# **AMD WLAN Card**

**User Manual** 

Version: 0.1 RD Draft

## FCC Class B Radio Frequency Interference Statement

#### Note:

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

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/television technician for help.

The user should not modify or change this equipment without written approval from Fi Win, Inc. Modification could void authority to use this equipment.

#### Notice 1:

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

## Notice 2:

To comply with the FCC RF exposure compliance requirements, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. No change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user' s authority to operate the device.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATIONS 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 UNDESRIED OPERATION

## **Table of Contents**

Chapter 1	. Introduction4
Chapter 2	Installation4
2.1 Insta	Illation/Uninstallation4
2.1.1	Installation4
2.1.2	2 Uninstall Wireless Network Configuration8
2.2 Ho	w to surf on the internet with this Wireless Network Card?11
	Step 1. Wireless Network Card Driver/Utility Installation (page 4)11
	Step 2. Please Install the WLAN card into your PC or notebook
	Step 3. Wireless Networks setting to connect AP ( 5 clicks )11
2.3 Wi	reless Network Configuration Details13
	2.3.1 Network Status Page14
	2.3.2 Site Survey Page
	2.3.3 Statistics Page16
	2.3.4 About Page17
	2.3.5 Advanced Page
	2.3.6 SSID and WEP Page 19
Chapter 3	. Troubleshooting 21
	a. Check the Various Properties of the card
	b. Plug the device first then install the Driver/Utility
	c. PC or Notebook cannot configure WLAN card

## Chapter 1. Introduction

WLAN Management Utility supports the following: 802.11b WLAN Configuration Windows 98SE / ME / 2000 (In Windows XP, we use its default WLAN Utility) Card Bus / Mini-PCI Bus Interface

## Chapter 2. Installation

## 2.1 Installation / Uninstallation

2.1.1 Installation

1. Insert the installation CD into your CD-ROM drive. The setup program will start automatically.

InstallShield Wizard	
	Preparing to Install WLAN Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait. Configuring Windows Installer
	Cancel

2. Click "Next" to go to next screen.

WLAN Installation		×
	Welcome to WLAN Setup	
	The InstallShield® Wizard will install WLAN on your computer. To continue, click Next.	
	< Back Next > Cancel	

3. Select the destination folder. To install to the default folder as shown below, click "Next" to go to the next screen.

boose Destination Location	
Select folder where Setup will install files	s.
Setup will install WLAN in the following f	folder.
To install to this folder, click Next. To ins another folder.	stall to a different folder, click Browse and select
- Destination Folder	
Destination Folder     C:\Program Files\WLAN\	B <u>r</u> owse
Destination Folder C:\Program Files\WLAN\ tallShield	B <u>r</u> owse

4. Select "No" and then click "Finish" to complete the installation (It is recommended to select "Yes" for Windows 98).

WLAN Installation	
	Congraduation! WLAN Setup Complete. Do you want to restart your computer?
	<ul> <li>Yes, I want to restart my computer now.</li> <li>No, I will restart my computer later.</li> <li>Remove any disks from their drives, and then click Finish to complete setup.</li> </ul>
	K Back Finish Cancel



5. The shortcut Manager will appear on your desktop. By click this icon, you can run the

Utility program.

6. You will also find a shortcut "WLAN Manager" at Start\Programs\Startup Menu as shown below:



7. Please Install the WLAN card into you PC or notebook.

After the installation, a little black icon 🗼 will appear on the bottom right of the screen. Right click that icon and select open, the Wireless Network Configuration will pop-up on the screen.

Open Wireless Network Configuration
Disable radio transmitter
 Shutdown Wireless Network Configuration
Shacdown wireless Network Coningeration

## 2.1.2 Uninstall Wireless Network Configuration

 To exit the WLAN Utility, you should click the right bottom on the Utility icon in the working bar and select "Close".



 To uninstall the WLAN Utility and Driver, you can move to Start – Programs –WLAN Management Utility, and click "Un-installation".



