# Wireless USB Adapter

USER'S MANUAL

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# **Chapter4: Glossary**

### **Chapter 1: Introduction**

The Wireless USB Adapter gives you the flexibility to install the PC or notebook PC in the most convenient location available, without the cost of running network cables. Its auto-sensing capability allows high packet transfer up to 150Mbps for maximum throughput, or dynamic range shifting to lower speeds due to distance or operating limitations in an environment with a lot of electromagnetic interference. It can also be compatible with all the 11/54Mbps wireless (802.11b/g) products.

### **1.1 Features**

- pports 64/128-bit WEP, complies with 128 bit WPA standard (TKIP/AES)
- ports 135/121.5/108/81/54/40.5/27/13.5/65/58.5/52
  /39/26/19.5/13/6.5/54/48/36/24/18/12/9/6/11/5.5/2/1Mbps
  wireless LAN data transfer rates
- Provides Soft AP, supports PSP connection
- Supports Ad-Hoc and Infrastructure modes
- Supports roaming between access points when configured in Infrastructure mode
- Eases to configure and provides monitoring information
- Supports Windows 2000/XP/VISTA/Win7/Linux/Macintosh
- Internal Antenna

### **1.2 Contents of Package**

Before you begin the installation, please check the items of your package.

The package should include the following items:

• One USB Adapter

• One CD (Driver)

#### If any of the above items is missing, contact your supplier as soon as

possible.

### **1.3 Product specification**

Software Specification						
Standards	IEEE 802.11n, IEEE 802.11g, IEEE 802.11b					
Wireless Signal	11n: Up to 150Mbps (Dynamic)					
<b>Rates With</b>	11g: Up to 54Mbps (Dynamic)					
Automatic Fallback	11b: Up to 11Mbps (Dynamic)					
<b>Frequency Range</b>	2.4-2.4835GHz					
Wireless	19dDm(MAV)					
<b>Transmit Power</b>	160 DIII(MAA)					
<b>Modulation</b> Type	DBPSK,DQPSK,CCK, OFDM					
	135M: -68dBm@10% PER					
<b>Receiver Sensitivity</b>	54M: -68dBm@10% PER					
	11M: -85dBm@8% PER					
Work Mode	Ad-Hoc					
WOIK MIDUE	Infrastructure					
Wiroloss Socurity	64/128 bit WEP					
wireless security	WPA/WPA2, WPA-PSK/WPA2-PSK (TKIP/AES)					
Support	Windows 2000/XP/VISTA//Win7/Linux/Macintosh					
<b>Operating System</b>	vindows 2000/XI / v IS IA// vin //Elinux/Macintosii					
Hardware Specification						
Interface	USB2.0 Hi-Speed connector					
Antenna Type	Internal Omni-directional Antenna					
<b>Operating Temperature</b>	0°C~40°C (32°F~104°F)					
Storage Temperature	-40°C~70°C (-40°F~158°F)					
<b>Relative Humidity</b>	10% ~ 90%, non condensation					
Storage Humidity	5%~95% non-condensing					
Weight	15.2g					
Dimensions	86mm × 26mm × 12mm					

### **Chapter 2: Installation**

Before you proceed with the installation, please notice following descriptions.

Note1: The following installation was operated under Windows VISTA. (Procedures are similar for Windows 2000/XP.)

Note2: If you have installed the Wireless LAN USB Adaptor driver & utility before, please uninstall the old version first.

#### 2.1 How to install the driver

Please follow the instructions below to install the driver and utility of Wireless Adapter..

**2.1.1** Insert Wireless Adapter into the USB port on your PC. After that, the computer will automatically detect and open the Found New Hardware Wizard, please click "Cancel" and then use the driver and utility of Wireless Adapter.



**2.1.2** Put the installation CD-ROM into the CD-ROM player and then go to WU3070's directory to start the "Setup.exe" program. After that, the setup wizard will automatically start the "InstallShield Wizard" to continue setting up. First, you have to make sure that if you want to use the Wireless Adapter as the default adapter.



