setting
Tx	Frame: 38	Rx Frame: 29		

- 24 -

Network Adapter	You can select the network adapter from the pull-down menu, it shows the device itself (the 802.11g Wireless LAN USB Adapter) and also shows the devices supported by the 802.11g Wireless LAN USB Adapter.
Connection Station List	It shows the stations which are now connecting to the AP.
Channel	Shows the selected channel that is currently in use. (There are 14 channels available, depending on the country.)
SSID	<ul> <li>The SSID is the unique name shared among all points in your wireless network. The name must be identical for all devices and points attempting to connect to the same network.</li> <li>It shows the current SSID setting of the Wireless USB Adapter.</li> </ul>
WEP	The WEP function here has been disabled. If you want to change to Enabled, click <b>More Setting</b> to configure.
Tx Power	The Tx power here is configured as Level 0, to change the Tx power, click <b>More Setting</b> to configure.
More Setting	Click the <b>More Setting</b> button and the following figure will appear for you to configure (Refer to the <b>More Setting</b> ) part on the next page for more information about this figure.)

	Access Plint Setting       General Connection Setting       Channel 6       Mode Mode       SSD WLAM, AP       SSD WLAM, AP       Filde SSD       Tx Power [Level 0 [Maximum Power] • Apply]       WEP       Disable       Fragment       Pragment       Disable       Presenble       Long       MAC Address Filter:       Setting       Didge Adapter:       No bridge
Tx Frame	The quantities for the wireless network card transmit. (Frame: The unit of packet)
Rx Frame	The quantities for the wireless network card receive. (Frame: The unit of packet)

#### More Setting...

ccess Point Settin	8	E
General Conne	ction Setting	
Channel	6 •	
Mode	Mixed Mode	
SSID	WLAN_AP	
	F Hide SSID	
Tx Power	Level 8 Maximum Powert	Apply
	,	
WEP	Disable - Setting	
Authentication	Mode: Open System 💌	
Fragment		Disable
ringinent		_ j Disable
RTS/CTS		_   Disable
Preamble	Long	
MAC Address	Filter: Setting	
Bridge Adapte	r:	
No bridge		-

Channel	Shows the selected channel that is currently in use. (There are 14 channels available, depending on the country.)
Mode	Select <b>Mixed Mode</b> or <b>802.11b only</b> , <b>802.11g</b> <b>only</b> standard Mode (If you choose this option the device will automatically convert the suitable standard ).
SSID	The <b>SSID</b> is the unique name shared among all points in your wireless network. The name must be identical for all devices and points attempting to connect to the same network. It shows the current SSID setting of the Wireless USB Adapter.
Tx Power	Select the Tx power from the pull-down menu, there are four levels including Level 1, Level 2, Level 3 (Minimum).
Change or Apply	Click <u>Change</u> to set the General Connection Setting. After Completing the setting Click <u>Apply</u> .
WEP	You can select to <b>Enable</b> or <b>Disable</b> the WEP function by selecting from the pull-down men. Click Setting and the following figure will appear. VEP Key Setting         VEP Key Setting         Key Length:         64 bit         128 bit         256 bit         Default Key ID:         #1         Key Value:         #1:         #2:         #4:         #4:         *********         #3:         *********         #4:         *********         #4:         **********         *******************         ************************************

	~
Authentication Mode	Select the Authentication mode from the
	pull-down menu, there are two modes for you to
	choose, Open System and Shared Key.
<b>F</b> (	The mechanism of Fragmentation Threshold is
Fragment	used to improve the efficiency when high traffic
	flows along in the wireless network. If your 802.
	Wireless LAN Adapter often transmit large files
	in wireless network, you can enter new Fragment
	I hreshold value to split the packet. The value $256 \pm 2246$ The default value is
	2346
DTS/CTS	DTS/CTS Thrashold is a machanism
K15/C15	KIS/CIS Theshold is a mechanism
	Implemented to prevent the Hidden Node
	problem. If the "Hidden Node" problem is an
	issue, users have to specify the packet size. The
	RTS/CTS mechanism will be activated if the data
	size exceeds the value you set. The default value
	is <b>2347</b> .
	This value should remain at its default setting of
	2347. Should you encounter inconsistent data
	flow, only minor modifications of this value are
	recommended.
Preamble	A preamble is a signal used in wireless
	environment to synchronize the transmitting
	timing including Synchronization and Start
	frame delimiter. Select from the pull-down menu
	to change the Preamble type into Long or Short
	to enange me i reamere type into hong of short.