3. You will be asked if you want to uninstall the WLAN Utility and all of its components.



4. Click "Remove" option and "Next" button.

InstallShield Wizard	×
₩elcome Modify, repair, or remove the program.	
Welcome to the WLAN Setup Maintenance program. This program installation. Click one of the options below.	lets you modify the current
C Modify Select new program features to add or select current remove.	y installed features to
Repair     Reinstall all program features installed by the previous	s setup.
Remove all installed features.  InstallShield	
< <u>B</u> ack	Next > Cancel

5. Click "OK" to remove or click "Cancel" to exit.

Confirm Uninstall	69 	dana (19		×
Do you want to comple	etely remove the	e selected applic	ation and all of i	ts features?
	ОК	Cancel		

6. Performing "uninstall" option.

InstallShield Wizard	×
Setup Status	
WLAN Setup is performing the requested operations.	
91%	
InstallShield	Cancel

7. Now the un-installation is completed. Please click "Finish".



2.2 How to surf on the internet with this Wireless Network Card?

Step 1. Wireless Network Card Driver/Utility Installation (page 4)

Step 2. Please Install the WLAN card into you PC or notebook

Step 3. Wireless Networks setting to connect AP ( 5 clicks )

Please Click 5 buttons as follows:

Click 1: Automatically configure my wireless network connections
Click 2 : • Any available network defined above
Click 3 :
Click 4 : 🗼 wg18-b31
Click 5 :
Wireless Network Configuration
Statistics Advanced About Wireless Networks Site Survey Network Status
□ Disable wireless transmission (turn off radio transmitter)         Network Profiles         To connect to one of the networks below, click Connect Now.         ↓ QT-L-AP         ↓ tsunami         ↓ wg18-b31
Selected Profiles Try to automatically connect to available networks in the order listed below: Move up
Add       Bemove       Broperties         Computer-to-computer (ad-hoc) networks only       Computer-to-computer (ad-hoc) networks only         Access point (infrastructure) networks only         Any available network defined above
OK

- 3. This mean that you get connection with WLAN network.
  - 💡 wg18-b31



Please open your IE browser now. It is your time to surf on your internet.

	Statistics	Advanced	About
W	ireless Networks	Site Survey	Network Status
Au Dis etv	tomatically configure m sable wireless transmiss vork Profiles	ny <u>w</u> ireless network conne sion (turn off radio transmit	ctions ter)
•	CONNECT to one of the	networks below, click Cor	nect Now.
1	Q1-0034 ΩT-1-ΔΡ		
1	tsunami	-	<u>S</u> can Now
'ry ste	to automatically conne ed below:	ect to available networks i	n the order
iry ste	to automatically conne ed below: wg18-b31	ect to available networks i	n the order Move <u>up</u>
ry ste	to automatically conne ed below: wg18-b31	ect to available networks i	n the order Move <u>up</u> Move <u>d</u> own
ry ste	to automatically conne ed below: wg18-b31 Add	ect to available networks i nove	n the order Move <u>up</u> Move <u>d</u> own

4. Click , the Wireless Network Configuration page will close. It only leave this icon on system tray area.

## 2.3 Wireless Network Configuration Details

## 2.3.1 Network Status Page

You would know how is your network situation.

Statistics	Advanced	About	
Wireless Networks	Site Survey	Network Status	
Network status			
Network signal quality:			
	79 %		
Network signal strength:			
	100 % -47 dBm	(Excellent)	
Current Speed:	11.0 Mbps		
Current Channel:	7		
Network name (SSID):	wg18-b31		
Network address (BSSID):	00:C0:9F:09:EF:07		
Network type:	Infrastructure (using	access points)	
Interface Details			
MAC Address:	00:0C:20:00:02:EF		
IP Address:	169.254.244.225		
Subnet:	255.255.0.0		
Gateway:	None		
DHCP:	255.255.255.255		

## 2.3.2 Site Survey Page

This tool provide you the information of network around your area.

Statist Wireless N	ics Networks		Advanced Site Survey	 N	About etwork Status
ite Survey			2000		22 343
SSID	BSSID	WEP	Туре	Signal	Channel
💡 wg18	00:C0:	No	Infrastr	Excellent	7
🧈 chac	02:0C:	No	AdHoc	Medium	11
L QT-G	00:07:4	No	Infrastr	Medium	7
🕻 tsuna	00:40:9	No	Infrastr	Good	6
WLAN	00:08:	No	Infrastr	Excellent	1

## 2.3.3 Statistics Page

This page provide the information of how many bytes and frames you transmit and

#### receive.

Wireless Networks	Site Surv	ey Network Status
Statistics	Advance	ed   About
<b>F</b>	Transmit	Receive
Unicast	65	0
Multicast	0	0
Management	6	25905
Bytes		
Unicast	12064	0
Multicast	0	0
Management	60	2440749
Errors		
Total	60	24

## 2.3.4 About Page

The most important information that you might use is driver version.