**2.1.3** Please read the end user license agreement and click "I accept the terms of the license agreement", then click Next.



2.1.4 please choose "Install driver and Ralink WLAN Utility" or "Install driver only".



2.1.5 please choose "Ralink Configuration Tool" or "Microsoft Zero Configuration Tool".



**2.1.6** After click "Next" on the previous page, the installation wizard starts to install the software for WU3070. Then click "Install" to start installing the utility.

Ralink Wireless LAN - Inst	allShield Wizard $ imes$
Ready to Install the Program The wizard is ready to begin in	m stallation.
Ralink	Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard Note: Some virus scanner program will block the install package. If the install package does not work properly, please try to close the virus scanner before you run the install package
InstaliShield	< Back Install Cancel
Ralink Wireless LAN - Inst Setup Status	allShield Wizard 🛛 👋
Ralink	The InstallShield Wizard is installing Ralink Wireless LAN

2.1.7 you can click "Finish" on the page to complete the installation.



### **Chapter3: Configuration**

### 3.1 Run configuration utility

When you finish installing the driver and utility on the computer, you can start to use the utility of WU3070 to check the connection status of wireless connection. Right lick the icon of the utility "Ra" on the task bar, and choose "Launch Config Utilities" to start to use the utility; or you may double click on the icon to directly enter the utility. If you closed the utility of WU3070 and want to use it again, please click "Start  $\rightarrow$  All **Programs**  $\rightarrow$  **Ralink Wireless**  $\rightarrow$  **Ralink Wireless Utility**" on the start

menu. After that, it will open the utility and the icon of the utility "Ra" will show on the task bar.



### **3.2 Configuration Interface**

To enter the utility program, please follow the instructions below.

Right click the mouse on the utility icon on the taskbar, and you can click on the "Launch Config Utilities" to enter WU3070 utility; or you can just double click on the utility icon and enter the utility directly.

**3.2.1 Launch Config Utilities** (Click it to enter the utility program of WU3070)

**3.2.1.1** Click the "Profile" button can "Add, Edit, Delete, Import, Export, Activate" new configuration. Clink "Profile List" can see wireless network mode.

K	RaUI				_		_	×
	P Profile	Network	Advanced	) Statistics	WAWA	Ø WPS	CCX	Radio on/off
-		Pro	file List					
	PROF1	HLY			6	Profile Name >>	PROF1	
	PROF2	office		0	6	ssid >>	HLY	
	1.1.1.1.1.1.1.1.1	00210002000		U.	<b>*</b>	Network Type >>	Infrastructure	
						Authentication >>	Open	
						Encryption >>	None	
						Use 802.1x >>	NO	
						Tx Power >>	Auto	
						Channel >>	Auto	
						Power Save Mode >>	CAM	
			I and the second se			RTS Threshold >>	n/a	
1	Add Edit	t Delete	Import	Export Acti	vate F	ragment Threshold >>	n/a	
1 me								

**3.2.1.1.1** Click "Add" button, Increase character list in the SSID, The SSID (up to 32 printable ASCII characters) is a unique name identified in a WLAN. The SSID can prevent the unintentional merging of two co-located WLANs. You may assign an SSID for WU3070, and only the device with the same SSID can interconnect to it.

ĸ	RaUI				_		_	Χ.
	Profile	Network	Advanced	) Statistics	Gos WAMA	<b>Ø</b> WPS	CCX	Radio on/off
		Prot	ïle List					
-	PROF1	HLY		3	6	Profile Name >>	PROF1	
ŕ	PROF2	office		•	6	ssid >>	HLY	
				U.	Ť	Network Type >>	Infrastructure	
						Authentication >>	Open	
						Encryption >>	None	
						Tx Power >>	Auto	
						Channel >>	Auto	
					P	ower Save Mode >>	CAM	
-			1			RTS Threshold >>	n/a	
1	Add Edit	Delete	Import	Export Acti	vate Fra	gment Threshold >>	n/a	
	System Config	Auth, \ Enci	w. 80	2.1×				
			<b>,</b>					
	Drofile Nam	e SS PROF3			Jetwork Type >:	Infrastruct	ure 🔻	
	Profile Nam							
	SSI	D >>		<b>T</b>	Tx Power >>	Auto	_	
		HLY			000C435200	15	~	
	Daman Caus Had	1314520			000C435000	18		
	Power save Mou							
	🔲 RTS 1	Threshold	0 -		<b>1</b> 2347	2347		
	🗌 Frag	ment Threshold	256 -		<u>)</u> 2346	2346	Diagnosis (	Capable
			-	ок	Cancel	-		