MAC Address Filter	Click <b>Setting</b> and you will see the following figure. You can select the Filter Type from the pull-down menu.
	<b>Disable</b> : Select to disable the filter function. <b>Accept</b> : You can type in 15 MAC addresses by clicking <b>Change</b> . If you select Accept, then the MAC address(es) you type in will be connected to the AP. <b>Reject</b> : You can type in 15 MAC addresses by clicking <b>Change</b> . If you select Reject, then the MAC address(es) you type in will not be connected to the AP.
	Access Point Setting         Image: Control of the set o
Bridge Adapter	The stations will not be allowed to connect to the internet if you select <b>No bridge</b> . The stations will be allowed to connect to the internet if you select the device listed in the pull-down menu.

# **Appendix**

### **Soft AP Configuration**



Setup Requirement:

To bridge your wired and wireless network using 802.11b+g Wireless LAN USB Adapter, the following must be met:

- 1. Install the 802.11b+g Wireless LAN USB Adapter on the LAN-connected computer.
- The Soft Access Point should be connected to a network switch, hub or a Broadband Router. Use a standard Category 5 UTP Ethernet cable with an RJ-45 connector to connect the Soft Access Point to one of router, hub, or switch.
- 3. The computer that you are installing the wireless card into has an Ethernet connection, and is connected to a LAN with a DHCP server.

SoftAP Configuration :

1. Select the Access Point mode, and you will see the following figure

😻 802.11b+g USB Wireless LAI	1 Utility 📃 🗖 🔀
Network Adapter:  802.11b+g USB Wireles	Mode: Access Point 💌 is LAN Adapter 🔍
Station MAC Address	Current Network Setting Channel: 6 SSID: WLAN_AP WEP: Disable Tx Power: Level 0
	More Setting
Tx Frame: 38	Rx Frame: 29

2. Click the **More Setting...** button and the following figure will appear for

you to configure

Access Point Setting
General Connection Setting
Channel 6 👻
Made Mixed Made
SSID WI AN AP
Tx Power Level 0 (17 dbm) (Maximum Po
WEP Disable Setting
Authentication Mode: Open System 💌
Fragment J Disable
RTS/CTS( Disable
Preamble Long 💌
MAC Address Filter: Setting
Bridge Adapter:
No bridge
Information Apply

3. Select the wired Network Adapter that has already installed in the PC from the pull-down menu.

Access Point Setting
Ceneral Connection Setting     Channel 6      Mode Mode     SSID WLAN, AF     Fielde SSID     Tr Yomer (Local) 0.07 after Minimum Poly
WEP Disable Setting Authentication Mode Open System Fraemont Fraemont FIS/OTS Figure Setting MAC Address Filer: Setting
Enclare Hospiter No bridge No Enridge Neatter FTUIIS9 Family POL Fast Ethernet ND: 1394 Net Adapter

4. If the network connected to the wired LAN card has a DHCP server, you just need to configure the wireless station as a DHCP client (select **Obtain an IP address automatically**). If the network does not have a DHCP server, you must assign a fixed IP to the wired PC (select Use the following IP address).

settings assigned automatically if your network supports Otherwise, you need to ask your network administrator to IP settings.
ni address automatically
ollowing IP address.
192.168.1.1
c 255.255.255.0
way:
NS server add ess automatically
allowing DNS server addresses
VS server:
IS server:
Advanced.