Statistics     Advanced     About       roduct information
roduct information Wireless Network Configuration Utility Fi Win, Inc. Wireless network adapter: Am1772(tm) Wireless LAN Chipset Network driver version: 176.7.0.5 Application version: 176.7.0.5
Wireless Network Configuration Utility Fi Win, Inc. Wireless network adapter: Am1772(tm) Wireless LAN Chipset Network driver version: 176.7.0.5 Application version: 176.7.0.5
Fi Win, Inc. Wireless network adapter: Am1772(tm) Wireless LAN Chipset Network driver version: 176.7.0.5 Application version: 176.7.0.5
Wireless network adapter: Am1772(tm) Wireless LAN Chipset Network driver version: 176.7.0.5 Application version: 178.7.0.5
Wireless network adapter: Am1772(tm) Wireless LAN Chipset Network driver version: 176.7.0.5
Network driver version: 176.7.0.5
Application version: 176.7.0.5
Application version. Trot. to. 5

## 2.3.5 Advanced Page

ireless Network Configu	iration
Wireless Networks	Site Survey Network Status Advanced About
This dialog allows for char If you do not wish to chan be used which should be	nging advanced wireless parameters. Ige any of these, a default value will fine for typically applications.
Advanced wireless paramete	ers-
Regulatory domain:	United States of America (FCC)
<u>M</u> aximum TX power level:	100 mW
Default <u>C</u> hannel:	Channel 6 (2437 MHz)
Supported rates:	Automatic (max. 11 MBit/s)
Eragmentation threshold:	2346 • Bytes (2346 means 'OFF')
<u>B</u> TS threshold:	2347 • Bytes (2347 means 'OFF')
Ethernet compatibility m	node Apply <u>C</u> hanges
🗖 Use antenna <u>d</u> iversity	Reload Defaults
	OK

Default Channel

It shows the channel being used, if any, for this wireless connection. The communication channel ranges from 1 to 11(US/FCC, Canada/RSS),

1 to 13(Europe/ETSI) or 1 to 14(Japan/TELEC)

' Supported Rates

The supported rate is the rate at which the data packets are transmitted by the client. You can set this to 2Mbps, 5.5Mbps, 11Mbps.

RTS Threshold

RTS threshold is a mechanism implemented to prevent the "Hidden Node" problem. "Hidden Node" is a situation in which two stations are within range of the same access point, but are not within range of each other. Thus, it provides a solution to prevent data collisions. Enabling RTS Threshold may cause redundant network overhead that could negatively affect the throughput performance.

## <sup>·</sup> Fragment Threshold

The field allows you to set enable or disable. When the field is set to Enabled, you can adjust the value between 256 to 2346. Fragmentation mechanism is used for improving the efficiency when high traffic flows along in the wireless network. If your wireless devices often transmit large files in wireless network, you can enable the Fragmentation Threshold and the mechanism will split the packet to send.

## 2.3.6 SSID and Encryption Page

Statistics A	Advanced	About
Wireless Networks	Site Survey	Network Status
Automatically configure my <u>w</u> irele Disable wireless transmission (turr etwork Profiles to connect to one of the network A QT-G54	ss network conne n off radio transmi s below, click Coi	nnect Now.
QT-L-AP     tsunami lected Profiles		<u>S</u> can Now
QT-L-AP     tsunami elected Profiles inv to automatically connect to av sted below:     Y wg18-b31	vailable networks i	Scan Now
QT-L-AP     tsunami elected Profiles ry to automatically connect to av sted below:     wg18-b31	vailable networks i	<u>S</u> can Now
QT-L-AP     tsunami elected Profiles inv to automatically connect to av sted below:     wg18-b31 <u>A</u> dd <u>R</u> emove	vailable networks i	<u>S</u> can Now

When you click this button the page below is showing.

Now you can set the WEP key you want.

ireless Network Prope	erties	2
Network <u>n</u> ame (SSID):	000	
This is a <u>computer</u> -to access points are no	computer (ad-hoc) network; wireless used	
- Wireless network key (	wEP)	
This network requires	a key for the following:	
Data encryption	(WEP enabled)	
Network <u>A</u> uthen	tication (Shared mode)	
The key is provi	ded for me automatically	
Network <u>k</u> ey:		
Keyinde <u>x</u> :		
Key Format	Encryption Method	
C ASCII	C 64 Bit WEP (10 characters)	
100 E-100 A (55 A)	129 Bit WEP (26 obstactors)	

#### <sup>·</sup> Encryption

The Encryption tab is used to equip an additional measure of security on your wireless network, which can be achieved by using WEP (Wired Equivalent Privacy) encryption. To prevent unauthorized wireless stations from accessing data transmitted over the network, WEP can support high secure data encryption. WEP encrypts each frame transmitted through the radio by using one of the Keys entered from this panel. When an encrypted frame is received, it will only be accepted if it decrypts correctly. This will only happen if the receiver has the same WEP Key used by the transmitter. The Encryption tab contains some fields as below.