Click "Auth. \Encry." Button, The choice encrypts mode. This section shows whether the APs are using encryption or not. There are four kinds of encryption:"WEP", "AES", "TKIP" and "None". If the AP which you want to connect needs the encryption (the encryption section shows WEP, TKIP or AES, etc), double click on the name of the AP or click "Connect" button and then the configuration page of encryption will show.

ĸ	RaUI				_		_	×
	P Profile	Network	کی Advanced	) Statistics	Cos WAMA	Ø WPS	CCX	Radio on/off
		Pro	file List					
•	PROF1	HLY			6	Profile Name >>	PROF1	
	PROF2	office		٩.	6	ssid >>	HLY	
						Authentication >>		
						Encryption >>	None	
						Use 802.1x >>	NO	
						Tx Power >>	Auto	
					P	ower Save Mode >>	CAM	
-			I and the second se			RTS Threshold >>	n/a	
	Add Edit	Delete	Import	Export Acti	vate Fra	gment Threshold >>	n/a	
-								<u></u>
	System Config	Auth. \ Enc	ry. 80	02.1x				
	Authe	ntication >>	Open	<b>v</b> 1	Encryption >>	None	-	
	WPA Prest	hared Kev >>						
				<u>.</u>				
	Wept	Key —		-				
	C	) Key#1	Hex	*				
	0	) Key#2	Hex	•				
	9	Key#3	Hex	-				
	9	Key#4	Hex	-				
				ОК	Cancel			

**3.2.1.1.2** The constitution of clicking "Edit" corresponds parameter.

**3.2.1.1.3** Single click "Profile List" contents, the choose a "delete" button deletion.

**3.2.1.1.4** Single click "Profile List" contents, the choose a "Activate" button activates.

**3.2.1.2** Click "Network" button, Look into network parameter.

RaUI								×
Profile 1	Network	Advanced	) Statist	ics		Ø WPS	CCX	Radio on/off
Sorted by >>	O SSID	🖉 Cha	nnel	AP List >	gnal		C Show dB	m
1314520		10 1	6 9	-	-81 dBm 📕			
HLY		6	b g	h	-49 dBm 📒			
office		<b>b</b> 11	<mark>b</mark> g	1	-59 dBm 📕			
Rescan	Add to Profile	Con	inect					
		40 F0 00 4F				Link Ou	ality ss 100%	
status **	HET \$10000	-43-52-00-15				Signal Strer	gth 1 >> -47 dBn	n,
Extra Info >>	Link is Up [Tx P	ower >>:100%]						
Channel >>	6 <> 2437 MH	z; central chann	el : 8					
Authentication >>	Open							
Encryption >>	NONE				Transmit —		1	
Network Type >>	Infrastructure				Link Speed >>	135.0 Mbps	Max	
IP Address >>	192.168.1.120				Throughput >>	• 0.000 Kbps	114 044	
Sub Mask >>	255.255.255.0					8	Kbps	
Default Gateway >>	192.168.1.1				Receive			
BW >> 40		SNR0 >> 3			Link Speed >>	1.0 Mbps	Max	

**3.2.1.3** Click "Advanced" button ,Choose "WIRELESS MODE" and "Country Region Code", an among those item, press Apply button to keep.

K	RaUI							×
	Profile	Network	Advanced	) Statistics	www.	<b>Ø</b> WPS	ccx	Radio on/off
1	Vireless mode >>	2.4G	•					
	Select	Your Country Re	gion Code					
2	2.4GHz >>	1: CH1-13		<b>•</b>				
[	Enable TX Burst							
[	Enable TCP Wind	low Size						
[	Fast Roaming at	-70 dBm						
I	Show Authentica	ation Status Dialo;	3					
	Apply							
-								

**3.2.1.4** Click a "Statistics" button, show "Transmit and Receive" success rate.

	RaUI			_				×
	Profile	↓ Network	کی Advanced	) Statistics	WMM	<b>Ø</b> WPS	CCX	Radio on/off
	Transmit	Receive						
	Frames	Transmitted Succe	essfully		=	532		
	Frames	Retransmitted Suc	cessfully		=	511		
	Frames	Fail To Receive ACI	K After All Retries		-	0		
R	leset Counter							_

**3.2.1.5** Clicking "WMM" presses button, choosing "WMM Setup Status" to carry on a constitution.

RaUI						_	×
Profile	Network	Advanced	) Statistics	aos WMM	() WPS	CCX	Radio on/off
WMM Setup Status -							
WMM >> E	nabled	Power Save >	> Disabled		Direct	t Link >> Disat	bled
	M Enable						
	WMM - Power Savi	e Enable					
	AC_BK	AC_BE	AC_VI	AC_V			
	Direct Link Setup	Enable					
	MAC Address >>			Timeout Value >>	60 sec		
							Apply
						-	ear Down
						-	

3.2.1.6 Clicking "WPS" presses button, can look into WPS conjunction

#### appearance.

R	RaUI				_				×
	Profile	Network	Advanced	) Statistics	www.	Ø WPS	CCX	Radio on/off	>
			W	PS AP List				Rescan Information Pin Code 21609725 Renew	
-			WPS	Profile List ———				Config Mode	
								Enrollee	
								Detail	
	-		10					Connect	
-	EIM	WPS Associate			Progress >> 0	%		Rotate	
-	PEC	WPS Probe IE						Disconnect	
		Auto						Export Profile	
								Delete	
									6

**3.2.1.7** Clicking "CCX" presses button to enable the CCX.



**3.2.1.8** Clicking "the Radio On/Off" presses button, opening or closing a wireless network.

×	RaUI								X	
4	Network	Advanced	) Statistics	Cos WMM	() WPS	CCX	Radio on/off	About		
	Enable CCX (Cisc	o Compatible eXte	ensions)							
	Enable Radi	o Measurements		CAC >>	ADDTS(Direc	tly send TS)	<b>T</b>	Set		
	Non-Ser	ving Channel Meas ms(0-1023)	urements limit	Diagnostic >>	Select Pro	ofile PROF1	T D	iagnose		
				□ Information o	f selected pro	file				
	Roaming wi	Roaming with RF Parameters			Profile Name >> PROF1					
	Voice Drastic Roaming				ssid >> F	ΊLΥ				
				Diagnosis	Capable >> N					
								1		
	Apply									
	1443								-	

**3.2.1.9** Click a "About" button, look into edition number.

×	RaUI								×
<b></b>	LLL Network	Advanced	) Statistics	www.	<b>Ø</b> WPS	ra ccx	Radio on/off	R About	•
		(c)	Copyright 2009,	Ralink Technology	, Inc. All rights reserve	d.			
		RaConfi	ig Version >>	3.1.2.0	Date	>> 08	-20-2009		
		Drive	er Version >>	1.4.6.0	Date	>> 08	-03-2009		
		DL	L Version >>	1.0.2.0	Date	>> 08	-20-2009		
		EEPRO	M Version >>	1.1	Firmware Version	>> 0.	19		
		Phy	y_Address >>	00-0C-43-30-8E	E-8D				
				WWW.R	ALINKTECH.COM				
			_						_