#### Encryption [WEP security]

The field allows you to select Disabling, 64-bit and 128-bit. When setting 64bit, or 128 bits, it means WEP security is used.

## ' WEP Key

You can choose "Create Keys Manually" or "Create Keys with Pass-phrase" method to enter encryption keys. It allows the entry of four keys for 64-bit and 128-bit key

according to WEP function select. To be written to the driver and registry, each key must consists of correct digits and letters allowed. The detailed descriptions will be shown as below for these two kinds of methods:

#### Create Key Manually

For 64-bits encryption:

- Five alphanumeric characters in the range of "a-z", "A-Z" and "0-9". (e.g. MyKey)
- 10 digit hexadecimal values in the range of "A-F" and "0-9". (e.g. 11AA22BB33).

For 128-bits encryption:

- 13 alphanumeric characters in the range of "a-z", "A-Z" and "0-9". (e.g. WEPencryption).
- 26 digit hexadecimal values in the range of "A-F" and "0-9". (e.g. 11AA22BB33123456789ABCDEFF)

#### Create Keys with Pass-phrase

A Pass-phrase can be entered which is used as a "seed" to randomly generate the four keys. This saves considerable time since the same keys must be entered into each node on the wireless network.

#### Key1, Key2, Key3, Key4

These four fields can be used to manually enter the keys. This may be necessary if you wish this node to match keys which is set in a different vendor product. These fields also display the keys when they are generated using a Pass-phrase.

## Use WEP key

This field updates the driver with the four keys displayed in Key1 through Key4. These keys are also written to the registry for permanent storage.

## Chapter 3. Troubleshooting

If you encounter some problems installing the WLAN PC card, refer to below the procedure after you have installed the card.

#### a. Check the Various Properties of the Card

Click the "Control Panel" and check whether there is a WLAN card in one of the sockets or not.

If there are yellow signs on network card, please check the followings:

- 1) Check if your notebook supports 3.3V Card.
- 2) Check that you have inserted the right card and have installed the proper driver.
- 3) Check if your notebook has installed some other wireless LAN card driver.

If you do not know the reason why, please contact agency that provide you WLAN card.

## b. Plug device first and then install the driver/ Utility

1. When you plug device in USB port, operating system will detect automatically.



2. Search the driver.

Found New Ha	ardware Wizard
Install Ha A devi an ope	rdware Device Drivers ce driver is a software program that enables a hardware device to work with rating system.
This wi	zard will complete the installation for this device:
- Portage - Port	USB 802.115 WLAN DEVICE
A devid needs installa	ce driver is a software program that makes a hardware device work. Windows driver files for your new device. To locate driver files and complete the tion click Next.
What c	lo you want the wizard to do?
œ	Search for a suitable driver for my device (recommended)
С	Display a list of the known drivers for this device so that I can choose a specific driver
	< Back Next > Cancel

3. Select CD-ROM drives and click Next.

ound New Hardware Wizard	
Locate Driver Files Where do you want Windows to search	o for driver files?
Search for driver files for the following ha	ardware device:
USB 802.115 WLAN DEVICE	
The wizard searches for suitable drivers any of the following optional search loca	in its driver database on your computer and in ations that you specify.
To start the search, click Next. If you are insert the floppy disk or CD before clickin	e searching on a floppy disk or CD-ROM drive, ng Next.
Optional search locations:	
Floppy disk drives	
CD-ROM drives	
Specify a location	
🔲 Microsoft Windows Update	
	<back next=""> Cancel</back>

ind New Hai	rdware Wizard
<b>Driver File</b> : The wiz	s Search Results ard has finished searching for driver files for your hardware device.
The wiz	ard found a driver for the following device:
- Portage -	USB 802.115 WLAN DEVICE
Window	s found a driver for this device. To install the driver Windows found, click Next.
	e:\wlan 2b\wlan driver\wlan.inf
	Z Back Next Cancel

5. Driver installation is completed.





If you want to install the Utility, double click the setup in CD-ROM.



## c. If your notebook or PC has default WLAN card, it cannot configure WiFi WLAN card

Change the setting of TCP/IP protocol component inside the content of Local Area Connection (in Network Neighborhood).

-----The End -----