**3.2.1.10** Click a " $\rightarrow$ " diagram mark, press "Help" to carry on a technique help.

K -	RaUI		_		_	_	_		×
4	) Statistics	WWW	<b>Ø</b> WPS	e Sso	CCX CCX	Radio (	) on/off	About	😯 Help
		(c) Copy	right 2009,	Ralink Technology,	Inc. All rights re	eserved.			
		RaConfig Ve	rsion >>	3.1.2.0		Date >>	08-20-20	009	
		Driver Ve	rsion >>	1.4.6.0		Date >>	08-03-20	009	
		DLL Ve	rsion >>	1.0.2.0		Date >>	08-20-20	009	
		EEPROM Ve	rsion >>	1.1	Firmware Ve	ersion >>	0.19		
		Phy_Add	dress >>	00-0C-43-30-8E	-8D				
				WWW.RA	LINKTECH.COM				

### **3.2.2** Use Zero Configuration as Configuration Utility

The right key single shot on the "Ra" diagram mark, and choose "Use **Zero Configuration as Configuration Utility**", Click a conjunction button, the equipments links AP/ROUTER successfully.

### 3.2.3 Switch to AP Mode

**3.2.3.1** The right key single shot on the "Ra" diagram mark, the choose"Switch to AP Mode ", such as diagram:

🔏 🛛 Ralink Wireless Ut	ility	×
Config Access Control	Mac Table   Event Log   Statistics   Abo	ut
SSID	SoftAP-8D Channe	
Wireless Mode	2.4G ▼ <- Us	e Mac Address Security S
-		
Country Region (	Code	No forwarding among wireless c
2.4GHz 1:	CH1-13	Hide CCID
	M	Allow BW 40 MHz
Beacon (ms)	100	
TVD	100 %	
TX Power		
ldle time(60 - 3600	))(s) <u>300</u>	
		<u> </u>
		Help

Can look into an equipments to install parameter in "Config".

**3.2.3.1.1** Click "Security Setting" button to choose encrypts way.

A Rali	ink Wireless Utility	-X
Config	Access Control   Mac Table   Event Log   Statistics   About	
SSID	SoftAP-8D Channel 1 -	
Wi	Authentication Type Shared Encryption Type WEP	urity S
	WPA Pre-shared-Key	
-C	Group Rekey Interval 60 10 seconds	less c
	Wep Key	
Pa		
DC	O Key#2 Hex ▼	
TX	C Key#3 Hex 💌	
Idle	O Key#4 Hex 💌	
	*WEP 64 Bits Encryption: Please Keyin 10 HEX characters or 5 ASCII characters	
	WEF 126 bits Enclyption. Flease Keyin 26 HEA characters of 15 ASCH characters	
	OK	
		1
	ir ir	11
	- F	leip

**3.2.3.2** Click a "Access Control" button, increase or delete MAC Address.



**3.2.3.3** Click "Mac Table" button, look into MAC Address information.

🔏 Ralink Wireless Utility 🛛 🕹									
Config Access Control Mac Table Event Log Statistics About									
	MAC Address	AID	Power S	Status					
		-							
			1						
			1						
				1					
				-					
			1						
	<	100		1.1					
			15						
					Help				

**3.2.3.4** Click "Event Log" press button, looking in to Restart Access Point information and date.

Å	Ralink Wireless Utility							
Co	Config Access Control Mac Table Event Log Statistics About							
	Event Time (yy/mm/dd- hh:mm:ss)	Message						
	2010/01/05-10:38:04	Restart Access Point						
	2010/01/05-10:38:06	Restart Access Point						
		· · · · · · · · · · · · · · · · · · ·						
		Help						

**3.2.3.5** Click a "Statistics" button, look in to receive and send out detailed parameter.

Ralink Wireless Utility		- ×
Config   Access Control   Mac Table   Event Log Statistics   About	t	
⊤ Transmit Statistics		
Frames Transmitted Successfully	=	
Frames Fail To Receive ACK After All Retries	Ħ	
Frames Transmitted Successfully After Retry	=	
Receive Statistics		
Frames Received Successfully	=	
Frames Received With CRC Error	=	
Frames Dropped Due To Out-of-Resource	=	
Duplicate Frames Received	=	
	RESET C	:0
	Help	

**3.2.3.6** Click a "About" button, look into parameter edition number.

Config	alink Wireless Utility   Access Control   Mac Tabl	e   Event Log   Statis	tics About   YW.RALINKTECH.COM					
	(c) Copyright 2009, R	alink Technology,	hk Technology, Inc. All rights reserved.					
	Utility Version :	3.0.3.0	Date :	07-28-2009				
	DLL Version :	1.0.3.0	Date :	07-28-2009				
	Driver Version :	1.4.6.0	Date :	08-03-2009				
	EEPROM Version :	1.1	Firmware Version :	0.19				
1	IP Address :	192.168.0.1	Phy_Address :	00-0C-43-30-8E-8				
	Sub Mask :	255.255.255.0	Default Gateway :					
l.	<u></u>							
5								
				Help				

#### 3.2.4 Exit

Click a "Exit" button, withdraw parameter configuration utility.

### **Chapter4:Glossary**

**802.11b:** The 802.11b standard specifies a wireless networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and

operating in the unlicensed radio spectrum at 2.4GHz, and WEP encryption for security. 802.11b networks are also referred to as Wi-Fi networks.

**802.11g:** specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4GHz, and backward compatibility with IEEE 802.11b devices, and WEP encryption for security.

Ad-hoc Network: An ad-hoc network is a group of computers, each with a wireless adapter, connected as an independent 802.11 wireless LAN. Ad-hoc wireless computers operate on a peer-to-peer basis, communicating directly with each other without the use of an access point. Ad-hoc mode is also referred to as an Independent Basic Service Set (IBSS) or as peer-to-peer mode, and is useful at a departmental scale or SOHO operation.

**Infrastructure Network:** An integrated wireless and wireless and wired LAN is called an Infrastructure configuration. Infrastructure is applicable to enterprise scale for wireless access to central database, or wireless application for mobile workers.

**DSSS (Direct-Sequence Spread Spectrum):** DSSS generates a redundant bit pattern for all data transmitted. This bit pattern is called a chip (or chipping code). Even if one or more bits in the chip are damaged

during transmission, statistical techniques embedded in the receiver can recover the original data without the need for retransmission. To an unintended receiver, DSSS appears as low power wideband noise and is rejected (ignored) by most narrowband receivers. However, to an intended receiver (i.e. another wireless LAN endpoint), the DSSS signal is recognized as the only valid signal, and interference is inherently rejected (ignored).

**FHSS (Frequency Hopping Spread Spectrum):** FHSS continuously changes (hops) the carrier frequency of a conventional carrier several times per second according to a pseudo-random set of channels. Because a fixed frequency is not used, and only the transmitter and receiver know the hop patterns, interception of FHSS is extremely difficult.

**Spread Spectrum:** Spread Spectrum technology is a wideband radio frequency technique developed by the military for use in reliable, secure, mission-critical communications systems. It is designed to trade off bandwidth efficiency for reliability, integrity, and security. In other words, more bandwidth is consumed than in the case of narrowband transmission, but the trade off produces a signal that is, in effect, louder and thus easier to detect, provided that the receiver knows the parameters of the spread-spectrum signal being broadcast. If a receiver is not tuned to the right frequency, a spread-spectrum signal looks like background noise. There are two main alternatives, Direct Sequence Spread Spectrum

(DSSS) and Frequency Hopping Spread Spectrum (FHSS).

**SSID:** A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless PC card. It corresponds to the ESSID in the wireless Access Point and to the wireless network name.

**WEP (Wired Equivalent Privacy):** A data privacy mechanism based on a 64-bit or 128-bit or 152-bit shared key algorithm, as described in the IEEE 802.11 standard.

**Wi-Fi:** A trade name for the 802.11b wireless networking standard, given by the Wireless Ethernet Compatibility Alliance (WECA, see http://www.wi-fi.net), an industry standards group promoting interoperability among 802.11b devices.

WLAN (Wireless Local Area Network): A group of computers and associated devices communicate with each other wirelessly, which network serving users are limited in a local area.

**WPA (Wi-Fi Protected Access):** A wireless security protocol use TKIP (Temporal Key Integrity Protocol) encryption, which can be used in conjunction with a RADIUS server.

#### FCC STATEMENT

1. 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 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.

#### RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.